TAX EXPENDITURES IN CROATIA

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Abstract

The tax system of the Republic of Croatia contains a large number of very diverse kinds of tax expenditures whose the declared aim is to achieve certain social and economic objectives. This paper considers all the items that constitute tax expenditures in Croatia, within the systems of the personal income tax, corporate income tax, and real estate transfer tax and value added tax. The objective of the article is to determine the real level of tax expenditures per form of tax in the 2001-2004 period. We hypothesised that the tax expenditures in the analysed forms of tax are both high and growing, which was ultimately borne out, for almost all the analysed items in the tax forms considered are growing.

Key words: tax expenditures, personal income tax, corporate income tax, real estate transfer tax and value added tax.

1 Introduction

At the beginning of the 1990s, like many other transition countries, Croatia underwent a tax reform; in our case, this was primarily because of the newly-achieved independence but it was also because Croatia needed to set up a new, market-oriented system, compatible with the tax systems of developed countries. In tax reforms that were taking place in developed countries, the emphasis was placed on increasing the effectiveness and the maximum degree of neutrality of the tax system. The consideration here was mainly reduction of tax exemptions allowances and reliefs, or in other words the enlargement of the tax base

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and the reduction of marginal tax rates. In Croatia, too, reform in the mid-1990s started out in this way, but with time, from the very end of the 1990s, and particularly after 2000, the system began to move in the opposite direction. Thus in 2000 in the Croatian income tax system there was only one real relief – the personal allowance. But since 2001 the number of different kinds of allowances and exemptions has risen to over a score.

Tax reform in Croatia of 1994 was oriented to direct taxes, reform of the Tax Administration, and the introduction of value added tax (VAT) was completed in early 1998. In so doing, the country largely followed the trends of contemporary tax reforms in other countries. The reform was based on its own concept, i.e., a consumption-oriented taxation that was supported by many celebrated economists in the last two centuries (Mill, Schumpeter, Kaldor, Shoup and others). Unfortunately, the most recent interventions in the tax system carried out at the end of 2000 cast certain doubt on the basic conception and consistency of the tax system to that date, which, we venture to say, was in some elements among the best in the world. Apart from that, such frequent changes in this important part of the economic system disturb the stability of business conditions. They were not well received in the business world and were definitively not in line with the well-known saying of J. S. Mill that “an old tax is the best tax” (Jurković, 2002:304-305).

The basic principles of the tax reform started ten years ago are on the whole still respected notwithstanding certain deviations brought about by current economic and political changes. Certain changes mark a positive move forwards (for example reduction of the tax burden, emphasis on taxation of consumption and not of income and savings, reduction of tax evasion, improvement of the efficacy of the tax administration), while some changes already in place or just announced should be carefully re-examined and the fiscal consequences that stem (or would stem) from their application should be realistically evaluated. At issue here is the introduction of new allowances, exemptions and privileges, the introduction of new tax rates, for instance that of income tax or VAT, the reduction of the VAT rate, and the introduction of new taxes.

The introduction of new allowances, reliefs and privileges distorts the consistency and transparency of the tax system, as well as its stability. It also makes the procedure of collecting and controlling taxes additionally complex, which leads to further expenses and poorer efficiency of the system. Frequent changes, often in form of *ad hoc* measures, have a negative effect on the way in which taxpayers make decisions. Measures of social, economic and developmental policy should not be implemented by the tax policy; rather, its basic objective and purpose is to gather the tax revenue necessary to cover existing public expenditures as simply, efficiently and equitably as possible. But in Croatia, it is the expenditure side of the central government budget that is the major problem, and no changes on the revenue side can possibly contribute to any improvement in Croatian public finances without radical reforms in expenditure. (Kuliš, 2003)

2 An overview of the tax system in Croatia

In the Croatian tax system we have shared and central government taxes. Shared taxes partially accrue to the central government budget, and partially to the budgets of the counties, cities and municipalities. Central government taxes accrue entirely to the central government budget. The following table shows how taxes are shared among different levels of government.

Table 1 Shared taxes and distribution among different levels of government (in %)

	Central government	County	Municipality or city	Decentralised functions[a]	Fire services[b]	Equalisation fund[c]
Personal income tax	24.6	10.0	34.0	9.4	1.0	21.0
Personal income tax (including city of Zagreb)	21.6	–	47.0	9.4	1.0	21.0
Corporate income tax	70.0	10.0	20.0	–	–	–
Real estate transfer tax	0.0	–	60.0	–	–	–

[a] *Accrues to municipality or city that finances its decentralised functions, otherwise accrues to the county.*

[b] *Accrues to municipality or city that has founded and finances the regular work of public fire services.*

[c] *Government fund from which resources are allocated to local units that cannot finance their public functions.*

Source: Financing of Local and Regional Units of Self-Government, previously of Local Self-Government and Government, NN 150/02 (old laws are NN 117/93, 69/97, 33/00, 73/00, 127/00, 59/01, 107/01, 117/01).

The four tax forms analysed in this investigation can be classified as follows:

• corporate income tax – a shared, direct tax

• personal income tax – a shared, direct tax

• real estate transfer tax – a shared, indirect tax

• value added tax – a central government, indirect tax.

The next table shows how much each of the tax forms analysed contributes to the revenue of the central government budget.

The table shows that, in terms of percentages of GDP VAT is the major element in the central government budget.

The importance of personal income tax as revenue of the central government budget declined over the period under analysis. Although corporate income tax revenue increased in terms of percentages of GDP, this tax is still equivalent to a very small proportion of GDP. Tax on real estate transfers is also equivalent to a practically negligible percentage of GDP.

In other words, indirect taxes dominate in the structure of central government budget tax revenue, above all VAT. This would be still more pronounced if we were to analyse individual taxes as proportions of the total revenue of the central government budget. In the following table, we analyse the structure of the taxation revenues of the central government budget, or the proportions of the individual forms of taxation in the tax revenues of the central government budget.

Table 2 Revenue of the central government budget of Croatia and expressed as a percentage of GDP (in million kuna and in %)

	2001		2002		2003		2004	
	in million kuna	%	in million kuna	%	in million kuna	%	in million kuna	%
Total revenue of central government budget	53,504	32.3	69,651	38.8	74,677	38.7	80,464	38.9
Tax revenues	40,493	24.4	42,810	23.9	45,281	23.5	47,150	22.8
personal income tax	3,404	2.1	3,363	1.9	3,115	1.6	3,128	1.5
corporate income tax	1,987	1.2	2,659	1.5	3,074	1.6	3,131	1.5
property tax (real estate transfer)	282	0.2	295	0.2	290	0.2	356	0.2
tax on goods and services	31,121	18.8	33,974	18.9	36,651	19.0	38,602	18.6
value added tax	23,267	14.1	25,952	14.6	28,129	14.7	29,865	14.4
excises	7,699	4.6	7,474	4.2	7,851	4.2	7,942	3.8
sales taxes	155	0.1	137	0.1	131	0.1	149	0.1
international trade and transactions tax	3,215	1.9	2,051	1.1	1,811	0.9	1,591	0.8
other taxes	483	0.3	468	0.3	340	0.2	341	0.2
GDP (million kuna)	165,640	–	179,390	–	193,067	–	207,082	–

Source: Monthly Statistical Review, no. 120:18; 100:10; adapted by the authors

Table 3 The structure of the tax revenue of the central government budget (individual tax forms as proportions of total tax revenue) (in %)

	2001	2002	2003	2004
	100.0	100.0	100.0	100.0
personal income tax	8.4	7.9	6.9	6.6
corporate income tax	4.9	6.2	6.8	6.6
property tax (real estate transfer tax)	0.7	0.7	0.6	0.8
tax on goods and services	76.9	79.4	80.8	81.7
value added tax	57.5	61.6	62.2	63.5
excises	19.0	17.5	17.3	16.9
sales tax	0.4	0.3	0.3	0.3
international trade and transactions tax	7.9	4.7	4.1	3.5
other taxes	1.2	1.1	0.8	0.8

Source: Monthly Statistical Review, no. 120:18; no. 100:10; adapted by the authors

In the structure of tax revenue of the central government budget, revenues from VAT convincingly account for the highest proportion (64% in 2004). The second most important form of taxes is excises, and only after that come personal and corporate income tax.

The table allows us to conclude that in the structure of tax revenue indirect taxes are dominant, above all VAT and excises, which account for about 80% of all tax revenue of the central government budget.

Apart from providing a simple and concise display of the basic facts of the Croatian tax system, these tables are aimed at underlining the fact that these central government budget tax revenues would be greater if numerous allowances, reliefs and exemptions had not been introduced into the tax system, especially into the personal and corporate income tax systems (without, however, neglecting the innovations in the VAT system). In the chapters below will be discussed these new allowances, reliefs and exemptions in four tax forms.

Definition of and methodololy for assessing tax expenditures in the Croatian tax system

A definition. For this investigation, we have used the following definition: tax expenditures are items in the analysed tax forms (four of them) which represent a loss to the tax revenue of the central government budget, either because they reduce the tax base or because they reduce the tax liability. In producing this definition we have attempted to follow the definition of the OECD, which states:

Tax expenditures are concessions (reliefs) that fall outside tax norms or benchmarks. These norms include accounting conventions, the structure of tax rates, the deductibility of compulsory payments, provisions to facilitate tax administration, and norms related to international fiscal obligations. Tax expenditures can take a number of forms—including tax exemptions, allowances, credits, deferrals, and reliefs (see OECD, 1996).

The methodology. Following this definition, we calculated different kinds of tax expenditures in the form of lost tax revenue. We used the method of lost revenue in which the tax expenditure is quantified as the magnitude by which the central government budget revenues are reduced because of the existence of certain exemptions in the tax structure.

The basic approach in this investigation was similar to Canadian experience in the analysis of tax expenditures. The Canadian department of finance endeavours to do the following in its report on tax expenditures: enable the reader to have as much information as possible, inform the reader about the size of all the tax exemptions within a narrowly defined reference structure for the taxation system, while letting the reader to decide which exemptions meet the definition of tax expenditure.

Given categories of tax expenditures for different taxes are not aggregated, because assessments of their amount are obtained with the hypothesis that other categories of tax expenditures, the behaviour of consumers, government policy and other factors do not change.

The objective of the investigation. The objective of the investigation was to show systematically all the items that constitute tax expenditures in Croatia, within the systems of personal and corporate income tax, the real estate transfer tax and the value added tax, and to determine the real level of tax expenditures in the period from 2001 to 2004. At the same time, the investigation is supposed to serve as a source of information about tax expenditures necessary for an analysis of the Croatian taxation system and an evaluation of its efficacy.

Types of tax expenditures. The following diagram enumerates the items considered to be tax expenditures in the Croatian tax system, and hence covered by this investigation.

Diagram 1 Analysed items of tax expenditures in the Croatian tax system

Personal income tax (a total of 19 different tax expenditures put into 2 groups and numerous subgroups)

Reduction of the tax base

Personal allowance

- A1 basic personal allowance
- A2 additional personal allowance for dependents

Other allowances (6 kinds)

Excluded receipts

- D1 untaxed receipts of artists, or exemptions and relefs to private persons who carry out some artistic or cultural activity
- D2 the untaxed part of artistic fee or royalty

Augmented expenditures

- D3 premiums for life insurance that have characteristics of savings, premiums for supplementary and private health insurance, and voluntary retirement insurance premiums
- D4 income reduction in the Areas of Special National Concern (PPDS) and the city of Vukovar
- D5 augmented depreciation costs
- D6 tax deductible entertainment costs

Deducted income

- D7 the salaries paid out for newly hired persons and rewards to pupils doing practical work

Enlargements of the personal allowance for expenditures made

- D8 expenditures for training and personal professional development of staff
- D9 expenditures for research and development (R&D) costs of depreciation for intangible assest acquired

Enlargements of the personal allowance

- D10 additional personal allowance for persons living in the PPDS (1st, 2nd and 3rd categories) and other areas specially treated for tax purposes (hill and mountain areas and islands)
- D11 contributions for health insurance in the country
- D12 expenditures for healthcare services
- D13 expenditures for satisfaction of housing requirements
- D14 expenditures for donations for culture, art and similar purposes

Lump-sum expenditures

- D15 lump-sum expenditures for taxpayers who have acquired some forms of income from assets
- D16 lump-sum expenditures for taxpayers who have earned personal income from some other independent activities

Reduction of tax due – i.e., tax credits

- C1 tax credit for Croatian Wartime Military Disabled (HRVI) in proportion to degree of disability

Corporate income tax (8 different forms of tax expenditure divided into 2 groups)

Reduction of the tax base
incentives for employment
incentives for research and development (since 2003)
incentives for education, training and personal professional development (since 2003)

Reduction of tax due (corporate income tax credits)
reliefs and exemptions in the Areas of Special National Concern (PPDS, 1st, 2nd, and 3rd categories, as well as for the hill and mountain areas)
reliefs and exemptions in the city of Vukovar
incentives for capital investment (depending on the amount of the investment, planned durability and the number of employees involved)
reliefs and exemptions for free zone users
incentives for occupational rehabilitation and the employment of disabled persons.

Real estate transfer tax (3 tax expenditures analysed)

Reduction of tax due (real estate transfer tax credits)
amount of exemptions from the payment of the tax
reduction of tax due on purchase of first piece of real estate
reductions of tax due for the Areas of Special National Concern (PPDS)

Value added tax (3 forms of tax expenditure, but only one is analysed)

Reductions of the tax base
deliveries not subject to taxation (shown, but not considered tax expenditures in this investigation)

deliveries exempted from taxation – in the territory of the country, without the right to repayment of input taxes (shown, but not considered tax expenditures in this investigation)

zero rated deliveries

Since this is the first investigation of tax expenditures in the Croatian taxation system, we have allowed ourselves the maximum amount of latitude in the choice of items. But this division is extremely broad, because it is sometimes very difficult to distinguish to which category an individual tax expenditure belongs.

Various forms of tax reliefs in the Croatian taxation system have certain features, as follows:

- tax reliefs are various methods for reducing the tax due or the tax base.
- the tax base or the tax due can be reduced for certain or for all taxpayers.
- they are applied to all kinds of taxes.

The following table gives the total nominal amounts of tax expenditures in the Croatian tax system from 2001 to 2004.

Table 4 Nominal amount of total tax reliefs for all levels of government 2002-2004 (in million kuna)

	2001	2002	2003	2004
Personal income tax				
Total personal allowance[a]	42,803.0	44,962.0	49,414.0	52,666.0
other allowances	2,023.2	2,598.0	4,332.4	4,897.9
Corporate income tax				
Reduction of the tax base				
incentives for employment for research and development, and for training and personal professional development	178.4	276.5	1,263.0	1,626.3
Reduction of tax due				
reliefs and exemptions in the Areas of Special National Concern (PPDS), in the city of Vukovar and for free zones users; incentives for capital investment and incetives for occupational rehabilitation and the employment of disabled persons	50.6	63.3	122.9	152.9
Real estate transfer tax				
amount of exemptions from the payment of the tax	17.9	33.8	57.8	72.1
reduction of tax due on purchase of first piece of real estate	0.0	12.2	174.1	194.3
reduction of tax due for the Areas of Special National Concern (PPDS)	0.0	24.8	38.1	55.0
Value added tax				
deliveries not subject to taxation[a]	15,773.0	17,018.5	19,876.6	21,124.2
deliveries exempted from the taxation[a]	36,447.2	39,679.1	42,070.1	49,397.9
zero rated deliveries 0%	17,582.7	19,331.3	21,491.7	23,502.8

[a] *In this investigation personal allowances are not considered tax expenditures;*

Source: Central Office, Tax Administration, Ministry of Finance.

The table makes it clear that the greatest amounts are put aside inside the personal allowance in the personal income tax system and deliveries exempted from taxes and zero-rated deliveries in the value added tax system. Furthermore, the total number and nominal amounts of tax expenditures (which are not subjected to tax rate) have risen since 2001.

We should also mention that these are only the total amounts of the individual items in the system of taxing personal income, corporate income, real estate transfers and added value in the 2001-2004 period. To see how much revenue is lost, the tax rate has to be applied to these amounts (depending on the form of the tax) and the proportion of the tax, i.e., the amount that is usually put aside for the central government exchequer (within the system of shared taxes).

As mentioned, 19 items of tax expenditures were analysed in the personal income taxation system, 6 in the corporate income tax system, 3 in the real estate transfer taxation system and one item (3 items are shown) in the VAT system.

The legislative framework, the list and calculation of tax expenditures

Since the Republic of Croatia became independent, the tax system has been subject to frequent modifications. Each one of these changes had its effect on the tax revenue obtained from personal income tax and corporate income tax. The revenues from other tax forms also changed.

In this part we shall describe tax expenditure items in the systems of personal income tax, corporate income tax, real estate transfer tax and value added tax.

3 Personal income tax

In the first part of this chapter we give an overview of personal income tax. A particular emphasis is placed on the definition of gross personal income and its importance as revenue of the central government budget.

In the second part, we discuss the changes in the personal income tax in the 2001-2004 period, while the third part defines the tax expenditure items in more detail and calculates the total tax expenditures in the personal income tax system.

An overview of personal income tax and its importance

In Croatia, personal income is defined as the difference between receipts and outlays during a given tax period, ascertained on the cash principle, i.e., after payments have been received and disbursements made. Personal income coming from six sources can be taxed: from employed work, from self-employed work, from assets and from property rights, from capital, from insurance, and other income.

The amounts collected from personal income tax are shared among the different levels of government in certain percentages. The following table presents the percentages of revenue from personal income tax that go into the central government budget, or the budgets of local and regional units of government. Different percentages go for the city of Zagreb and other local units, as can be seen from the two separate columns.

Table 5 Distribution of personal income tax revenue among the different levels of government (in %)

	Central government share (city of Zagreb)	Central government share (other cities, municipalities and counties)	Law
since January 1st, 1994	55	70	NN 117/97
since April 1st, 2000	55	60	NN 33/00
since July 1st, 2001	45.2 = 24.2+21	50.2 = 29.2+21	NN 59/01
since January 1st, 2002	45.6 = 24.6+21	50.6 = 29.6+21	NN 107/01
since January 1st, 2003	42.6 = 21.6+21	46.6 = 25.6+21	NN 150/02

Sources: NN, various numbers, Financing of Units of Local Government and Self Government Law, (NN 117/93, 33/00, 73/00, 59/01, 107/01, 117/01, 150/02, revised wording).

Since 2001, because of the decentralisation of the financing of local units, the system for distributing revenue has become much more complex. A position for equalisation aid for the decentralised functions has been set up inside the central government budget, to which 21% of the revenue collected is allocated. From this account equalisation aid is given for municipalities and cities that cannot independently finance the decentralised functions (elementary and secondary education, welfare, health care…). As can be seen, changes in the formulae for the distribution of the revenue from personal income tax became something of a tradition from 2001 on.

The importance of personal income tax as revenue of the central government budget can be seen best from the following table, which presents personal income tax revenue as a proportion of total central government budget revenue and of GDP in the 2002-2004 period. Personal income tax is a shared tax (like corporate income tax and real estate transfer tax). Revenue collected on the basis of personal income tax partially accrues to the central government budget, partially to the budgets of the counties, cities and municipalities, and is divided according to statutorily defined formulae.

Table 6 Central government budget revenue from personal income tax as a proportion of total central government budget tax revenues and as a proportion of GDP (in million kuna and in %)

	2001	2002	2003	2004
GDP	165,640	179,390	193,067	207,082
Total central government budget tax revenues	40,493	42,810	45,281	47,150
Central government budget revenue from personal income tax	3,404	3,363	3,115	3,128
Consolidated general government revenue from personal income tax	6,445	7,227	7,198	7,765
Central government budget revenue from personal income tax as proportion of:				
Total central government budget tax revenues (%)	8.4	7.9	6.9	6.6
GDP (%)	2.1	1.9	1.6	1.5

Sources: MF (2004:201, 212; 2006:194, 216)

From the table it is possible to see the decline in revenue from personal income tax year after year. A particularly sudden fall was recorded in 2001, which was certainly assisted by the greater extent of various tax allowances and reliefs introduced in 2000.

Central government budget revenue from personal income tax decreased from 3.4 billion kuna in 2001 to 3.1 billion kuna in 2004. The share of revenue collected from personal income tax in the total tax revenue of the central government budget, as well as in GDP, declined during the period under analysis. For example, the share of personal income tax in total tax revenue of the central government budget fell from 8.4% in 2001 to 6.6% in 2004. Personal income tax as proportion of GDP in the same period fell from 2.1 to 1.5%.

Changes in the taxation of personal income from 2001 to 2004

Personal income tax was introduced on January 1, 1994, with the passing of the Personal Income Tax Law (NN 109/93). From that year on, it underwent a great number of changes[1].

The first major modification, enacted in 2001, entailed the following:

- instead of the previous two rates (20 and 35%), three rates were brought in: 15% was paid on a tax base up to 2,500 kuna p.m.; 25% was paid on the difference in the base between 2,500 kuna and 6,250 kuna, and 35% was paid on amounts above 6,250 kuna,
- dividends and profit shares were taxed at the rate of 15%. This, for the first time after 1994, brought in taxation of part of the personal income from capital and abandoned the system of the taxation of personal income based on consumption,
- premiums for life insurance, supplementary and private health insurance and voluntary retirement insurance premiums up to the amount of 80% of the basic personal allowance (i.e. 1,000 kuna p.m. or 12,000 kuna p.a.) were for the first time introduced into the tax system. They could be deducted from the tax base, and claimed after the filing of the annual tax return,
- for self-employed persons (small businesses) a tax relief was introduced in the form of deductions for the salaries of persons newly hired during the fiscal year.

This modified system of the taxation of personal income lasted for two years. In 2003, new and much larger modifications were introduced:

- an increase in the basic personal allowance from 1,250 to 1,500 kuna,
- modifications for the personal allowances for dependents and for the Areas of Special National Concern (PPDS),
- a change in the allocation and the introduction of four tax rates: 15% for personal income up to 3,000 kuna, 25% up to 6,750 kuna, 35% up to 21,000 kuna, and 45% over 21,000 kuna,
- reliefs for house purchase (and paying interest on mortgages), for subtenants (50% of the annual rental paid to the landlord) and reliefs for the costs of healthcare services and the procurement of orthopaedic aids, if they cannot be financed from the basic, supplementary or private insurance.

The same provisions of the Personal Income Tax Law held in 2004. Thus, in the 2000-2004 period, the law changed three times. Amendments mainly related to the introduction of new allowances, exemptions and incentives that are the subject of this investigation. At the end of 2004, a new law was introduced, which entered into force from 2005.[2]

[1] The law has been changed and amended seven times. The biggest changes took place in 2001 and 2003, and later in 2005. A new Personal Income Tax Law was adopted at the end of 2000, and it was in force from January 2001 (NN 127/00). It was amended three times (NN 152/02, 163/03 and 30/04), and was applied in this form to 2004. But from January 1st, 2005 a new Personal Income Tax Law came into force (NN 177/04).

[2] Although this investigation does not deal with them, we will adduce the changes for 2005. The new Personal Income Tax Law (NN 177/04) came into force on January 1st, 2005, when a new set of Corporate Income Tax Regulations was also adopted (NN 01/05). It would seem that the new law is simpler, more user-friendly, fuller and intelligible. The social component is puts forward, particularly in provisions which determine the size of the basic personal allowance, the increase of the personal allowance for dependents, the disability of the taxpayer and members of the taxpayer's family, the exemption of survivors' pensions for members of the families of soldiers killed in the Homeland War and survivors' pensions children, who can claim it after the death of their parents. Particular focuses of the new law are the incentives for employment and the increase of economic activities in the Areas of Special National Concern (PPDS) and the hill and mountain areas.

The legislative framework for personal income tax up to 2004 consisted of:

- the Personal Income Tax Law (NN 127/00, 150/02, 163/03, 30/04),
- the General Tax Law (NN 127/00, 86/01, 150/02),
- the Personal Income Tax Regulations (NN 140/03, 188/03, 198/03, successors to the old Regulations of 54/01, 2/03),
- the Regulations concerning independent activities that can be taxed by lump-sum tax and the manner of assessing and taxing lump-sum personal income (NN 90/03),
- the Regulations concerning depreciation (NN 54/01),
- the Decision on the confirmation of the status of a commune (municipalities) in the third group of areas of special national concern (NN 138/02).

Accordingly, many modifications of the system of taxation of personal income tax since its introduction. From the viewpoint of this investigation the most important modifications occurred during the period 2000-2001.

Items considered as tax expenditures

First, we explain the manner of calculating the tax liability and the items analysed within the personal income tax system.

Diagram 2 The current manner of calculating the personal income tax liability

I	taxable receipts from all sources – expenditures incurred during the realisation of these receipts = gross income
II	gross income – deductions from income (the tax base)3 – losses carried forward = taxable income
III	taxable income x tax rate/rates = provisional personal income tax liability
IV	provisional personal income tax liability – deduction from tax due or tax credit = final tax liability or tax due

Taxable income is defined as gross personal income (i.e. income from all sources minus the costs of making that income) reduced by *tax allowances* and *tax exemptions.* The tax due on personal income is obtained by applying the progressive tax rates (15, 25, 35 and 45%) to the taxable income. Once the personal income tax liability is obtained, it can be further reduced by tax credits before we get the final personal income tax due. *Allowances, exemptions* and *tax credits* are all called tax reliefs.

This is the area in which the problem of defining the nature and scope of tax expenditures is most obvious. We could consider items excluded from income (expenditures incurred while earning the income) as tax expenditures. But it is perhaps simplest and most equitable to do as the Canadian department of finance does – list and calculate all the items within a given tax form, and let the reader freely decide for himself whether

[3] Tax allowances and exemptions.

this item is a tax expenditure or not. On the whole, this is the logic by which we will be guided in this investigation.

Reductions of tax base and reductions of personal income tax due

The basic distinction here is the division into items that reduce the tax base (deductions from income) and items that reduce the tax due (deductions from tax due, or tax credits).

In this research, according to the provisions of the Personal Income Tax Law, the following are not held to be tax expenditures: receipts not deemed an income (receipts from interest on kuna and foreign currency savings, receipts from interest on securities, from inheritances and gifts, and from alienation); compensations (transport costs, use of private car for business purposes); grants and aid (workers' disability, death of worker or member of worker's immediate family, sick leave of a worker over 90 days in one year); gifts, occasional bonuses and bonuses to employees (for years of seniority, gifts to a child, occasional bonuses as Christmas and summer holidays); supplements (field and maritime supplement or supplement for living away from family); severance benefit (for going into retirement, for notice for personal and business reasons, injury at work or occupation illness).

Let us now consider items of tax expenditure in the personal income taxation system.

Reduction of the tax base (deductions from income). This group of tax expenditures includes all forms of personal allowances, incentives and tax reliefs.[4]

1 Allowances and deductions

We distinguish between basic personal allowances and allowances of pensioners and dependents of immediate family. Personal allowance is the amount of personal income that is not subject to taxation, i.e., that reduces the tax base. From the standpoint of equity it is considered that the amount of income that serves to cover the basic living requirements of the taxpayer should not to be taxed. The personal allowance then consists of the factors of personal allowance[5] and the amount of the basic personal allowance for the year. Multiplied, the total factor and the amount of the basic personal allowance give the total amount of the personal part of the deduction from income. Additionally, the amounts of the part of the personal allowance for healthcare services and health insurance, for housing requirements and for donations made can be added to this amount.[6]

- The basic personal allowance. Every tax payer can claim a personal allowance and this is called the basic personal allowance. The amounts of the basic personal allow-

[4] Articles 29, 40, 41, 42, 43 and 43a of the Personal Income Tax Law (NN 127/00, 150/02, 163/03 and 30/04).

[5] Personal allowance factor depends on the number of dependents and other personal circumstances of the taxpayer, particularly whether the taxpayer lives in an area of special national concern (PPDS) or not. If he or she does, an important component is which PPDS his local unit belongs to (there are three categories).

[6] New deductibles in the taxation of personal income for the costs of healthcare, certain housing requirements and reduction of the tax base by the salaries of new employees and rewards to pupils on practical work and apprenticeship work were brought in on January 1, 2003. At the end of 2003 the amount of the untaxable occasional bonuses rose from 1,000 to 1,600 kuna.

ances have risen more than four times during the 1994-2000 period. In the second half of 1994 the amount was 400 kuna a month, and during 2001 it rose to 1,250 kuna a month. During 2003 it was raised to 1,500 kuna, but since the beginning of 2005 it has risen to 1,600 kuna per month.

- The basic personal allowance of pensioner. The amount of the basic personal allowances for retirees in 2001 and 2002 came to 2,500 kuna a month, while in 2003 and 2004 this amount was increased to 2,550 kuna. Since the beginning of 2005, it has been 3,000 kuna.
- The basic personal allowance for dependents of immediate family. A taxpayer who supports a spouse, children, disabled and other members of the immediate family, apart from the basic personal allowance, can also claim the deduction for the personal allowances for dependents. Dependents personal allowances are expressed in factors of the basic personal allowance. For the first child or a dependent spouse, for example, the taxpayer can deduct the amount of 0.5 of the basic personal allowance, for a second child 0.7, for a third child 1.00 and so on, and for a disabled dependent, 0.3 of the basic personal allowance.

The basic feature in the changes of the basic personal allowances from 2001 to 2004 is that the factors have decreased, but the monthly sums have actually increased. For example, the amount of the basic personal allowance for one month went up from 1,250 kuna in 2001 to as much as 1,600 kuna in 2005 and since. It is very likely that these changes had a major impact on the structure and distribution of personal income tax. Since quite a lot of elements of this tax have changed, it is hard to predict how the size of the overall tax burden and its distribution over individual taxpayers will move. But why are these changes important? They are important because in Croatia personal allowances have a crucial effect on the progressiveness of income tax. Personal allowances accounted for between 87.1% (1997) and 95.4% (2003) of the progressiveness of the entire system (Urban, 2006:3), but this issue will not be discussed on this occasion.

NB: Categories of allowances for taxpayers and members of their families in most personal income tax system are not considered tax expenditures, rather an inherent feature of the system that must be taken account of. The same principle holds good in this investigation. Basic and personal allowances for dependents are not considered tax expenditures, but the amounts sets aside for this purpose are shown in order to give an insight into their amount and the social effects they achieve.

2 Incentives approved as deduction from income

At the end of 2003, along with the existing incentives for employment (hiring), the following incentives were introduced:

- for training and personal professional development of staff (in the amount of total expenditures incurred in the period),
- for research and development (100 per cent reduction of the tax base for costs of research and development and depreciation costs for intangible assets),

- for employment (for salaries paid out for newly employed persons and rewards to pupils on practical work), which were previously in the personal income tax system. Taxpayers who carry out an independent activity can deduct the amount of pay and contributions for the pay of newly employed works from the tax base for a period of one year from the day of their employment. In this way it is possible to deduct these wages twice: once as expenditure that reduces the receipts of the income, and once as a tax credit.

3 Tax privileges (reliefs)

- Freelance artists and people in culture (heritage) activities are also given certain reliefs known as exemptions and reliefs to private persons who carry out an artistic or cultural activity (Article 42 of the Personal Income Tax Law, NN 127/00).
- Monetary donations in the amount of 2% of total receipts of the previous year for the purpose of encouraging culture, education, science and scholarship and charitable, sporting and religious are considered tax-deductibles. In this manner the taxpayer can claim such donations as reductions from the tax base.
- Areas of special national concern, hill and mountain areas and the islands

  Areas of special national concern (PPDS), hill and mountain areas and islands. In 1996, three groups of areas of special national concern (PPDS) were determined,[7] in all embracing 180 local units (50 in the 1st category, 61 in the 2nd and 69 in the 3rd). The first and second categories are determined according to the degree of economic damage brought by war damage up to 1996. The third group is determined according to four criteria: economic development, structural difficulties, demographic and special criteria. The three categories can cover up to 15% of the total population of Croatia. The government regularly provides grants to these areas from the central government budget. However, from 2000 the government brought in additional incentive measures for the PPDS. Thus, revenue from personal and corporate income tax (otherwise shared between central and local government) was by 2005 ceded completely to the municipalities and cities in the areas. In addition, in the PPDS there are, with certain conditions, tax exemptions from the payment of real estate transfer tax.

Table 7 Distribution of tax in areas of special national concern (in %)

	Central government	Counties	Municipalities and cities in the PPDS
Personal income tax	–	10	90
Corporate income tax	–	10	90

- *Hill and mountain areas*. From 2002, 45 local units obtained the status of hill and mountain areas for the sake of stimulating more rapid and even economic development. The same tax incentives and manner of participating in tax sharing as in the

[7] Areas of Special National Concern Law, NN 44/96 and 26/03.

PPDS were introduced. For tax purposes, hill and mountain areas are treated in the same way as the third category of the PPDS.[8]

For the protection of the islands and their fast demographic development, in 2003 the government adopted inventive measures for the development of 45 island local units in the shape of privileges for the purchase or lease of agricultural land, for financing capital investment projects for water and water supply, zoning and improving the traffic infrastructure.

Croatia actually has 270 local units (municipalities and cities) that have a special status in the financing system and that are given a number of tax reliefs and exemptions by central government, and are ceded the entire revenue of personal and corporate income tax, or a part of this tax revenue, and additionally assured grants for horizontal fiscal equalisation (Bajo and Bronić, 2004). For example, for taxpayers and dependents in the PPDS in 2001 the basic personal allowance (claimable by all taxpayers) came to 2,500, 3,125 or 3,750 kuna, depending on the particular area in which they lived. By 2005 these amounts had risen to 2,400 for the 3rd area of special concern and hill and mountain areas, to 3,200 for the 2nd of PPDS and 3,840 kuna for the 1st category.

In addition, if taxpayers in these areas carried out an independent activity, their income earned in 2001 would be reduced by 25, 50 or 75%, depending on the particular area. These amounts also increased and in 2005 came to 25% reduction for group 3, 75% for group 2 and 100% for the first group of PPDS. This all meant that the base for tax assessment was reduced.

For the performance of an independent activity in Vukovar, on condition that from 2001 on the entrepreneur employed more than five workers, of whom half had to live in Vukovar, the employer would not pay income tax in 2000 and for five more years to come, and after that it would pay 25% of the tax. But by 2005, these conditions had been changed.

Reduction of tax due. The only form of reduction of tax due is the tax credit for Croatian Military War Disabled (known as HVRI). In other words, natural persons who had obtained a ruling confirming their status as HVRI from the Homeland War do not pay tax on income from employed work and pensions in accordance with the degree of disability ascertained.[9] In addition, from the beginning of 2005, an exemption was brought in for members of the families of Homeland War soldiers who were killed, captured or missing, who are now not supposed to pay tax on survivor pensions claimed according to the Entitlements of Croatian Defenders Law.[10]

Thus, the Croatian personal income tax system allows many reductions from the tax base and one reduction of tax due.

Calculation of the total amount of tax expenditures

We shall attempt to calculate the total amount of tax expenditures in the system of personal income taxation in the 2001-2004 period using the method of lost revenue and the data from the Central Office of the Tax Administration of the Ministry of Finance and pursuant to our own estimates.

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[8] Because of strong lobbying and the lack of clear criteria, some municipalities and cities that had fiscal capacities making them quite capable of financing current expenditure were nevertheless classified as hill and mountain areas. The main problem was that no proper audit had been done, and that it had not been determined how much the fiscal capacities of local units in the PPDS and hill and mountain areas had increased and how many of these local units there were that did not need to be in any special funding system; however, this is not the subject of this investigation.

[9] Article 39 of the old and Article 53 of the new Personal Income Tax Law.

[10] Article 30 Paragraph 4 and Article 39 of the Personal Income Tax Law.

Reliefs that reduce the tax base are also called deductions or allowances, and in 2001-2002 there were 12 of them in total; in 2003-2004, there were 16. We divide the allowances and deductions into personal allowance and other allowances or deductions. The personal allowance covers the basic personal allowance (A1) and the additional personal allowance for dependents (A2). *Categories A1 and A2 are shown, but are not considered tax expenditure.* The other deductions are all allowances that reduce the tax base (D1 to D16).

We call the second group of reliefs, which reduce the tax due, tax credits, and in the period under observation there was only one such relief. The following diagram shows all the analysed reliefs in the personal income taxation system in Croatia.

Diagram 3 List of analysed reliefs in the personal income tax system

Reductions of the tax base		
Personal allowance	A1	basic personal allowance of the taxpayer
	A2	additional to personal allowance for dependents
Other allowances (six kinds)		
excluded receipts	D1	untaxed receipts of artists, or exemptions and reliefs to private persons who carry out some artistic or cultural activity
	D2	the untaxed part of artistic royalty or fee
augmented expenditures	D3	premiums for life insurance that have characteristics of savings, premiums for supplementary and private health insurance, and voluntary refirement insurance premiums
	D4	income reduction in the Areas of Special National Concern (PPDS) and the city of Vukovar
	D5	augmented depreciation costs
	D6	tax deductible entertainment costs
deducted income	D7	the salaries paid out for newly hired staff and rewards to pupils doing practical work
enlargement of personal allowances for expenditures made	D8	expenditures for training and personal proffesional development of staff, since 2003
	D9	expenditures for research and development (R&D, 100 percent reduction of tax base for costs of R&D and costs of depreciation for intangible assets acquired), since 2003
enlargement of personal allowance	D10	additional personal allowance for persons living in the Areas of Special National Concern (PPDS-1st, 2nd and 3rd categories) and other areas specially treated for tax purposes (hill and mountain areas and islands – 45 units)
	D11	contributions for health insurance in the country, from 2003
	D12	expenditures for healthcare services, from 2003
	D13	expenditures for satisfaction of housing requirements, from 2003
	D14	expenditures for donations for culture, art and the similar purposes
lump-sum expenditures	D15	lump-sum expenditures for taxpayers who have acquired some forms of income from assets
	D16	lump-sum expenditures for taxpayers who have earned personal income from some other independent activities
Reduction of tax due	C1	tax credit for Croatian Wartime Military Disabled in proportion to degree of disability

From the diagram above it can be seen that there is a total of 19 items that can be considered tax expenditures in the personal income tax system.

The calculation of the tax expenditure pursuant to the amount of relief and allowances in personal income tax is relatively complex as compared to other taxes. This is because in the personal income tax system, the final tax liability is obtained as the product of several marginal tax rates and different parts of the base.

In 2001-2002 there were three tax rates – 15, 25 and 35%, and after that a higher rate of 45% was introduced. Because of the progressivity of the system, taxpayers do not have equal benefit from a one kuna deduction – taxpayers who earn higher incomes enter brackets in which the base is multiplied with higher marginal tax rates.[11] The same thing holds if we look at the problem from the point of view of the state – deductions allowed to persons with higher income mean greater tax expenditure per one kuna deduction than deductions allowed to taxpayers with lower incomes. Thus, for a precise calculation of tax expenditures of income tax it is clear that more detailed figures concerning the distribution of deductions among taxpayers are required.[12]

The method for calculating tax expenditures. The reference base is calculated pursuant to real data about income, deductions and losses brought forward, as in formula (1)

Reference base = income – losses brought forward – personal allowance – other deductions	(1)

The reference base is divided, and each part is multiplied by the appropriate rate. The amounts are aggregated into the tax due which is called the reference tax liability.

We shall distinguish the reference base from the simulated base, and the reference tax base from the simulated tax liability. We want, in fact, to know how much tax revenue there would be in the system were it not for deduction *i.* In order to obtain this result, first of all we have to calculate the simulated base, which is the same as the reference base increased by the amount of deduction *i*¸ as shown by formula (2).

Simulated base *i* = reference base + amount of deduction *i*	(2)

The simulated base is divided, and each part is multiplied by the appropriate rate. The amounts obtained are aggregated into the tax due which we call the *simulated tax liability for deduction i.*

Now the tax expenditure for the deduction is calculated as the difference between the simulated and the reference tax liability, as shown in formula (3).

Tax expenditure *i* = simulated tax *i* – reference tax	(3)

The procedure shown here is repeated for each individual deduction.

[11] For example, for a taxpayer whose base income in 2004 was 200,000 kuna, a relief of 1 kuna meant a reduction of the tax due of 45 lipa; for a taxpayer whose highest marginal rate was 15%, a one kuna relief meant a reduction of tax due of 15 lipa.

[12] For the purposes of the research "Redistributive effect of income in Croatia (Urban, 2006) data were collected concerning income, reliefs and tax of individual taxpayers who paid personal income tax (sample of 5% of the population). This sample enabled the simulation of the tax burden pursuant to which we shall calculate the tax expenditures for each individual relief.

In this way, with the use of several marginal rates, the major part of personal income tax in Croatia is taxed – incomes from salaries, pensions and self-employed work or small business activities. However, some kinds of personal income – from assets, other independent activity and capital are taxed with the same rate, and there is no obligation to include these incomes into the annual tax return. Allowances D15 and D16 are also associated with these kinds of income. These are the so-called lump-sum expenditures, which are subtracted from the income in order to obtain the base, which is then taxed at a single rate.

The databases that we use enable the differentiation of personal income tax that is reported in the annual tax return from that which is not. For income from assets and other independent activities that are reported in the annual tax return (ATR) the calculation of the tax deductible expenses for reliefs D15 and D16 is done in the manner already mentioned. For the part of the income outside the ATR a simple formula is used according to which the amount of the relief is multiplied by the rate at which this income is taxed. This is shown in formula (4). The amounts of tax expenditures for allowances D15 and D16, separately calculated for income inside and outside the scope of the ATR are aggregated to produce the total amounts.

Tax expenditure i = the amount of the relief i x the single rate	(4)

In the reduction of tax due or the tax credit, the whole amount of the relief is a tax expenditure, and there is no need for this kind of calculation.

The following tables show the total nominal amounts of allowances and reliefs allowed[13], and the tax expenditures calculated from them according to each individual allowance in the 2001-2004 period, for the general government and as a loss of the central government budget alone.

The greatest amounts of nominal allowances are found in the reduction of the tax base. The estimate is that for the basic personal allowance of the taxpayer alone (A1) in 2001, 35 billion kuna of nominal allowances were put aside and in 2004 this became almost 44 billion kuna. As additional personal allowance for dependents (A2) vast nominal amounts of allowances were set aside, with an average of 8.1 billion kuna in the analysed period. For A1 and A2 allowances together almost 43 billion kuna were set aside in 2001, and almost 53 billion kuna in 2004. The increase was mostly the result of the increase in the actual amount of the basic personal allowance in the analysed period. But the categories of basic and dependents allowances are primarily welfare categories, and in the literature, as in this research, are not considered a tax expenditure. We have stated the results in order to get some picture of how much they burden the central government budget and the general government budget, but we assume that the category of basic personal allowance is an inherent part of the tax system which ensures that all taxpayers can enjoy the minimum standard of living.

As for other nominal amounts of allowances, earmarked are amounts allowed for reductions for premiums for life insurance that have characteristics of savings, premiums for supplementary and private health insurance and premiums of voluntary retirement insurance (D3), additional personal allowance for persons living in the Areas of specia National concern (PPDS) and in other areas specially treated for tax purposes (D10), and lump-sum expenditures for taxpayers who have earned personal income from some other independent activities (D16). The greatest amounts are set aside as the additional person-

[13] Calculations of the Institute of Public Finance, official figures from the Central Office of Tax Administration are given in the annexes for comparison.

al allowance for people living in the (PPDS) and other areas specially treated for tax purposes (D10): amounts range from almost half a billion kuna in 2001, rising to 1.8 billion kuna in 2004. This result is mainly caused by the statutory increase in the amount of the basic personal allowance for personal income tax payers who live in the PPDS.

Table 8 Nominal amounts of reliefs, allowances, exemptions and deductions in general government revenue from personal income tax from 2001 to 2004 (in million kuna)

		2001	2002	2003	2004
I Reduction of the tax base					
Total other allowances (D)		2,023.2	2,600.0	4,332.4	4,897.9
D1	untaxed receipts of artists, or exemptions and reliefs to private persons who carry out some artistic or cultural activity	0.2	0.8	0.5	0.0
D2	the untaxed part of artistic royalty or fee	28.3	26.2	23.9	28.5
D3	premiums for life insurance that have characteristics of savings, premiums for supplementary and private health insurance, and voluntary refirement insurance premiums	100.8	388.5	591.7	673.4
D4	income reduction in the Areas of Special National Concern (PPDS) and the city of Vukovar	67.6	84.7	100.1	178.8
D5	augmented depreciation costs	187.2	253.3	479.0	348.5
D6	tax deductible entertainment costs	4.2	2.2	4.4	2.2
D7	the salaries paid out for newly hired staff and rewards to pupils doing practical work	28.0	59.0	74.6	69.1
D8	expenditures for training and personal proffesional development of staff, since 2003	–	–	6.8	9.6
D9	expenditures for research and development (R&D, 100 percent reduction of tax base for costs of R&D and costs of depreciation for intangible assets acquired), since 2003	–	–	0.1	0.7
D10	additional personal allowance for persons living in the Areas of Special National Concern (PPDS-1st, 2nd and 3rd categories) and other areas specially treated for tax purposes (hill and mountain areas and islands – 45 units)	494.6	630.6	1.567.1	1.820.9
D11	contributions for health insurance in the country, from 2003	–	–	0.4	0.5
D12	expenditures for healthcare services, from 2003	–	–	43.8	102.8
D13	expenditures for satisfaction of housing requirements, from 2003	–	–	328.8	506.0
D14	expenditures for donations for culture, art and the similar purposes	4.2	2.8	3.5	3.0
D15	lump-sum expenditures for taxpayers who have acquired some forms of income from assets	388.4	390.4	572.7	616.4
D16	lump-sum expenditures for taxpayers who have earned personal income from some other independent activities	719.8	761.2	535.1	537.6
Total personal allowance (A)		42,804.4	44,965.1	49,417.5	52,670.1
A1	basic personal allowance of the taxpayer	35,057.7	36,707.1	41,660.6	43,855.3
A2	additional personal allowance for dependents	7,746.7	8,258.0	7,757.0	8,814.8
II Reduction of tax due (C)					
C1	tax credit for Croatian Wartime Military Disabled in proportion to degree of disability	11.5	8.3	10.7	14.1

Calculation: Institute of Public Finance, 2006.

Tax credits, or reductions of tax due, have a negligible role as compared with deductions from the tax base.

Let us now look at what is the amount of tax expenditures in the personal income tax system in the period from 2001 to 2004.

Table 9 Tax expenditures in the personal income tax revenue of general government, real amounts (in million kuna)

		2001	2002	2003	2004
I Reduction of the tax base					
Total other allowances (D)		616.7	628.7	939.3	1042.2
D1	untaxed receipts of artists, or exemptions and reliefs to private persons who carry out some artistic or cultural activity	0.0	0.1	0.1	0.0
D2	the untaxed part of artistic royalty or fee	8.0	7.1	6.3	8.1
D3	premiums for life insurance that have characteristics of savings, premiums for supplementary and private health insurance, and voluntary refirement insurance premiums	22.9	87.4	123.0	149.0
D4	income reduction in the Areas of Special National Concern (PPDS) and the city of Vukovar	16.5	19.9	21.7	44.7
D5	augmented depreciation costs	62.5	82.6	189.5	133.2
D6	tax deductible entertainment costs	1.4	0.5	1.8	0.7
D7	the salaries paid out for newly hired staff and rewards to pupils doing practical work	7.4	16.8	19.7	18.5
D8	expenditures for training and personal proffesional development of staff, since 2003	–	–	1.9	2.5
D9	expenditures for research and development (RRD, 100 percent reduction of tax base for costs of R&D and costs of depreciation for intangible assets acquired), since 2003	–	–	0.0	0.2
D10	additional personal allowance for persons living in the Areas of Special National Concern (PPDS-1st, 2nd and 3rd categories) and other areas specially treated for tax purposes (hill and mountain areas and islands – 45 units)	90.0	117.0	261.9	311.3
D11	contributions for health insurance in the country, from 2003	–	–	0.1	0.1
D12	expenditures for healthcare services, from 2003	–	–	9.7	22.9
D13	expenditures for satisfaction of housing requirements, from 2003	–	–	67.7	108.6
D14	expenditures for donations for culture, art and the similar purposes	1.4	0.8	1.4	0.9
D15	lump-sum expenditures for taxpayers who have acquired some forms of income from assets	210.8	87.8	85.9	92.5
D16	lump-sum expenditures for taxpayers who have earned personal income from some other independent activities	195.9	208.7	148.7	149.1
Total personal allowance (A)		7,710.4	8,142.9	8,644.2	9,312.7
A1	basic personal allowance of the taxpayer	6,192.8	6,521.3	7,196.6	7,649.8
A2	additional personal allowance for dependents	1,517.6	1,621.6	1,447.7	1,662.9
II Reduction of tax due (C)					
C1	tax credit for Croatian Wartime Military Disabled in proportion to degree of disability	11.5	8.3	10.7	14.1

Calculation: Institute of Public Finance, 2006.

It is logical, given the explanations of the greatest amounts of allowances in the taxation of personal income, that the greatest tax expenditures are related to these allowances. Thus, the greatest amount of tax expenditures are made for deductions from the tax base, while no significant amounts are allowed for reductions of tax due.

Convincingly the greatest amounts of tax expenditures were "lost" by general government in the total personal allowances of the taxpayer (A), i.e., the aggregated basic personal allowances (A1) and additional personal allowances for dependents (A2). For example, total tax expenditures for the total personal allowances (A) moved up from 7.7 billion kuna in 2001 to 9.3 billion in 2004. Within the basic personal allowance alone (A1) general government gave up more than 6 billion kuna in 2001 and 7.7 billion kuna in 2004.

Tax expenditures made for total other allowances (D, not including total personal allowance A) reducing the tax base rose from 0.6 billion kuna in 2001 to more than one billion kuna in 2004.

Of other tax expenditures that act to reduce the tax base, the particularly prominent ones are the allowances for premiums for life insurance that have characteristics of savings, premiums for supplementary and private health insurance and premiums of voluntary retirement insurance (D3), for augmented depreciation costs (D5), for additional personal Areas of Special National Concern (PPDS) (D10), for lump-sum expenditures for taxpayers who had earned some forms of income from assets (D15) and lump-sum expenditures for taxpayers who have earned some income from some "other independent activities" (D16), but with different tendencies. Expenditures for allowances D3, D5 and D10 were on the rise, while tax expenditures for D15 and D16 tended to fall in the analysed period.

Considering the total amounts of tax expenditures made inside the untaxed receipts of artists, or exemptions and reliefs to private persons who carry out some artistic or cultural activity (D1), the tax deductible entertainment costs (D6), expenditures for research and development (D9) and expenditures for donations for culture, art and similar purposes (D14), we can say that these allowances do not have great importance in the tax system. But since each allowance increases the administrative costs of the tax authorities, consideration should be given to their abolition. Of course this claim seems still even better-founded if we bear in mind one of the basic principles of taxation – the principle of simplicity.

In order to find out how much the central government budget lost from tax expenditures in the personal income tax system, it is necessary to calculate the ratio of the central government revenue and the consolidated general government revenue on the basis of personal income tax.

Table 10 Ratio of central government budget revenue and consolidated general government revenue on the basis of personal income tax

		2001	2002	2003	2004
A	Revenue of the central government budget from personal income tax	3,404	3,363	3,115	3,128
B	Revenue of consolidated general government from personal income tax	6,445	7,227	7,198	7,765
A/B	Revenue of central government budget as a proportion of total revenue of consolidated general government	0.53	0.47	0.43	0.40

Sources: MF (2004:201, 212; 2006:194, 216)

The table shows clearly that, for example, in 2001, for each kuna that was collected into the budget of consolidated general government, almost 0.53 kuna was revenue of the central government budget. By the end of 2004, this share fell, mainly because of decentralisation. Thus, in 2004 only 0.40 kuna of every one revenue kuna collected on the basis of personal income tax made up revenue of the central government budget.

Table 11 Loss of central government revenue on the basis of tax expenditures in the personal income tax system from 2001 to 2004 (in million kuna)

		2001	2002	2003	2004
I Reduction of the tax base					
Total other allowances (D)		326.9	295.5	403.9	416.9
D1	untaxed receipts of artists, or exemptions and reliefs to private persons who carry out some artistic or cultural activity	0.0	0.1	0.04	0.0
D2	the untaxed part of artistic royalty or fee	4.2	3.3	2.7	3.2
D3	premiums for life insurance that have characteristics of savings, premiums for supplementary and private health insurance, and voluntary refirement insurance premiums	12.1	41.1	52.9	59.6
D4	income reduction in the Areas of Special National Concern (PPDS) and the city of Vukovar	8.7	9.4	9.3	17.9
D5	augmented depreciation costs	33.1	38.8	81.5	53.3
D6	tax deductible entertainment costs	0.7	0.2	0.8	0.3
D7	the salaries paid out for newly hired staff and rewards to pupils doing practical work	3.9	7.9	8.5	7.4
D8	expenditures for training and personal proffesional development of staff, since 2003	–	–	0.8	1.0
D9	expenditures for research and development (R&D, 100 percent reduction of tax base for costs of R&D and costs of depreciation for intangible assets acquired), since 2003	–	–	0.0	0.1
D10	additional personal allowance for persons living in the Areas of Special National Concern (PPDS-1st, 2nd and 3rd categories) and other areas specially treated for tax purposes (hill and mountain areas and islands – 45 units)	47.7	55.0	112.6	124.5
D11	contributions for health insurance in the country, from 2003	–	–	0.04	0.04
D12	expenditures for healthcare services, from 2003	–	–	4.2	9.2
D13	expenditures for satisfaction of housing requirements, from 2003	–	–	29.1	43.4
D14	expenditures for donations for culture, art and the similar purposes	0.7	0.4	0.6	0.4
D15	lump-sum expenditures for taxpayers who have acquired some forms of income from assets	111.7	41.3	36.9	37.0
D16	lump-sum expenditures for taxpayers who have earned personal income from some other independent activities	103.8	98.1	63.9	59.6
Total personal allowance (A)		4,086.5	3,827.2	3,717.0	3,725.1
A1	basic personal allowance of the taxpayer	3,282.2	3,065.0	3,094.5	3,059.9
A2	additional personal allowance for dependents	804.3	762.2	622.5	665.2
II Reduction of tax due (C)					
C1	tax credit for Croatian Wartime Military Disabled in proportion to degree of disability	6.1	3.9	4.6	5.6

Source: authors' calculation

The same ratios were applied each year to tax expenditures of general government to obtain tax expenditures of central government budget.

Central government budget alone lost 327 million kuna on the basis of total other allowances (D) in 2001, or 417 million in 2004. For example, in 2004, the greatest losses from any of the other allowances, D (from D1 to D16) were suffered recorded within the following items: additional personal allowance for persons who lived in the Areas of Special National Concern (PPDS) (D10, 125 million kuna), premiums for life insurance that have characteristics of savings, premiums for supplementary and private health insurance and premiums for voluntary retirement insurance (D3) and lump-sum expenditures for taxpayers who have earned personal income from some other independent activities (D16), 60 million kuna each. In the concept of the augmented depreciation costs (D5) the central government budget lost 53 million kuna.

Because of the claimed basic personal allowances for the taxpayer (A1), the central government budget lost 3.3 billion kuna in 2001 and 3.1 billion kuna in 2004. The amounts for allowance A2 came from 0.8 billion kuna in 2001 to 0.6 billion in 2004. If we aggregate A1 and A2 (total personal allowance, A) then we will obtain the amounts of 4.1 billion kuna in 2001, and 3.7 billion kuna in 2004 that were voluntarily renounced by the government exchequer.

Items that reduce tax due or tax credits (C) did not constitute an important loss of revenue to the central government budget. Thus, the budget set aside the sum of 6.1 million kuna in 2001 and 5.6 million kuna in 2004for tax credits for Croatian Military War Disabled (C1).

Conclusion

In both the theory and the practice of contemporary tax systems there is a tendency to reduce various tax exemptions and privileges that distort the consistency of the tax system. The Croatian tax system, however, abounds in allowances and exemptions that reduce the tax base, with just a single exemption that reduces the tax due. Up to 2001 the reasons for these were numerous, from the particular circumstances of the Republic of Croatia in and just after the Homeland War, to the need to give certain tax breaks to artists and support artistic creation and sport. The number of allowances and reliefs in the personal income tax system suddenly rose when the new Personal Income Tax Law was passed at the end of 2000. The good thing about the new Law was that it brought together everything that had previously been settled via a number of separate statutes, but the bad thing was that in addition to a single (basic personal) allowance, a number of other allowances were allowed that reduced the tax base. The various exemptions and tax privileges complicate the tax system, increase the costs of tax collection and open up windows for tax evasion. It is hard to say how much the existing tax breaks really do enable privileged categories of taxpayers to enjoy a better tax position, but in this project we have attempted to show how much less revenue is collected because of them.

General government and central government budgets lost the highest amounts with the total personal allowances (A). However, these amounts were not treated as tax expenditures in this investigation; in fact, they are treated as an inherent part of the tax system. The amounts are presented for us to be able to have some picture of the amounts that were involved in just these two items. It was also shown that the tax expenditures associated with other allowances (D, not including personal allowance A) that reduce the tax base rose in the investigated period.

Because of the claimed basic personal allowances for tax payers (A1) the central government budget lost 3.3 billion kuna in 2001 and 3.1 billion in 2004. Amounts for additional personal allowance for dependents (A2) came to 0.8 billion in 2001 and almost 0.6 billion in 2004. The aggregate, A1 and A2, gives the total personal allowance (A), and the central government exchequer in 2001 forewent 4.1 billion kuna on this basis and 3.7 billion kuna in 2004.

As for other tax expenditures that reduce the tax base, particular prominence is assumed by premiums for life insurance that have characteristics of savings, premiums for supplementary and private health insurance, and voluntary retirement insurance premiums (D3), augmented depreciation costs (D5), additional personal allowance for persons living in the Areas of Special National Concern (PPDS) (D10), lump-sum expenditures for taxpayers who have earned some forms of income from assets (D15) and lump-sum expenditures for taxpayers who have earned personal income from some other independent activities (D16), but with different trends. Tax expenditures for allowances D3, D5 and D10 grew in the analysed period, while those for D15 and D16 fell. This means that the first group of tax expenditures in the personal income tax system had the effect of decreasing the revenues of the general and central government budget, while the second had an opposite, increasing effect.

Given the small total amounts of tax expenditures made in the context of untaxed receipts of artists (D1), the tax deductible entertainment costs (D6), expenditures for research and development (D9) and expenditures for donations for culture, art and similar purposes (D14), we can say that these allowances do not have a major role in the tax system. However, since every allowance and relief increases the administrative costs of taxation, consideration should be given to repealing them. Certainly, the aim should be achieving the greatest possible degree of transparency, simplicity and user-friendliness, some of the important preconditions for an effective tax system. This should necessarily result in some future mini-reform of the tax system.

4 Corporate income tax

Corporate income tax is paid by corporate entities on the profit or corporate income they make, that is, the difference between revenues and expenditures.

The first part of this section deals with the share of corporate personal income tax in overall tax revenues of the central government budget. Similar to the situation with personal income tax, the emphasis here is placed on the definition of total (gross) corporate personal income tax and its importance as central government budget revenue (concerning the calculation, see diagram 2 in the chapter on personal personal income tax).

Overview of corporate income tax and its importance

The corporate income tax is a direct tax paid by entities and shared among central government, counties, and cities and municipalities in the ratio of 70:10:20.[14]

[14] The Financing of Units of Local and Regional Self-Government Law (NN 117/93, 33/00, 73/00, 59/01, 107/01, 117/01, 150/02, revised wording).

According to the Corporate Income Tax Law (NN 177/04), the taxable entity is a company and any other legal or natural person who is permanently and independently engaged in an economic activity for the purpose of deriving a profit, an income or revenue, or other assessable economic benefit. Taxpayers are on the whole legal entities, while natural persons can be so only under certain conditions. A natural person who derives income from small business, from independent or freelance occupations and farming and forestry pays this tax only if he or she wants to on his or her own request. A natural person can choose to pay corporate personal income tax instead of personal personal income tax.

The tax base comprises of displayed profit in the accounting period, i.e. the difference between revenues and expenditures. For a domestic taxpayer this is the total profit or corporate income earned in Croatia and abroad, and for a foreign taxpayer the corporate income earned in Croatia.

In 1994 the corporate income tax rate was 25%. With changes to the Law at the end of 1996, this rate was raised to 35%, so as to be harmonised with the upper rate of income tax. From January 1st, 2001, the tax rate on corporate income was reduced to 20%.

Table 12 shows the importance of central government budget revenue from corporate income tax.

Table 12 Central government budget revenue from corporate income tax as a proportion of total central government budget revenue and as a proportion of GDP (in million kuna and in %)

	2001	2002	2003	2004
GDP	165,640	179,390	193,067	207,082
Total central government budget tax revenues	40,493	42,810	45,281	47,150
Central government budget revenue from corporate income tax	1,987	2,659	3,074	3,131
Central government budget revenue from corporate income tax as proportion of:				
Total central government budget tax revenues	4.9	6.2	6.8	6.6
GDP	1.2	1.5	1.6	1.5

Source: Ministry of Finance (see annex)

The amounts of central government revenue collected from corporate income tax grew from almost 2 billion in 2001 to over 3 billion in 2004. The biggest rise in central government revenue happened in 2002. Corporate income tax as a proportion of total central government budget tax revenue also rose, from 4.9% in 2001 to 6.6% in 2004. Similarly, central government budget revenue from corporate income tax as a proportion of GDP also rose from 1.2% in 2001 to 1.5% in 2004.

We will now consider the legislative changes that occurred in the taxation system during the period under observation, and the items we have analysed.

Expenditures in the corporate income tax system in 2000–2004

With the aim of simplifying the tax system, in parallel with the build-up of the overall economic system, from 2000 on a change in the direct taxation system was enacted, including the corporate income tax system. The tax authorities justified the changes with the need to harmonise the tax system with EU systems and to increase its competitiveness vis-à-vis other transition countries. From 2000, the payment of corporate personal income tax was regulated by the Corporate Income Tax Law (NN 127/00).

The basic items that show expenditures in the system of corporate income tax from this period are regulated in the form of reliefs or reductions of the tax base and reductions of the tax due or tax credits. Tax exemptions and reliefs are allowed to the following taxpayers:

- taxpayers who carry out their activity in Areas of Special National Concern (PPDS) and permanently employ more than five employees, with more than 50% of the employees having domicile and habitual residence, pay corporate personal income tax at 25, 50 or 75% of the standard corporate personal income tax rate, depending on the actual Areas of Special National Concern (the 1st, 2nd or 3rd group),
- exceptionally, taxpayers who carry out an activity in the area of the City of Vukovar, if they meet these conditions, shall be totally exempt from corporate income tax in 2000 and in the next 5t years, after which they will pay corporate income tax at 25% of the standard rate,
- tax free zone users pay 50% of the prescribed rate of taxation. Exceptionally, a user that invests resources in and amount more than 1,000,000 kuna in a free zone does not pay corporate income tax for the next five years of business operations, although at the most up to the amount of resources invested. If the free zone is located in the area of the Vukovar and Srijem county the user of the tax free zone does not pay corporate income tax for five years from the start of the activity, and then he will pay 25% of the prescribed corporate income tax rate. Exceptionally, the Government can increase the tax relief when it determines that there is an economic interest for a given zone,
- special capital investment incentives were also provided. Privileged rates of corporate income tax depended on the amount of the investment and the number of persons employed. The opportunities for taking advantage of the privileged rate can be seen from the table.

Table 13 Privileged rate of corporate income tax for capital investment incentives

Amount of investment (in million kuna)	Privileged rate of corporate income tax (in %)	Time claimed (years from beginning of investment)	Minimum number of employees (from beginning of investment)
at least 10	7	10	30
more than 20	3	10	50
more than 60	0	10	75

Source: Corporate Income Tax Law, NN 127/00 i 163/03

- The law also stipulated certain employment incentives. The tax base could additionally be reduced by the amount of salaries and contributions for newly hired employees for one year. Deducting these wages was possible twice: once as an expenditure reducing the income, and once as a credit applied to the tax due.

- Incentives for occupational rehabilitation and employment of disabled persons enabled such taxpayers to pay corporate income tax at the rate of 25% of the prescribed rate.

Key changes in 2003 and 2004

- Taxpayers who carried out an activity in the hill and mountain area and permanently employed more than 5 employees, more than 50% of whom had domiciles and habitual residences in the hill and mountain area, would pay the corporate income tax in the amount of 75% of the prescribed rate.
- The tax base could additionally be reduced in the tax period by incentives for research and development and for depreciation costs of intangible assets acquired. The law defined in detail what it meant by research and development and intangible assets.
- The tax base could also be additionally reduced by the incentives for education, training and personal professional development for employees in the period for which the tax was being assessed.

Changes in 2005. The new Corporate Income Tax Law (NN 177/04) came into force on January 1st, 2005. This law will become the subject of research in the future, but it is certain that because of its simplicity and greater comprehensiveness it brought more order and many changes into the corporate personal income tax system. The basic purpose of the new law was to resolve the weaknesses of the existing system, to simplify the law and the assessment of the tax base, and to gradually align direct taxation with EU directives.

The legislative framework of corporate personal income tax up to 2004 consisted of:

- Corporate Income Tax Law (NN 127/00, 163/03),
- General Tax Law (NN 127/00, 86/01, 150/02),
- Corporate Income Tax Regulations (NN 54/01 198/03),
- Areas of Special National Concern Law (revised wording) (NN 26/03),
- Areas of Hill and Mountain Areas Law (NN 12/02, 32/02, 117/03),
- Reconstitution and Development of City of Vukovar Law (NN 44/01),
- Depreciation Regulations (NN 54/01),
- Decision concerning confirmation status of a municipality as belonging to the 3rd group of areas of special national concern (NN 138/02).

From 2005, however, the following were applied:

Corporate Income Tax Law (NN 177/04, and Amendments, NN 90/05)
General Tax Law (NN 127/00, 86/01, 150/02)
Corporate Income Tax Regulations (NN 1/05, 14/05, and most recently 95/05, since when previous Regulations have been invalid)
Areas of Special National Concern Law (NN 44/96, 57/96, 124/97, 78/99, 73/00, 07/00, 127/00, 88/02, 42/05 and 90/05)
Areas of Hill and Mountain Law (NN 12/02, 32/02, 117/03, 42/05 and 90/05)
Reconstitution and Development of City of Vukovar Law (NN 44/01 i 90/05)
The Free Zones Law (NN 44/96 and 92/05).

For more: Porez na dobit (2005:21).

The current investigation gives an analysis of the following items.

I Items that reduce the corporate income tax base are:

- incentives for employment (the whole of the period)
- incentives for research and development (since 2003)
- incentives for education, training and personal professional development (since 2003).

Since 2003 (NN 163/03) reliefs have been in operation for taxpayers who invest in research and development and incentives for training and personal professional development of their employees. Up to that time there were privileges for taxpayers depending on the place of their activity, the amount of investment in the undertaking of the activity or privileges in the form of deferred payments of tax such as accelerated or one-time depreciation of equipment and real estate. The objective of these reductions was to encourage research and development that was oriented to the manufacture of new products and generation of new procedures, to the improvement of existing and the development of in-house know-how as well as the stimulation of the economic sector to greater investment in research and development.

By incentives for training and personal professional development, the government attempted to use taxes to encourage those taxpayers who did ongoing training of their employees.

II Items that reduce the tax due or tax credits are:

- reliefs and exemptions for the Areas of Special National Concern (PPDS, for 1st, 2nd and 3rd Groups and the hill and mountain areas),
- reliefs and exemptions for the area of the city of Vukovar,
- capital investment incentives (depending on the amount and time of the investment and the number of employees and the amount of the rate).

This investigation does not analyse expenditures that are partially deductible (material costs, service costs and depreciation), items increasing corporate income (30% of the costs of the use of personal cars, entertainment, donations and promotion), items reducing corporate income (revenues from dividends, profit shares) and tax loss.

Calculation of total amount of tax expenditures

Before calculating the total amount of tax expenditures or losses of total government exchequer revenue, we shall attempt to calculate the effective or real rate of corporate income tax in Croatia. In other words, the real obligation of the taxpayer is expressed as percentage of taxable corporate income, i.e., as tax rates that take into consideration not just the standard tax rate but also other aspects of the tax system that define the amount of tax. The real tax rate shows the real economic tax burden.

From the table we can see that the effective corporate income tax rate was a little lower than the standard or official rate, and that it decreased from 19.5% in 2001 to 18.1% in 2004.

Let us look now at Table 14 and the amounts of reductions in the corporate income tax base and reductions of tax due in the analysed period.

Table 14 Effective corporate income tax rate in Croatia from 2001 to 2003.[a]

		2001	2002	2003	2004
Official tax base (in million kuna)	1	16,683.6	19,576.5	20,840.0	23,892.8
Reduction from the corporate income tax base[b] (in million kuna)	2	178.4	298.1	1,255.1	1,626.3
Potential tax base (in million kuna)	3=2+1	16,862.0	19,874.6	22,095.1	25,519.1
Official tax rate (in %)	4	20	20	20	20
Provisional tax due (in million kuna)	5=1x4	3,336.7	3,915.3	4,168.0	4,778.6
Reduction of tax due[c] (in million kuna)	6	50.6	63.0	122.9	152.9
Final tax due (in million kuna)	7=5-6	3,286.1	3,852.3	4,045.1	4,625.7
Effective or real tax rate (in %)	8=7/3x100	19.5	19.4	18.3	18.1
Effective tax rate/Official tax rate (in %)	9=8/4x100	97.5	97.0	91.5	90.5

[a] *A similar calculation can be seen in a World Bank document (World Bank, 2003)*

[b] *Whole period employment, research and development, and educational, training and personal professional development incentives since 2002*

[c] *Reliefs and exemptions for Areas of Special National Concern (PPDS, 1st, 2nd, and 3rd Group), for Vukovar and free zone users, incentives for investment, and incentives for occupational rehabilitation and the employment of disabled persons*

Source: authors' calculation

Reductions of the corporate income tax base. Since incentives for research and development and for education, training and personal professional development were introduced in 2003, there is no data for previous years. In 2003, however, for incentives for research and development alone more than half a billion kuna were set aside, while in 2004 these expenditures rose to 620 million kuna. 313 million kuna were set aside for incentives for education and personal professional development in 2003, and 652 million kuna in 2004. Nominal amounts of incentives for employment rose from 178 million kuna in 2001 to 370 million kuna during 2004. In order to obtain total losses to all levels of government we must apply the rate of corporate income tax – 20% – to these amounts. The results are shown in table 16.

The table shows that with the introduction of new incentives into the system (for research and development and for education, training and personal professional development), incentives for employment increasingly lost importance.

Corporate income tax credits. Items that reduce the tax due are divided into reliefs and exemptions in the PPDS, for the city of Vukovar, for users of free zones and for capital investment incentives and incentives for the employment of the disabled persons. All the analysed items grew in the 2001 to 2004 period. Hence, the amounts of exemptions and reliefs for the Areas of Special National Concern (PPDS) grew from 14 million in 2001 to 35 million in 2004. The greatest amounts were set aside for the 2nd group of PPDS. Special exemptions and reliefs for Vukovar grew from almost 6 million in 2001 to 13 million kuna in 2004. Total amounts of reliefs and exemptions for users of free zones rose from 31 million kuna in 2001 to 64 million kuna in 2004. Capital investment incentives also increased, from hardly

200,000 kuna in 2001 to a sizeable 41 million kuna in 2004. It is interesting that the greatest amounts were allowed for incentives to corporate income obtained from investments greater than 60 million kuna, with corporate income tax being paid at a rate of 0% for the 10 years subsequent to the start of the investment, along with the condition that the enterprise employed at least 75 employees. In this incentive item alone, more than 24 million kuna were set aside in 2004. An insignificant part was played by incentives for the employment of the disabled, both qualitatively and quantitatively, in amounts of incentives and in number of users. Instead of providing reliefs in this manner, it would be worth considering giving direct subsidies to these categories of taxpayers.

Table 15 Reliefs, exemptions and incentives to entities paying corporate income tax from the corporate income tax return of 2001 to 2004 (in million kuna)

	2001	2002	2003	2004
Reduction of the corporate income tax base for incentives				
Total incentives	178.4	298.0	1,255.1	1,641.8
incentives for employment	178.4	298.0	384.7	369.8
incentives for research and development	–	–	557.3	619.9
incentives for education, training and personal professional development	–	–	313.2	652.1
I Total reduction of the tax due from corporate income tax base on the basis of reductions for incentives (incentives x 20%)	35.7	59.6	251.0	328.4
Reductions of the tax due (tax credits)				
Reliefs and exemptions in the PPDS	14.2	18.4	34.6	34.6
1st group	4.3	5.4	7.6	10.2
2nd group	9.9	11.6	15.0	13.7
3rd group	0.1	1.4	5.4	4.0
hill and mountain areas	–	–	6.6	6.6
Reliefs and exemptions for the city of Vukovar	5.5	6.5	10.0	13.0
Reliefs and exemptions for free zone users	30.7	36.8	57.5	63.5
free zone users (50% of prescribed rate)	25.1	25.5	42.4	42.9
free zone users investing more than a million kuna	5.6	11.3	14.0	20.0
free zone users in city of Vukovar	–	–	1.1	0.6
Capital investment incentives	0.2	1.3	19.8	41.1
on corporate income from investment greater than 10 million kuna, 7% tax, 10 years, 30 employees	0.2	0.4	2.0	7.2
on corporate income from investment greater than 20 million kuna, 3% tax, 10 years, 50 employees	0	1.0	0	9.5
on corporate income from investment greater than 60 million kuna, 0% tax, 10 years, 75 employees	0	0	17.8	24.4
Incentives for the employment of disabled persons	0	0.3	0.9	0.8
II Total reductions of tax due from corporate income tax on the basis of reliefs and incentives	50.6	63.3	122.9	152.9
Total	86.3	122.9	373.9	481.3

Source: Central Office, Tax Administration, Ministry of Finance, January 31, 2006

The following table shows real losses of revenue or tax expenditures (for all levels of government, general budget) inside the corporate income tax system for items that reduce the tax base (incentives x 20%).

Table 16 Lost revenue because of reductions in the corporate income tax base for all levels of government (general budget) from 2001 to 2004, incentives x 20% (in million kuna)

	2001		2002		2003		2004	
	Reduction of the tax base	All levels of government	Reduction of the tax base	All levels of government	Reduction of the tax base	All levels of government	Reduction of the tax base	All levels of government
Incentives for employment	178.4	35.7	298.0	59.6	384.7	76.9	369.8	74.0
Incentives for research and development	0	0	0	0	557.3	111.5	619.9	124.0
Incentives for education, training and personal professional development	0	0	0	0	313.2	62.6	652.1	130.4
Total losses	178.4	35.7	298.0	59.6	1,255.1	251.0	1,641.8	328.4

Source: authors' calculation

After the tax rate of 20% is applied to the reductions of the tax base, we obtained the total amounts of reductions of corporate income tax due pursuant to reductions of the tax base given for incentives. From the table we can see that total losses to all levels of government among which the corporate income tax revenue is divided went up almost fourfold – from about 36 million kuna in 2001 they rose to as much as 328 million kuna in 2004.

If we want to calculate the loss only to the central government exchequer, we have to apply the formula for sharing the revenue (in this case, 70% of the corporate income tax revenue) to the amounts of total losses of revenue for all levels of government.

Table 17 Lost central government budget revenue within the reduction of the corporate income tax base (70% of the base) from 2001 to 2004

	Lost revenue							
	2001		2002		2003		2004	
	All levels of government	Central government budget	All levels of government	Central government budget	All levels of government	Central government budget	All levels of government	Central government budget
Incentives for employment	35.7	25.0	59.6	41.7	76.9	53.8	74.0	51.8
Incentives for research and development	0	0	0	0	111.5	78.1	124.0	86.8
Incentives for education, training and personal professional development	0	0	0	0	62.6	43.8	130.4	91.3
Total	35.7	25.0	59.6	41.7	251.0	175.7	328.4	229.9

Source: authors' calculation

Table 18 Total lost revenue in the corporate income tax system in the period from 2001 to 2004 (in million kuna)

	2001		2002		2003		2004	
	All levels of government	Central government budget	All levels of government	Central government budget	All levels of government	Central government budget	All levels of government	Central government budget
Reliefs and exemptions in the PPDS	14.2	9.9	18.4	12.9	34.6	24.2	34.6	24.2
1st group	4.3	3.0	5.4	3.8	7.6	5.3	10.2	7.1
2nd group	9.9	6.9	11.6	8.1	15.0	10.5	13.7	9.6
3rd group	0	0	1.4	1.0	5.4	3.8	4.0	2.8
hill and mountain areas	0	0	0	0	6.6	4.6	6.7	4.7
Reliefs and exemptions for the city of Vukovar	5.5	3.9	6.5	4.6	10.0	7.0	13.0	9.1
Reliefs and exemptions for free zone	30.7	21.5	36.8	25.8	57.5	40.3	63.5	44.5
users (50% of prescribed rate)	25.1	17.6	25.5	17.9	42.4	29.7	42.9	30.1
users investing more than a million kuna	5.6	3.9	11.3	7.9	14.0	9.8	20.0	14.0
free zone users in city of Vukovar on corporate income	0	0	0	0	1.1	0.8	0.6	0.4
Capital investment incentives	0.2	0	1.3	0.9	19.8	13.9	41.1	28.8
from investment greater than 10 million kuna, 7% tax, 10 years, 30 employees	0.2	0.1	0.3	0.2	2.0	1.4	7.2	5.0
from investment greater than 20 million kuna, 3% tax, 10 years, 50 employees	0	0	1.0	0.7	0	0	9.5	6.7
from investment greater than 60 million kuna, 0% tax, 10 years, 75 employees	0	0	0	0	17.8	12.5	24.4	17.1
Incentives for the employment of disabled persons	0.0	0	0.3	0.2	0.9	0.6	0.8	0.6
Total	50.6	35.3	63.3	44.4	122.8	86.0	153.0	107.2

Source: authors' calculation

By applying the 70% rate we can see that during 2001 the central government budget could have collected 25 million kuna more, if there had not been incentives for employment that reduced of the tax base. Over the course of time, these amounts grew, and in 2004 losses to central government budget revenue amounted to 52 million kuna because of incentives for employment. But from 2003 on the central government exchequer forewent much larger amounts in the name of incentives research and development for education and personal professional development. For example, in 2004 research and development incentives led to a central government budget loss of almost 87 million kuna from corporate income tax revenue, while incentives for education, training and personal professional development entailed the failure to collect almost 91 million kuna.

Now let us look at table 18 and the items reducing the tax due, or tax credits, for all levels of government (central, county, city and municipality) and separately just the loss of the central government budget revenue.

Reductions of the tax due (tax credits) caused losses to all levels of government in amounts from 51 million in 2001 to 153 million in 2004. Accordingly, the share of revenue that the central government exchequer might have collected in the taxation of corporate income tax but which it willingly forfeited rose from 35 million kuna in 2001 to 107 million kuna in 2004. The greatest amount of central government revenue was given up because of reliefs and exemptions for free zone users.

To summarize, total losses to all levels of government (general budget) in the taxation of corporate income tax are given in the following table.

Table 19 Total lost revenue of all levels of government (general budget) in the corporate income tax system in Croatia (in million kuna)

	2001	2002	2003	2004
Reductions of the tax due	50.6	63.3	122.9	152.9
Reductions of the tax base (incentives x 20%)	35.7	59.6	251.0	328.4
Total lost revenue of all levels of government	86.3	122.9	373.9	481.3

Source: authors' calculation

The total amounts that could have been collected in the corporate income tax system but were not because of various reductions in the tax base and reductions of the tax due were rising exponentially year after year. While these losses were only 86 million kuna in 2001, in 2004 they had come to almost half a billion kuna. In the light of problems with the deficits of the central government budget, and of most of the local and regional government units budgets, these are no small amounts. But once again we have to conclude that in Croatia the real problem is not in the revenue but in the expenditure side of the central government budget.

In line with figures from the preceding table, it can be concluded that central government budget losses due to uncollected corporate income tax have grown in the period under analysis. For example, in 2001, the central government gave up or, rather failed to collect 60 million kuna because of statutory provisions it created itself, while in 2004 these losses had climbed to 337 million kuna.

Table 20 Total lost central government budget revenue in the corporate income tax system (70% of total), (in million kuna)

	2001	2002	2003	2004
Reductions of the tax due	35.3	44.3	86.0	107.0
Reductions of the tax base (incentives x 20%)	25.0	41.7	175.7	229.9
Total lost central government budget revenue	60.3	86.0	261.7	336.9

Source: authors' calculation

To close this section, the following table gives details about the total number and the number of users of particular kinds of reliefs and exemptions in the corporate income tax system.

Table 21 Total number of returns submitted and number of tax reliefs claimed in the corporate income tax system

	2001	2002	2003	2004
I Reductions of the corporate income tax base				
Total incentives	2,909	3,989	9,626	13,781
incentives for employment	2,909	3,989	5,026	4,734
incentives for research and development	–	–	279	349
incentives for training and personal professional development	–	–	5,665	10,695
II Reductions of the corporate income tax due				
Reliefs and exemptions in the PPDS	138	281	713	736
1st group	65	84	114	136
2nd group	73	151	215	231
3rd group	3	52	127	121
hill and mountain areas			262	255
Reliefs and exemptions for the city of Vukovar	25	27	37	34
Reliefs and exemptions for free zone users	52	60	68	70
free zone users (50% of prescribed rate)	44	49	61	59
free zone users investing more than a million kuna	10	16	10	10
free zone users in city of Vukovar			3	6
Capital investment incentives	2	5	12	20
on corporate income from investment greater than 10 million kuna, 7% tax, 10 years, 30 employees	2	3	7	14
on corporate income from investment greater than 20 million kuna, 3% tax, 10 years, 50 employees	0	1	0	2
on corporate income from investment greater than 60 million kuna, 0% tax, 10 years, 75 employees	0	1	5	4
Incentives for the employment of disabled persons	3	6	6	10
Number of claimants of exemptions	3,129	4,368	10,462	14,651
Total number of filers of returns	71,927	71,690	73,790	77,104
Number of claimants as proportion of total number of return filers (in %)	4,4	6,1	14,2	19,0

Source: Central Office, Tax Administration, Ministry of Finance

The total number of claimants of one of the forms of exemption in the taxation of corporate income as a percentage of the total number of tax return filers rose from 4% in 2001 to 19% in 2004.

The greatest number of exemption claimants came in the system for reducing the tax base, in which the lead was taken by taxpayers who claimed incentives for employment and incentives for education, training and personal professional development. It is interesting that in 2003 only 279 taxpayers made use of incentives for research and development in an amount greater than 0.5 billion kuna, which meant an expenditure greater than 250 million kuna for the central government budget. Something similar occurred in 2004. In numbers of claimants in the system for reducing the tax due, claimants from the areas of special national concern stood out, although not very prominently.

Conclusion

The reductions of the tax base and the reduction of the tax due in the corporate income tax system divided into detailed groups are analyzed.

It is not clear why some incentives are in one and others are in a different group and the economic impact of this procedure is different. That is, in order to be able to obtain the real central government budget losses from the items of reductions of the tax base, it is necessary to apply the tax rate of 20% to these amounts, while no operations are needed within reductions of the tax due, which represent the amounts of the actual tax expenditures in the context of corporate income tax.

The total amounts that could have been collected in the corporate income tax system but were not because of reductions of the tax base and reductions of tax due are rising exponentially year by year. While in 2001 these losses came to only 86 million kuna, in 2004 they were more than 481 million kuna. In conjunction with the problems of deficits of the central government budget and of the budgets of most local and regional units, these amounts are not negligible.

Central government budget losses from uncollected revenues on the basis of corporate income tax rose from 60 million kuna in 2001 to 337 million kuna in 2004.

The size of the total revenue lost to the central government exchequer on the basis of corporate income tax as compared with total revenue collected from this tax can be seen from the following table.

Table 22 Lost central government budget revenue as a proportion of total central government budget revenue from corporate income tax

	2001	2002	2003	2004
Total central government budget corporate income tax revenue (in million kuna)	1,987	2,659	3,074	3,131
Lost central government budget revenue from corporate income tax (in million kuna)	60.3	86.0	261.7	336.9
Lost central government budget revenue as percentage of total central government budget revenue from corporate income tax (in %)	3.0	3.2	8.5	10.8

Source: authors' calculation

The previous table is the best indicator that the amounts that central government could have collected but did not are not so small and insignificant. It shows that lost tax revenues as a percentage of total central government budget corporate income tax revenue rose from 3% in 2001 to almost 11% in 2004. In other words, out of every 100 kuna of potential collected corporate income tax revenue, central government budget voluntary relinquished 11 kuna in 2004. In a situation in which the budget is in deficit and in which there are ever increasing demands, these amounts might have been an important source of revenue.

5 Real estate transfer tax

This chapter outlines the basic provisions of the real estate transfer tax in Croatia and its importance with respect to its share in the total tax revenue of the central government budget. Changes in the taxation of real estate transfer are explained subsequently, as well as the items that are considered expenditures in the context of this tax.

An overview of real estate transfer tax and its significance

Real estate transfer tax is an indirect and a shared tax. Total collected revenue is shared between the central government and the local government (40% to the central government, 60% to a municipality or a city).

According to the Real Estate Transfer Tax Law (NN 69/97), every acquisition of real estate is subject to taxation, irrespective of whether it is acquired by some legal transaction involving money, by inheritance, gift or some other way, even without any money changing hands. The taxpayer is the person or entity that acquires the real estate. The base for the tax is the market value of the real estate at the moment of acquisition. In other words, it is the price obtained for real estate obtained or that might be obtained for it on the market at the moment of the acquisition, taking into account its condition and physical characteristics such as location, and for buildings the quality of the construction, the age of the building, its main services and so on. As a rule, the market value is assessed by the Tax Administration pursuant to the transfer of documents, i.e., the price mentioned in the sale contract and other similar documents, if from the circumstances of each individual case it can be gathered that the price was really agreed on and paid.

The real estate transfer tax is paid on all kinds of real estate (land, buildings, and parts of buildings) at a standard rate of 5%. The law determines which sales are subject to real estate transfer tax, and which to VAT, and in conjunction with general tax exemptions also stipulates tax exemptions when real estate is put into the equity of a company and in the transfer of real estate in changes of corporate status (in a procedure for the merger, takeover or division of corporations). We will discuss this in more detail below.

Table 21 gives the best indication of the importance of this tax revenue for the central government budget and its proportion in the overall revenues of the central government budget.

The table shows that the real estate transfer tax, in terms of its proportion of total central government budget tax revenue and of GDP, has the least importance of all the forms of taxation analysed so far. That is, as a proportion of total tax revenue in the period from 2000 to 2004 the real estate transfer tax moved annually around 0.7%. As a proportion of GDP it is of course still much smaller, and comes to about 0.2%. In nominal amounts, real estate transfer tax revenue ranged from 282 million kuna in 2001 to 356 million kuna in 2004.

Table 23 Central government budget revenue from real estate transfer tax as a proportion of total central government tax revenue and as a proportion of GDP (in million kuna and in %)

	2001	2002	2003	2004
GDP	165,640	179,390	193,067	207,082
Total central government budget tax revenues	40,493	42,810	45,281	47,150
Central government budget revenue from real estate transfer tax	282	295	290	356
Central government budget revenue from real estate transfer tax as proportion of:				
Total central government budget tax revenues	0.7	0.7	0.6	0.8
GDP	0.2	0.2	0.2	0.2

Source: Ministry of Finance (see annex)

Tax expenditures in the real estate transfer tax from 2000 to 2004

Until 2004, the statutory framework for the real estate transfer tax consisted of:

- Real Estate Transfer Tax Law (NN 69/97, 153/02),
- General Tax Law (NN 127/00, 86/01, 150/02),
- Areas of Special National Concern Law (revised wording) (NN 26/03),
- Subsidised Housing Construction Law (NN 109/01, 82/04),
- The Legal Status of Religious Organizations Law (NN 83/02),
- Enforcement Law (NN 57/96 and 29/99),
- Regulations concerning the form and content of the real estate transfer tax return (NN 28/01),
- Decision concerning confirmation of whether municipalities have the status of members of the 3rd group of areas of special national concern (NN 138/02).

We shall now look at the best known items that are considered a loss of tax revenue in the real estate transfer tax, that is, tax expenditure in the sense of this investigation.

The best known forms of tax expenditures according to the Real Estate Transfer Tax Law, i.e., the tax exemptions, are divided into:

- general exemptions (Article 11, Law)
- tax exemptions when real estate is put into a corporation, either as founding equity or as increase of equity in line with the Companies Law and in the procedure of

merging or taking over companies, or splitting a single company into a number of entities (Article 12, Law),

- tax exemptions in the event of inheritance, deed or gifts or some other way of acquiring real estate without compensation (Article 13, Law).

In addition, by derogation from the provisions of the Real Estate Transfer Tax Law, the Areas of Special National Concern Law (NN 26/03) states that real estate transfer tax is not to be paid in the following cases:

- during acquisition of real estate in the PPDS (areas of special national concern) when an individual by the purchase of real estate registers or changes his registered domicile within this area or if he has a residence in the area (Article 13, Law)
- during purchase of real estate in the PPDS if it will be used by the purchaser (individual or company) for the performance of an activity (Article 13, Law)[15]

In the Law concerning the Legal Status of Religious Organizations (NN 83/-02) the following exemption is given:

- a religious organization is not liable to pay the real estate transfer tax on the acquisition of religious buildings or land for the construction of religious buildings, irrespectively of the manner in which such real estate have been acquired (Article 17, Paragraph 5).

In order to claim this right, religious organizations are bound, along with the contract and the tax return, to supply the competent local office of the Tax Administration with a certificate from the Register of Religious Organizations.[16]

According to the Socially Encouraged Housing Construction Law (NN 109/01) exemptions from this tax apply to:

- Agency for the legal trade and agency in real estate that acquires building land for the construction of housing units that cannot be greater in value than the market value and that constitutes the base for the calculation of the real estate transfer tax, an opinion as to this being given by the competent Tax Administration.

According to the Enforcement Law (NN 57/96 and 26/99) cases are stipulated in which:

- no tax is paid on real estate transfer, on the transfer of ownership of real estate for the sake of securing the payment of claims from the debtor to the creditor and vice versa (Article 273 – 279). No tax is paid when the creditor returns the ownership of the real estate to a debtor that has repaid a debt.

[15] *NB:* in both cases real estate transfer tax will be paid later if there is alienation, cessation of performance of the activity or if the claimant changes residences and moves outside the area within a period of 10 years from the day of purchase. Hence, the tax Administration in the procedure for assessing this tax and rights to exemptions from payment of it determine the tax base and the appropriate real estate transfer tax, and then rules that the assessed tax is not to be paid, but will be collected at a later date if changes take place because of which the tax is paid later.

[16] Regulations concerning forms and the manner of keeping records of the religious organizations in the Republic of Croatia (NN 9/03 and 12/03) additionally govern the issues of registering religious organizations.

Calculation of total amounts of tax expenditures

The following items will be analysed in the real estate transfer tax system: the amount of the exemptions, reduction of tax due on purchase of first piece of real estate[17] and reduction of tax due for the Areas of Special National Concern (PPDS).

The following tables give general data about real estate transfer tax and an analysis of taxpayers who have claimed exemptions and reductions of tax due on purchase of first piece of real estate and for the Areas of Special National Concern (PPDS).

Table 24 General data about the real estate transfer tax from 2001 to 2004 (all amounts in million kuna)

	2001	2002	2003	2004
Number of taxpayers	191,563	169,377	186,921	201,590
Number of taxpayers with exemptions	80,339	66,821	77,617	90,398
Contractual price	12,896.4	15,092.6	19,609.1	21,175.7
Tax basis	15,403.6	16,979.9	20,884.8	22,686.9
Amount of tax	750.6	814.3	985.4	1,079.1
Amount of exemptions from payment of tax	17.8	33.8	57.8	53.7
Total charge	750.6	–	–	–
Booked amount	698.6	744.8	737.2	794.0
Number of booked returns	–	102,563	108,896	118,688
Number of cancelled returns	–	154	120	99
Number of taxpayers claiming relief on purchase of first real estate	–	1,292	18,079	18,882
Reduction of tax due on purchase of first piece of real estate	0	12.2	174.1	194.3
Taxable surplus of area on purchase of first piece of real estate	–	73,780	1,422.701	1,501.090
Number of taxpayers from Areas of Special National Concern(PPDS)	6971	8,305	11,517	12,765
Reduction of tax due for the Areas of Special National Concern (PPDS)	0	24.8	38.1	55.0

Source: Central Office, Tax Administration, Ministry of Finance, June 23, 2005.

Reduction of tax due (tax credits). Items of reductions of tax due, reduction of tax due on purchase of first piece of real estate and in the Areas of Special National Concern (PPDS) belong to the group of tax credits. From the table it can also be seen that the records kept by the Tax Administration changed from 2002, which additionally hampered comparisons.

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[17] The Law concerning Amendments to the Real Estate Transfer Law (OG 153/02) provided tax exemptions for citizens who by buying their first piece of real estate provided housing for themselves that they otherwise did not have, on condition that the real estate that the person was buying, in relation to the size of the family, did not exceed a standardly defined area, and that the person acquiring the title to the property or members of his or her family possessed no other real estate. On the excess floor space, if during the purchase of a first piece of real estate a larger property than that for which exemption is granted is bought, the new owner of the title will have to pay tax at the standard rate. This exemption was introduced during 2002, and has been in force since January 1, 2003.

The greatest number of entities liable to pay real estate transfer tax that claimed some sort of exemption was recorded in 2004, more than 90,000 of them. An increasing number of taxpayers also claimed exemption from the payment of tax in the PPDS: from 7,000 in 2001 the number rose to 13,000 in 2004.

The following table shows the activities in which and the extent to which the three basic items analysed were claimed and led to a loss of shared tax revenue. In order to obtain precise amounts of losses of only central government revenue from the real estate transfer tax (not including the losses of the local units), the tax rate of 40% should be applied to the amounts of the total exemptions, for this is the percentage of the tax that goes to the central government budget.

Table 25 Statistical report about amounts of exemptions and reductions from the payment of the real estate transfer tax claimed (in million kuna)

	Amount of exemption	Reduction of tax due on purchase of first piece of real estate	Reduction of tax due for the PPDS
2001			
Sale and purchase	4.7	0	0
Inheritance	0.8	0	0
Gift	7.8	0	0
Exchange	0.2	0	0
Court decision	0.1	0	0
Other	3.7	0	0
Caregiving contract with posthumous effect	0.1	0	0
Caregiving contract with present effect	0.4	0	0
Total	17.8	0	0
2002			
Sale and purchase	26.9	12.2	22.1
Inheritance	0.5	0	0.3
Gift	2.3	0	1.0
Exchange	1.5	0	0.4
Court decision	0.6	0	0.5
Other	1.5	0	0.1
Caregiving contract with posthumous effect	0.1	0	0.1
Caregiving contract with present effect	0.4	0	0.3
Total	33.8	12.2	24.8

2003			
Sale and purchase	49.4	173.8	33.8
Inheritance	0.8	0	0.5
Gift	3.0	0	1.9
Exchange	1.1	0.1	0.6
Court decision	0.8	0	0.7
Other	2.0	0	0.1
Caregiving contract with posthumous effect	0.2	0	0.2
Caregiving contract with present effect	0.5	0.2	0.3
Total	57.8	174.1	38.1
2004			
Sale and purchase	43.9	193.4	50.0
Inheritance	2.7	0	0.8
Gift	3.8	0	2.2
Exchange	0.7	0.3	0.6
Court decision	0.4	0	0.4
Other	1.3	0.1	0.2
Caregiving contract with posthumous effect	0.3	0	0.2
Caregiving contract with present effect	0.5	0.5	0.6
Total	53.7	194.3	55.0

Source: Central Office, Tax Administration, Ministry of Finance.

Apart from 2001, the most used items were some of the tax exemptions, reduction of tax due on purchase of first piece of real estate and reduction of tax due in the Areas of Special National Concern (PPDS) in sale and purchase, and there was a particularly noticeable rise in reduction of tax due on purchase of first piece of real estate.

Table 26 Total lost revenue in the real estate transfer tax at all levels of government (central government, municipalities and cities) from 2001 to 2004 (in million kuna)

	2001	2002	2003	2004
Amount of exemption from payment of tax	17.8	33.8	57.8	53.7
Reduction of tax due on purchase of first piece of real estate	0	12.2	174.1	194.3
Reduction of tax due for the Areas of Special National Concern (PPDS)	0	24.8	38.1	55.0
Total	17.8	70.8	270.0	303.0

Source: author's calculations.

Total amounts of exemptions from payment of tax, reduction of tax due on purchase of first piece of real estate and reduction of tax due for the PPDS at all levels of government (central government, municipality and city) are rising year by year. These losses of general budget revenue (central and local government) increased from the almost 18 million kuna in 2001 to the 303 million in 2004.

But what were the losses of the central government exchequer? We can get these amounts if the total amounts of exemptions and reductions from the payment of real estate transfer tax are multiplied by the rate of 40%, which is the percentage of the tax that goes to the central government exchequer.

Table 27 Lost central government budget revenue in the real estate transfer tax system (in million kuna)

	2001		2002		2003		2004	
	All levels of government	Central government budget (40%)	All levels of government	Central government budget (40%)	All levels of government	Central government budget (40%)	All levels of government	Central government budget (40%)
Exemption from payment of tax	17.8	7.1	33.8	13.5	57.8	23.1	53.7	21.5
Reduction of tax due on purchase of first piece of real estate	0	0	12.2	4.9	174.1	69.7	194.3	77.7
Reduction of tax due for the PPDS	0	0	24.8	9.9	38.1	15.2	55.0	22.0
Total	17.8	7.1	70.8	28.3	270.0	108.0	303.0	121.2

Source: authors' calculation

Losses to central government budget due to uncollected real estate transfer tax caused by exemptions from payment tax, reductions of tax due on purchase of first piece of real estate and reductions on tax due for the PPDS were also rising year by year, from 7 million kuna in 2001 to 121 million kuna in 2004.

Conclusion

Since 2002 the amounts and the numbers of claimants involved in the various forms of exemptions from the payment of real estate transfer tax have risen. Accordingly, the amounts that the central government has given up have also increased.

Of the total number of entities, most were those who claimed the exemption from the payment of taxation on inheritance of real estate.

Reduction of tax due on purchase of first piece of real estate were brought in from 2002, and entities on the whole made use of them during sale and purchase, which also holds true for Reduction of tax due for the Areas of Special National Concern (PPDS).

How much revenue was lost to the central government exchequer can be seen from table 28.

Table 28 Lost real estate transfer tax revenue as a proportion of total revenue of central government budget (in million kuna and in %)

	2001	2002	2003	2004
Central government budget revenue from real estate transfer tax	282	295	290	356
Total lost central government budget revenue from real estate transfer tax (in million kuna)	7.1	28.3	108.0	121.2
Lost central government budget revenue as a proportion of total central government budget revenue from the real estate transfer tax (in %)	2.5	9.6	37.2	34.0

Source: authors' calculation

In total, central government budget revenue from the real estate transfer tax rose from 282 million kuna in 2001 to 356 million kuna in 2004. The lowest losses to the central government budget revenues occurred in 2001, in the amount of only 7 million kuna. After this year, the tax losses increased considerably, from 28 million kuna in 2002 to more than 121 million in 2004.

Lost tax revenue are still greater if we take into account the total losses of all levels of government, or add the 60% of the losses that that according to the Local Government Units Financing Law is allocated to cities and municipalities. Total amounts of exemptions, reduction of tax due on purchase of first piece of real estate and reductions of tax due for the PPDS at all levels of government (central and local) or lost general budget (central and local government) revenue increased from almost 18 million kuna in 201 to as much as 303 million kuna in 2004.

A comparison shows that lost tax revenue (revenue that the central government consciously forewent) as a percentage of total central government budget revenue from the real estate transfer tax increased from 2.5% in 2001 to as much as 34% in 2004.

6 Value added tax

In the first part of this chapter we will discuss the importance of value added tax in Croatia, and in the second and the third part we will discuss the overall amounts of VAT and the amounts that we consider to be tax expenditures within this tax system.

The importance of value added tax

Value added tax, or VAT, is the most revenue-productive tax of the central government budget, and hence the central government seldom allows any exemptions or any other kinds of tax expenditures into the system. In the Croatian tax system the best known relief is the zero rate of Vat for certain products. This relief can be considered a tax exemption and will be investigated and analysed in this research.

The following table illustrates the importance of VAT revenue as a proportion of the central government budget revenue and of GDP.

Table 29 Value added tax revenue as a proportion of total tax revenues of the central government budget and of GDP (in billion kuna and in %)

	2001	2002	2003	2004
GDP	165.6	179.4	193.1	207.1
Total central government budget tax revenues	40.5	42.8	45.3	47.2
Central government budget revenue from VAT	23.3	26.0	28.1	29.9
Central government budget revenue from VAT as proportion of:				
total tax revenues of central government budget	57.5	60.7	62.0	63.3
GDP	14.1	14.5	14.6	14.4

Source: Ministry of Finance, see annex

Total revenue from VAT in the analysed period increased by more than 6 billion kuna. The nominally highest growth was recorded in 2002 (as in the corporate income tax system), when the central government budget revenue from VAT rose by more than 2.5 billion kuna. The proportion of VAT revenue in total central government budget revenue has also grown, from 58% in 2001 to more than 63% in 2004. VAT revenue as a percentage of GDP did not change significantly and ranged around an average of 14.4%.

Now, we shall look briefly at the legislative framework of VAT and the items that are considered to be tax expenditures in the VAT system in the period from 2001 to 2004.

Value added tax from 2001 to 2004

For this research the most important expenditure is the VAT zero rate for special kinds of product (all kinds of bread and milk, books, medicines, surgical implants, scientific and scholarly journals, the service of the public screening films and, until the beginning of 2006, services organising tourist stays paid by transfers from abroad). There are also other tax exemptions inland (Article 11, Law), during importation (Article 12, Law) and during export (Article 13, Law), but they are not covered by this investigation.

In connection with the start of negotiations with the EU, the tax authorities will have to consider aligning the provisions of the Croatian VAT Law with the 6th Directive of the EU.[18] The EU demands a smaller number of VAT rates and recommends its members to have only two to three rates; the standard rate should be not lower than 15%, and there can be one or two lower rates, none lower than 5%.

The directive further stipulates exemptions in the territory of the country, during import and export from the Community, similar transactions and international transport and particular exemptions related to the international trade in commodities.

[18] The 6th Directive of the Council of the EU of May 17, 1977 concerning the harmonisation of the laws of the member states related to value added tax – the uniform basis for assessment (77/388/EEC), NN L 145, June 13 1977, p. 1, revised wording of the 6th Directive including the modification of January 23 2003.

Let us consider briefly the legislative framework and changes in the taxation of added value.

Up to 2004 the legislative framework for the value added tax consisted of:

- Valued Added Tax Law (NN 47/95, 106/96, 164/98, 105/99, 54/00, 73/00, and until 2004 also NN 48/04, 82/04),
- General Tax Law (NN 127/00, 86/01, 150/02),
- Law on the Rights of Croatian Defenders from the Homeland War and of Members of their Families (NN 94/01, 122/02, 17/04, 48/04),
- Law on Socially Encouraged House Building (NN 109/01, 82/04),
- Valued Added Tax Regulations (NN 60/96, 113/97, 7/99,112/99, 119/99, 44/00, 63/00, 80/00, 109/00, 54/01, 58/03, 198/03, 55/04 and 77/04),
- Framework between the European Commission and the Government of the Republic of Croatia in connection with the participation of the Republic of Croatia in European Community aid programmes (NN – Treaties 8/02, 11/02),
- Instruction concerning obtaining customs and tax exemptions in accordance with Article 13. of Annex *A* of the General Agreement between the European Commission and the Government of the Republic of Croatia in connection with the participation of the Republic of Croatia in European Community aid programmes (NN 110/03).

From January 1st, 1998, when VAT came into force, until December 31st, 1998 there was a single, 22% rate (Article 10, VAT Law, NN 47/95 and 164/98).

A great deal of lobbying from interest groups led, after almost two years, to the introduction of the zero rate for certain products. Hence, from November 1st, 1999 the Law concerning Amendments to the VAT Law (NN 105/99) prescribed new article 10a, which brought in the zero rate for bread, milk, books and textbooks, medicines, implants and other medical products of a similar nature (more details in the VAT regulations).

From June 1st, 2000 on this list was expanded by another Law concerning Amendments to the VAT Law (NN 54/00) to cover scientific and scholarly journals. Other tax exemptions were also prescribed (like film screening, which was abolisher later, in September, for at that time deliveries of goods by freelance and artists and artistic organisations were taxed at the zero rate), new exemptions during import and so on.

From September 1st, 2000, a new set of Amendments to the VAT Law (NN 73/00) came into force which additionally expanded the zero rate to cover the services of the public screenings of films and the service of organising stays which were paid for with transfers from abroad.[19] The last provision came into force on January 1st, 2001.

The last great changes important for this research happened in 2004 (NN 48/04) but they were not related to taxation at the zero rate.

[19] Services of organising stays that are paid with transfers from aborad have been taxed at a rate of 10% since January 1, 2006. But From January 1 2001 to January 1 2006, these services were zero-rated.

Calculation of total expenditures

The following tables show the total collected amounts of VAT.

Table 30 Statistical report concerning VAT-K, nominal amounts (in billions of kuna)

	2001	2002	2003	2004
Deliveries – total	361.0	417.2	478.3	506.5
Deliveries not subject to taxation and exempted deliveries – total (1+2+3)	69.8	76.0	83.4	94.0
1 Deliveries not subject to taxation[a]	15.8	17.0	19.9	21.1
2 Deliveries exempted from taxation (total of 2.1+2.2)[b]	36.4	39.7	42.1	49.4
2.1 Deliveries in the country – without right of deduction of input tax[c]	1.6	1.9	1.6	2.3
2.2 Export deliveries – with the right to deduct input tax[c]	34.9	37.8	40.4	47.1
3 Zero rated deliveries	17.6	19.3	21.5	23.5
Taxable deliveries	291.2	341.2	394.9	412.5

[a] *Article 2 related to Article 5 and Article 8, para. 8. of the Law.*
[b] *Article 11 of the Law.*
[c] *Article 13 and 14 of the Law.*

Source: Central Office, Tax Administration, Ministry of Finance

Although this research has been oriented to lost revenue due to the existence of the zero rate, something needs to be said about other amounts. From 2001 to 2004, all analysed categories in the system of taxation of added value increased.

For example, total deliveries rose from 361 billion kuna in 2001 to 506.5 kuna in 2004. The total value of taxable deliveries rose from 291 billion kuna in 2001 to 412.5 billion in 2004.

It is interesting that non-taxable deliveries and deliveries that are exempted rose by more than 24 billion kuna (from 69.8 billion in 2001 to 94 billion in 2004). Of this, the greatest amounts were expended for tax-exempted export deliveries with the right to deduct input taxation (from almost 35 billion kuna in 2001 to 47 billion in 2004). But these are only the nominal amounts of these items, and not the real amounts of central government budget lost revenue.

For this research the most interesting part consists of total deliveries that were set aside as deliveries at the zero rate. These amounts also rose in the analysed period, from 17.6 billion kuna in 2001 to almost 23.5 billion kuna in 2004. But these are not the amounts that the central government exchequer lost. To obtain the amounts that the central government lost in the 2001-2004 period, we have to apply the 22% rate to the total amounts for deliveries at 0%.

The amount of potential revenue from VAT within the zero rate expenditure item is shown in tables 31 - 34.

Table 31 Lost value added tax revenue because of zero-rated deliveries in 2001 (in billion kuna)

	Value of deliveries	Lost tax revenue (deliveries x 22%)
Deliveries not subject to taxation and exempted deliveries – total (1+2+3)	69.8	15.4
1 Deliveries not subject to taxation[a]	15.8	3.5
2 Deliveries exempted from taxation (total of 2.1+2.2)[b]	36.4	8.0
2.1 Deliveries in the country – without right of deduction of input tax[b]	1.6	0.4
2.2 Export deliveries – with the right to deduct input tax[c]	34.9	7.7
3) Zero rated deliveries	17.6	3.9

[a] *Article 2. in connection with Article 5 and Article 8, para. 8 of the Law.*
[b] *Article 11 of the Law.*
[c] *Article 13 and 14 of the Law.*

Source: authors' calculation

The total potential amounts of tax that could have been but were not collected in the item of total deliveries that are not subject to taxation or that were exempted came to 15.4 billion kuna in 2001. Due to deliveries at the zero rate alone, almost 4 billion kuna were lost.

Table 32 Lost VAT revenue because of zero-rate deliveries in 2002 (in billion kuna)

	Value of deliveries	Loss of tax revenue (deliveries x 22%)
Deliveries not subject to taxation and exempted deliveries – total (1+2+3)	76.0	16.7
1 Deliveries not subject to taxation[a]	17.0	3.7
2 Deliveries exempted from taxation (total of 2.1+2.2)[b]	39.7	8.7
2.1 Deliveries in the country – without right of deduction of input[b]	1.9	0.4
2.2 Export deliveries – with the right to deduct input tax[c]	37.8	8.3
3 Zero rated deliveries	19.3	4.3

Source: authors' calculation

In 2002, the total value of deliveries that were not subject to taxation and that were exempted came to 76 billion. As compared to 2001, the values of deliveries not subject to taxation had risen (to 17 billion), like deliveries exempted to taxation (to almost 40 billion) and zero-rated deliveries. But these were nominal values of deliveries. By recalculating we get that in 2002 the tax expenditure due to the zero rate was a total of 4.3 billion kuna of the central government revenue.

Table 33 Lost VAT revenue because of zero-rate deliveries in 2003 (in billion kuna)

	Value of deliveries	Loss of tax revenue (deliveries x 22%)
Deliveries not subject to taxation and exempted deliveries – total (1+2+3)	83.4	18.4
1 Deliveries not subject to taxation[a]	19.9	4.4
2 Deliveries exempted from taxation (total of 2.1+2.2) [b]	42.1	9.3
2.1 Deliveries in the country – without right of deduction of input[b]	1.6	0.4
2.2 Export deliveries – with the right to deduct input tax[c]	40.4	8.9
3 Zero rated deliveries	21.5	4.7

Source: authors' calculation

During 2003 all the analysed items within the VAT system rose. By recalculation we concluded that during 2003 a total of 4.7 billion kuna did not flow into the central government budget because of the various zero-rated deliveries.

Table 34 Lost VAT revenue because of zero-rate deliveries in 2004 (in billion kuna)

	Value of deliveries	Loss of tax revenue (deliveries x 22%)
Deliveries not subject to taxation and exempted deliveries – total (1+2+3)	94.0	20.7
1 Deliveries not subject to taxation[a]	21.1	4.6
2 Deliveries exempted from taxation (total of 2.1+2.2) [b]	49.4	10.9
2.1 Deliveries in the country – without right of deduction of input[b]	2.3	0.5
2.2 Export deliveries – with the right to deduct input tax[c]	47.1	10.4
3 Zero rated deliveries	23.5	5.2

Source: authors' calculation

If not for the zero rate exemptions in the VAT system, central government could have collected a total of 5.2 billion kuna.

From 2001 to 2004 the total value of deliveries that were not subject to taxation and that were exempted rose from about 70 to more than 94 billion kuna. If we considered all these items tax expenditures and losses of tax revenue (which we do not in this investigation), then, by recalculation, this would mean that in the context of this item the central government gave up 15.4 billion in 2001, rising to 20.7 billion in 2004.

Conclusion

Table 35 shows the total lost revenue of the central government exchequer in the VAT system in the period from 2001 to 2004.

Table 35 Central government revenue lost in the VAT system as a proportion of total revenue of central government budget from this source (in billion kuna and in %)

	2001	2002	2003	2004
Central government budget revenue from VAT	23.3	26.0	28.1	29.9
Total lost central government budget revenue because of the zero rate	3.9	4.3	4.7	5.2
Total lost central government budget revenue of the zero rate as proportion of central government budget revenue from VAT in %	16.7	16.5	16.7	17.4

Source: authors' calculation

In the period under analysis, the central government budget revenue derived from VAT increased, from 23 billion to almost 30 billion kuna.

Total lost central government budget revenue because of the zero rate of VAT rose from 3.9 billion kuna in 2001 to 5.2 billion kuna in 2004.

Lost central government budget revenue of the zero rate as a proportion of central government budget revenue collected from this source also rose, from 16.7% in 2001 to 17.4% in 2004.

7 Conclusion

The research on tax expenditures in Croatia in the period from 2001 to 2004 has shown that almost all the analysed items in the systems of personal income tax, corporate income tax, real estate transfer tax and value added tax increased.

Personal income tax. The number of allowances and reliefs in the personal income tax system suddenly rose with the passing of the new Personal Income Tax Law at the end of 2000. The general government and the central government budgets lost the biggest amounts because of basic personal allowances (A1) and additional personal allowance for dependents (A2). The sum of these gave total personal allowances (A), for which 4.1 billion was allowed in 2001 and 3.7 billion in 2004. And yet total personal allowances cannot be considered tax expenditures, being rather inherent to all tax systems. We analysed how much they were in order to see the magnitude of the greatest amounts that reduce the personal income tax base. Only because of claimed personal allowances (A1) the central government budget lost 3.3 billion kuna in 2001, and 3.1 billion kuna in 2004. The amounts for additional personal allowance for dependents (A2) came to 0.8 billion kuna in 2001 and almost 0.7 billion kuna in 2004.

It also turned out that tax expenditures made on other total allowances (D, not including the personal allowance A), which also act to reduce the tax base, had grown. In this category it was premiums for life insurance that have characteristics of savings, premiums for supplementary and private health insurance and voluntary retirement insurance premiums (D3), augmented depreciation costs (D5) and additional personal allowance for people living in the PPDS and other areas specially treated for tax purposes (D10) that stood out for their amounts.

Other allowances (D) either fell or were of relatively minor amounts. But since each allowance and relief increases the administrative costs of the tax authorities, consideration should be given to their abolition.

Corporate income tax. Reductions of the corporate income tax base and reductions of corporate income tax due (tax credits) were analysed in detail. The total amounts that might have been collected in the corporate income tax system but were not because of reductions of the tax base and reductions of tax due were rising exponentially year by year. While losses to the general budget in 2001 came to only 86 million kuna, in 2004 they were greater than 481 million kuna. Central government budget losses from this source rose, from 60 million in 2001 to 337 million kuna in 2004.

Real estate transfer tax. From 2002 the amounts and the number of claimants of various forms of exemption from the payment of real estate transfer tax rose, as did the amounts that central government gave up on this basis. Of the total number of taxpayers the greatest number of exemptions from the payment of tax was claimed for inheritance. Reduction of tax due on purchase of first piece of real estate, brought in during 2002, and reductions of tax due in the Areas of Special National Concern (PPDS), were mainly used during sale and purchase. The lowest losses to central government revenue from real estate transfer tax were recorded in 2001, only 7 million kuna. After this year, tax losses on this basis increased considerably, from 28 million in 2002 to more than 121 million kuna in 2004. Total amounts of exemptions, reduction of tax due on purchase of first piece of real estate and reductions of tax due in the Areas of Special National Concern (PPDS) for all levels of government (central government and local units) or general budget losses of revenue increased from almost 18 million kuna in 2001 to as much as 303 million kuna in 2004.

Value added tax. Total losses incurred by the central government budget from the VAT zero rate rose from 3.9 billion kuna in 2001 to 5.2 billion in 2004. For the sake of aligning the taxation system with that in the EU, the number of deliveries taxed with the zero rate will have to be reduced.

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ANNEXES

Table 1Revenue of central government budget of Croatia and GDP (in million kuna)

	2001	2002	2003	2004
Total revenue	53,504	69,651	74,677	80,464
Tax revenue	40,493	42,810	45,281	47,150
Personal income tax	3,404	3,363	3,115	3,128
Corporate income tax	1,987	2,659	3,074	3,131
Property tax (on real estate transfer)	282	295	290	356
Tax on goods and services	31,121	33,974	36,651	38,602
Valued added tax	23,267	25,952	28,129	29,865
Excises	7,699	7,474	7,851	7,942
Sales taxes	155	137	131	149
International trade and transactions taxes	3,215	2,051	1,811	1,591
Other taxes	483	468	340	341
GDP (in million kuna)	165,640	179,390	193,067	207,082

Source: Monthly Statistical Review, no. 120:18; no. 100: 10; adapted by authors

Table 2 Individual taxes as proportions of total tax revenue of central government budget (in %)

	2001	2002	2003	2004
Tax revenue	100.0	100.0	100.0	100.0
Personal income tax	8.4	7.9	6.9	6.6
Corporate income tax	4.9	6.2	6.8	6.6
Property tax (on real estate transfer)	0.7	0.7	0.6	0.8
Tax on goods and services	76.9	79.4	80.9	81.9
Valued added tax	57.5	60.6	62.1	63.3
Excises	19.0	17.5	17.3	16.8
Sales taxes	0.4	0.3	0.3	0.3
International trade and transactions taxes	7.9	4.8	4.0	3.4
Other taxes	1.2	1.1	0.8	0.7

Source: authors' calculation

Table 3 Revenue of central government budget as proportion of GDP (in %)

	2001	2002	2003	2004
Total revenue of central government budget	32.3	38.8	38.7	38.9
Tax revenue	24.4	23.9	23.5	22.8
Personal income tax	2.1	1.9	1.6	1.5
Corporate income tax	1.2	1.5	1.6	1.5
Property tax (on real estate transfer)	0.2	0.2	0.2	0.2
Tax on goods and services	18.8	18.9	19.0	18.6
Valued added tax	14.0	14.5	14.6	14.4
Excises	4.6	4.2	4.1	3.8
Sales taxes	0.1	0.1	0.1	0.1
International trade and transactions taxes	1.9	1.1	0.9	0.8
Other taxes	0.3	0.3	0.2	0.2

Source: authors' calculation

Personal Income Tax

Table 4 Amounts of basic personal allowance (untaxed portion of personal income) in 2001 and 2002

Allowance for 2001 and 2002	Factor	Amount per month (kuna)	Amount per year (kuna)
For the taxpayer For a pensioner	1.00	1,250 up to 2,500	15,000 30,000
For dependent spouse, other immediate family dependents and the first child	0.5	500,00	6,000
For a second child	0.7	700	8,400
Third child	1.0	1,000	12,000
Fourth child	1.4	1,400	16,800
Fifth child, and for each subsequent child the factor increases by 0.6, 0.7, 0.8 and so on	1.9	1,900	22,800
For a disabled dependent of immediate family and children and for disabled taxpayer	0.3	200	2,400

Source: NN 127/00 and 150/02; authors' calculation

Table 4a Basic personal allowance (untaxed part of income) for 2003 and 2004 outside PPDS and hill and mountain areas

Allowance for 2003 and 2004	Factor	Outside PPDS and hill and mountain areas	
		Amount per month (kuna)	Amount per year (kuna)
For the taxpayer	1.00	1,500	18,000
For a pensioner	1.70	2,550	30,600
For dependents in the immediate family[a] and each child, if disabled	0.40	600	7,200
Taxpayer, each dependent of immediate family[a], and each child, if disabled	0.25	375	4,500
First child	0.42	630	7,560
Second child	0.59	885	10,620
Third child	0.84	1,260	15,120
Fourth child	1.17	1,755	21,060
Fifth child	1.59	2,385	28,620
Sixth child	2.09	3,135	37,620
Seventh child	2.67	4,005	48,060
Eighth child	3.34	5,010	60,120
Ninth child	4.09	6,135	73,620
Tenth child	5.00	7,500	90,000
Eleventh child (and each subsequent child) – personal allowance factor increased by 1.0 as against the factor for the personal allowance for the preceding child	6.00 (5+1)	9,000	108,000

[a] *The parents of the taxpayer, parents of taxpayer's spouse, forebears and descendants in direct line of descent, former spouses if taxpayer gives alimony*

Source: authors' calculation

Table 4b Personal income tax payers who live in the PPDS or hill and mountain areas

Allowance for 2003 and 2004	Factor	1st group		2nd group		3rd group	
		Monthly amounts (kuna)	Annual amount (kuna)	Monthly amounts (kuna)	Annual amount (kuna)	Monthly amounts (kuna)	Annual amount (kuna)
For the taxpayer	1.00	3,750	45,000	3,000	36,000	2,250	27,000
For a pensioner		2,550	30,600	2,550	30,600	2,550	30,600
For dependents in the immediate family[a] and each child, if disabled	0.40	1,550	18,000	1,200	14,400	900	10,800
Taxpayer, each dependent of immediate family[a], and each child, if disabled	0.25	937	11,250	750	9,000	562,5	6,750
First child	0.42	1,575	18,900	1,260	15,120	945	11,340
Second child	0.59	2,212	26,550	1,770	21,240	1,327.5	15,930
Third child	0.84	3,150	37,800	2,520	30,240	1,890	22,680
Fourth child	1.17	4,387.5	52,650	3,510	42,120	2,632.5	31,590
Fifth child	1.59	5,962.5	71,550	4,770	57,240	3,577.5	42,930
Sixth child	2.09	7,837.5	94,050	6,270	75,240	4,702.5	56,430
Seventh child	2.67	10,012.5	120,150	8,010	96,120	6,007.5	72,090
Eighth child	3.34	12,525	150,300	10,020	120,240	7,515	90,180
Ninth child	4.09	15,337.5	184,050	12,270	147,240	9,202.5	110,430
Tenth child	5.00	18,750	225,000	15,000	180,000	11,250	135,000
Eleventh child (and each subsequent child) – personal allowance factor increased by 1.0 as against the factor for the personal allowance for the preceding child	6.00 (5.0 +1.0)	22,500	270,000	18,000	216,0000	13,500	162,000

[a]The parents of the taxpayer, parents of taxpayer's spouse, forebears and descendants in direct line of descent, former spouses if taxpayer gives alimony

Source: Jančiev, Supić and Živković (2003)

Table 5 Statistical report about processed personal income tax annual returns (in million kuna)

	2001	2002	2003	2004
Total annual income	26,181.1	32,350.1	40,102.4	44,032.5
Deductions from income	32.4	58.2	96.3	91.7
Income after deductions	26,148.7	32,291.8	40,006.1	43,940.8
Claimed losses brought forward	53.3	61.3	153.9	168.0
Claimed annual personal allowance	12,580.2	15,017.1	20,460.7	22,012.4
Annual tax base	13,710.3	17,427.3	19,732.4	21,760.4
Total annual tax and surtax on income tax (15.25 and 35%)	3,072.9	4,000.2	4,582.6	5,111.6
Deduction for CWMD reliefs	11.3	8.2	11.4	13.4
Annual income tax and surtax due			4.571,2	5,098.1
Paid as advance payments of tax and surtax in the territory of the country	3,515.9	4,536.6	5,421.1	6,098.2
Deductible tax paid abroad	12.2	15.3	8.2	4.6
Total tax and surtax paid	3,528.1	4,551.9	5,429.3	6,102.9

Source: Central Office, Tax Administration, Ministry of Finance, as of April 20, 2005 and February 6, 2006

Table 6 Number of taxpayers – statistical report concerning personal income tax annual returns – special part (administrative procedure)

	2001	2002	2003	2004
Total annual income	646,761	754,666	849,503	879,300
Deductions from income	1,584	2,304	4,480	4,559
Income after deduction			849,499	879,300
Claimed losses brought forward	2,015	2,394	6,930	7,517
Claimed annual personal allowance	631,615	739,512	833,503	862,976
Annual tax base	432,624	527,109	560,522	584,638
Annual tax and surtax due (15, 25 and 35%, or 45% from 2003)	431,846	526,351	559,942	584,171
Deduction as relief for CWMD	4,412	3,405	4,849	5,453
Annual tax and surtax due for CWMD	4,451	3,478	559,923	584,130
Advance payment of tax and surtax in the territory of the country	626,411	731,837	825,301	855,805
Deductible tax paid abroad	185	250	205	168
Total income tax and surtax paid	626,476	731,947	825,338	855,830

Source: Central Office, Tax Administration, Finance Ministry, as of April 20 2005 and February 6, 2006

Table 7 Statistical report concerning personal income tax returns processed (in million kuna)

	2001	2002	2003	2004
Total income	0	0	–	–
Income after deduction	–	–	25.505.5	28.487.1
Deduction for wages of newly hired persons	25.2	49.0	84.3	76.3
Deduction for rewards for pupils and students (doing practical work)	7.2	9.2	4.4	4.0
Expenditures for training and personal professional development of staff	0	0	7.4	10.8
Expenditures for research and development	0	0	0.2	0.8
Losses brought forward and deducted	53.3	61.3	153.9	168.0
Untaxed receipts of artists	0.5	0.4	0.7	0.8
The untaxed part of artistic royalty or fee	26.4	25.9	30.8	32.9
Deductions for expenditures for donations for culture, art and similar purposes	2.5	3.1	–	–
Dedcutions for paid life insurance premiums	98.0	361.8	–	–
Premiums for life insurance that have characteristics of savings	0	0	362.6	429.5
Premiums for supplementary and private health insurance	0	0	188.1	177.3
Premiums for voluntary retirement insurance	0	0	15.0	31.4
Augmented depreciation costs	166.7	231.8	367.8	421.4
Tax deductible entertainment expenditures	2.1	2.2	3.5	4.0
Deduction from income for PPDS and other areas	60.0	87.1	163.3	200.0
Income without reliefs and deductions	5,636.9	15,973.5	26,887.4	30,033.4
Difference of personal allowance	488.4	609.4	1,604.6	1,797.8
Part of personal allowance for contributions for health insurance in the country	0	0	0.8	0.6
Part of personal allowance for expenditures for healthcare services	0	0	57.0	112.7
Part of personal allowance for expenditures for satifactions of housing requirements	0	0	427.7	559.2
Part of personal allowance for expenditures for donations for culture, art and similar purposes	0	0	4.0	5.0
Tax due (amount of income) without reliefs and deductions	749.2	898.3	28,981.4	32,534.8
Tax credits for Croatian Wartime Military Disabled	11.3	8.2	11.4	13.4

Source: Central Office, Tax Administration, Ministry of Finance, as of April 20, 2005 and February 6, 2006.

Table 8 Number of taxpayers – statistical report on personal income tax annual returns – special part[a]

	2001	2002	2003	2004
Total income	96,881	270,609	0	0
Income after deduction	0	0	440,714	462,654
Deduction for wages of newly hired persons	1,168	1,891	2,860	2,484
Deduction for rewards for pupils and students (doing practical work)	480	520	414	349
Expenditures for training and personal professional development of staff	0	0	1,592	2,156
Expenditures for research and development	0	0	11	39
Losses brought forward and deducted	2,015	2,394	6,930	7,517
Untaxed receipts of artists	42	37	59	61
The untaxed part of artistic royalty or fee	2,184	1,957	1,961	1,762
Deductions for expenditures for donations for culture, art and similar purposes	1,031	1,196	–	–
Dedcutions for paid life insurance premiums	47,623	226,746	–	–
Premiums for life insurance that have characteristics of savings	0	0	112,170	127,189
Premiums for supplementary and private health insurance	0	0	234,299	213,201
Premiums for voluntary retirement insurance	0	0	4,308	8,995
Augmented depreciation costs	3,953	4,712	5,709	5,937
Tax deductible entertainment expenditures	769	996	1,363	1,347
Deduction from income for PPDS and other areas	1,517	2,613	3,942	4,628
Income without reliefs and deductions	97,625	271,821	440,716	462,654
Difference of personal allowance	22,074	33,604	105,729	111,091
Part of personal allowance for contributions for health insurance in the country	0	0	282	320
Part of personal allowance for expenditures for healthcare services	0	0	26,021	51,818
Part of personal allowance for expenditures for satifactions of housing requirements	0	0	54,868	69,641
Part of personal allowance for expenditures for donations for culture, art and similar purposes	0	0	1,570	1,804
Tax due (amount of income) without reliefs and deductions	13,198	17,528	440,715	462,654
Tax credits for Croatian Wartime Military Disabled	4,412	3,405	4,849	5,453

[a] *Administrative procedure*

Source: Central Office, Tax Administration, Ministry of Finance, as of April 20, 2005 and February 6, 2006

A list of reliefs and statutory definitions in personal and corporate income tax

Personal Allowance

1 The basic personal allowance of the taxpayer [A1]

- The basic personal allowance of 800 kuna for each month of the period for which the tax is assessed; the basic personal allowance for pensioners is allowed in the amount of 2,000 kuna (1997).
- The basic personal allowance of 1,250 kuna for each month of the period for which the tax is assessed; for a pension a personal allowance in the amount of the pension received in the tax period is allowed, but at most up to 2,500 kuna per month (2001).
- The basic personal allowance of 1,500 kuna, for each month of the tax period for which the tax is assessed; for a pension received on the basis of previous payments of obligatory contributions in the 1st and 2nd pillars of retirement insurance and on the basis of previous payments of life insurance for the purchase of the part of the retirement at the cost of the employer a personal allowance is admitted in the amount of the total pension received in the tax period, but at most up to 2,550 kuna per month (2003).

2 Addition to personal allowance for dependents [A2]

- Additional personal allowances: 0.3 of the basic personal allowance for a dependent spouse or other dependent members of the family including the first child; personal allowance is increased for each second and every subsequent child by 0.1 of the basic personal allowance (the second child is 0.3, the third 0.5 and so on) and for a dependent invalid of the immediate family by 0.2 (1997).
- Additional personal allowances: 0.5 of basic personal allowance for a dependent spouse or other supported member of the immediate family including the first child; the basic allowance is increased for the second and each subsequent child by 0.1 of the basic allowance (second child 0.4, third 0.5 and so on) and for a disabled dependent of the immediate family by 0.2 (2001).
- Additional personal allowances: 0.4 of the basic personal allowance for dependents of the immediate family and ex-spouse whom the taxpayer gives alimony; for children: 0.42 of the basic personal allowance for the first child, 0.59 for the second, 0.84 for the child, 1.17 for the fourth, 1.59 for the fifth, 20.09 for the sixth, 2.67 for the seventh, 3.34 for the eighth, 4.09 for the ninth and 5.0 for the tenth, and for each subsequent child the basic personal allowance factor is increased by 1.0 as compared with the factor of the personal allowance for the previous child; 0.25 of the basic personal allowance of the taxpayer for each dependent of the immediate family and for each child if disabled (2003).

Other allowances

Excluded receipts

1 Untaxed receipts of artists, or exemptions and reliefs to private persons who carry out some artistic or cultural activity [D1]

- Amounts of received gifts in goods up to 20,000 kuna annually for persons who carry out an independent activity in arts or culture are not considered business receipts.

2 The untaxed part of artistic royalty or fee [D2]

- An untaxed amount of 25% of earned business receipts from royalties or fees for an art or cultural work of is allowed to natural persons who carry out an independent activity in art or culture.

Augmented expenditures

3 Premiums for life insurance that have characteristics of savings;
premiums of supplementary and private health insurance;
premiums of voluntary retirement insurance. [D3]

- Also considered expenditures are premiums for life insurance that have the characteristics of savings, additional and private health insurance, and voluntary retirement insurance to insurers in the territory of the country, up to 0.7 of the basic personal allowance. (2003).
- Also considered expenditures are premiums on the basis of life insurance, supplementary and private health insurance and voluntary retirement insurance paid to insurers in the territory of the country, up to 0.7 of the basic personal allowance (2001).

4 Income reduction in the area of the Areas of Special National Concern (PPDS) and the city of Vukovar [D4]

- Earned income from an independent activity (tradesmen, freelance professions, farmers) in Areas of Special National Concern and city of Vukovar are reduced by: 75% in areas of the 1st group and the city of Vukovar, 50% in areas of the 2nd group, and by 25% in areas of the 3rd group.

5 Augmented depreciation costs [D5]

- For personal income tax payers who carry out independent activities (tradesmen, freelance professions, farmers) the base for personal income tax can be additional reduced in the tax period by 100% of the costs for depreciation of acquired intangible assets that are used for research and development if acquired in eh same tax period.

6 Tax deductible entertainment costs [D6]

- 30% of the costs for entertainment (hospitality, gifts with the trademark printed on or products or without the trademark, expenditures for rest, sport, recreation and leisure, for the use of personal motor cars, vessels, planes, second homes and other similar expenditures).

Deducted income

7 Salaries paid out for newly employed persons and rewards to pupils doing practical work [D7]

- For personal income tax payers who carry out some independent activity (tradesmen, freelance professions, farmers) the base for the personal income tax can in the tax period additionally by reduced by the amount of paid wages and paid in employers' contributions for new employees and by the amount of paid rewards to pupils during practical work and apprenticeships for a year from the day they are hired.

8 Expenditures for training and personal professional development [D8]

- For personal income tax payers who carry out an independent activity (tradesmen, freelance professions, farmers) the personal income tax base can in the tax period be additionally reduced by the amount of paid out wages and paid in employers' contributions for new employees and by the amount of paid out rewards to pupils during the time of practical work and apprenticeships for a period of one year from the day they are hired.

9 Expenditures for research and development [D9]

- For personal income tax payers who carry out an independent activity (tradesmen, freelance professions, farmers) the personal income tax base can in the tax period be additionally reduced by the expenditures for research and development, in the amount of 100% of those that were incurred and are shown as expenditures in the ledgers.

Enlargements of personal allowance

10 Additional personal allowance for persons who live in the Areas of Special National Concern (PPDS) and other areas specially treated for tax purposes [D10]

- Increased personal allowance for persons who are domiciled and live in the Areas of Special National Concern (PPDS), in the hill and mountain areas and other areas defined by a separate law.

11 Contributions for health insurance in the country [D11]

- For inland income tax payers the personal allowance is increased by the amounts of paid for health insurance if the taxpayer is not insured otherwise, up to the amount of the prescribed obligatory contribution for health insurance that is paid by employer and employee.

12 Expenditures for healthcare services [D12]

- The personal allowance can be increased by the amount of the real costs of health care services and procurement of orthopaedic aids in the Republic of Croatia, at most up to 12,000 kuna p.a. (under certain conditions).

13 Expenditures for satisfaction of housing requirements [D13]

- A personal allowance of 1,000 kuna p.m. for investment in the purchase, building or conversion of residential premises (with certain conditions).
- If the taxpayer finances the purchase or construction of residential premises or the investment maintenance of existing residential premises with resources of dedicated housing loans, the interest on the loan is considered a personal allowance.
- A personal allowance of 1000 kuna monthly of paid and freely negotiated rental for permanent residence in residential premises of the lessor (under certain conditions).

14 Expenditures for donations for culture, art and the similar purposes [D14]

- Personal allowance up to 2% of total receipts of the previous year donated in the form of gifts in goods or money transferred to a bank account for cultural, educational, scientific, healthcare, humanitarian, sporting, religious and other purposes, associations and other persons that carry out these activities in line with special regulations (in 2001 this relief was formulated in such a way that it had to be classified as increased expenditures).

Lump-sum expenditures

15 Lump-sum expenditures for taxpayers who have earned some forms of income from assets [D15]

- For income from assets on the basis of the rental or lease of movables or real estate expenses in the amount of 30% of the earned rental or lease money deductible (Assets 1). Expenditures necessary for earning the income from the renting of flats, rooms and beds to travellers and tourists for whom the tourist tax is paid are set at 50% of the rental earned (Assets 2).

16 Lump-sum expenditures for taxpayers who have earned personal income from "some other independent activities" [D16]

- For natural persons who earn an income from other independent activities, business expenditures are deductible in the amount of a)25% of receipts earned for DSD3; b) 40% of receipts earned for DSD4.

Reduction of the tax due

Tax credits for Croatian Wartime Military Disabled [C1]
2001 and 2003

- For Croatian Wartime Military Disabled the tax due on personal income from employment and pensions in proportion to degree of disability.

Real estate transfer tax

Table 9 Total number of taxpayers and taxpayers with exemptions and reductions of real estate transfer tax due

	Total number of taxpayers	Taxpayers with exemptions from the payment of the tax	Taxpayers with reduction of tax due on purchase of first peace of real estate	Taxpayers with reduction of tax due for the PPDS
2001				
Sale and purchase	96,095	7,341	0	5,255
Inheritance	44,856	38,835	0	234
Gifts	29,643	23,238	0	781
Exchanges	2,395	282	0	201
Court decision	9,512	4,553	0	319
Other	5,344	3,805	0	91
Life-long	1,364	598	0	36
Until death	2,354	1,687	0	54
Total	191,563	80,339	0	6,971
2002				
Sale and purchase	98,972	12,902	1,291	6,595
Inheritance	29,223	25,047	0	266
Gifts	23,299	18,511	0	814
Exchanges	1,975	371	1	184
Court decision	7,206	3,852	0	271
Other	5,177	3,812	0	81
Life-long	1,182	549	0	30
Until death	2,343	1,777	0	64
Total	169,377	66,821	1,292	8,305
2003				
Sale and purchase	109,088	16,363	18,053	8,680
Inheritance	34,066	29,179	1	515
Gifts	25,434	20,758	0	1,498
Exchanges	1,867	484	5	291,00
Court decision	6,875	3,851	2	254
Other	5,620	4,245	3	112
Life-long	1,304	586	2	71
Until death	2,667	2,151	13	96
Total	186,921	77,617	18,079	11,517
2004				
Sale and purchase	109,782	15,589	18,779	9,543
Inheritance	47,640	42,500	0	717
Gifts	26,809	21,823	0	1,640
Exchanges	2,032	525	25	292
Court decision	6,391	3,825	0	296
Other	5,076	3,500	14	153
Life-long	1,282	571	0	76
Until death	2,578	2,065	64	48
Total	201,590	90,398	18,882	12,765

Source: Central Office, Tax Administration, Ministry of Finance

Glossary

A

average tax rate – is the same as the ratio of tax and gross income for some gross income.

G

gross income – income that is taxable; the expression gross in this paper should not be confused with the expression gross pay, which actually refers to the amount of wages before deduction of employee contributions.

gross tax due – the amount of income tax before subtraction of the tax credit; see also distribution of tax rates.

I

income after tax, see net income

income before tax, see gross income

N

net income – the amount that is left to the taxpayer after the payment of income tax

net tax due – is the same as gross tax due from which the amount of tax credit is deducted.

O

other allowances – these are all reliefs that reduce the tax base apart from the personal allowance

P

personal allowance – a relief that reduces the tax base; in this research the basic personal allowance and the additional personal allowances for children and other dependents are considered personal allowances

R

reduction of tax base – a kind of relief in the tax system; gross income – deduction from income (the tax base) – losses brought forward = taxable income.

T

tax base – the amount to which the tax rate is applied; it is the same as gross income reduced by the personal allowance and other allowances; see distribution of tax rates

tax credit – a kind of relief; it is subtracted from the gross tax due to obtain the net tax due.