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THE 2000 TAX REFORM IN CROATIA: CAUSES AND CONSEQUENCES**

This paper represents an attempt to identify the key features of the Croatian tax system (such as the level of collected tax revenues, the overall tax burden, personal income tax progression and the composition of tax revenues) after the 2000 tax reform(s). It compares its performance to that of the old tax system that was in force from 1994 through 2000, as well as to the proclaimed goals of the tax reform. Some attention has also been devoted to the gradual erosion of the tax bases of personal and corporate income taxes and to the past, present and future consequences of such erosion to the creation of an "enabling environment" for foreign direct investment.

Key words: *tax reform, tax burden, tax progression, FDI*

Introduction

After the coalition government came to power in early 2000, it decided to abolish essential components of the existing tax system of direct taxes and initiate a stepwise reform of taxation. The inherited tax system was a unique system of mutually consistent consumption-based personal and corporate income taxes[1].

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** Nakon što smo u br. 9 i br. 11/2005. objavili uvodna izlaganja na Međunarodnoj konferenciji “Tax Systems in Competition and Countries in Transition”, u ovome broju nastavljamo s objavljivanjem radova koji govore o iskustvima pojedinih zemalja u reformiranju poreznih sustava. Svi su prilozi prošli recenzentski postupak.

[1] For details on Croatian tax system between 1994 and 2000 see, for example, Rose and Wiswesser (1998) or Schmidt, Wissel and Stöckler (1996).

Although criticised for being incomparable with the tax systems of other countries in the neighbourhood, the old tax system was surprisingly well accepted in the business community, and it generated a quite satisfactory level of tax revenues.

This paper represents an attempt to identify the key features of the Croatian tax system after the 2000 tax reform(s). It will try to compare its performance to that of the old tax system that was in force from 1994 through 2000, as well as to the intended goals of the tax reform., Some attention will also be devoted to the gradual erosion of the tax bases of personal and corporate income taxes and to the past, present and future consequences of such erosion to the creation of an "enabling environment" for foreign direct investment.

The introductory part is followed by the second chapter, which reviews the arguments that were used in 2000 to justify the launch of the tax reform. Part three shows the impact of the new tax system on the overall tax burden, the level of collected revenues from personal and corporate income taxes (both in absolute and relative terms), personal income tax progression and the structure of tax revenues. Part four focuses attention on the tax deductions introduced from 1994 onwards in order to provide incentives for domestic investors and turn Croatia into an attractive location for foreign direct investment. However, it also questions their effectiveness in achieving these goals. The final chapter highlights the most important lessons that can be learned from the 2000 tax reform experience.

Causes and goals of the 2000 tax reform in Croatia

The tax system that was introduced in 1994 (Official Gazette Narodne novine 109/1993) was a unique tax system based on the theoretical concept of the taxation of consumption. Besides VAT and excise taxes, its main components were direct taxes designed as taxes on consumption rather than income. The idea of taxing consumption rather than income, as far as direct taxes are concerned, was implemented through the taxation of interest-adjusted personal income and interest-adjusted business profits (Schmidt, Wissel and Stöckler, 1996).

As in everyday life, uncommon solutions are not welcomed by the public and usually face prejudice and hostility. And so was the case with the Croatian tax system. The tax system introduced in 1994 performed well by common standards, yet it was constantly blamed for suffering from all sorts of shortcomings. Unfortunately, few serious analyses on the macroeconomic effects of the tax system from 1994 onwards were undertaken and the majority of pro and con arguments on the issue of the consumption-based tax system were mostly based on personal impressions and beliefs rather than evidence.

The coalition government that came to power in early 2000 took the criticisms directed against the tax system seriously and decided to launch a tax reform that would gradually eliminate controversial features of the existing system. Government officials justified their actions by arguing that the existing tax system had serious drawbacks, e.g.:

- since the investment activity was sluggish in the period of its existence, the tax system was blamed for not providing a stimulating environment for investment,
- since it seemed evident that, without it, government revenue from corporate income tax would have been higher, the deduction for the imputed cost of capital (protective interest) was blamed for causing losses of government revenue (at the same time, another criticism was that the tax rate of 35 percent was set too high),
- due to the existence of protective interest, which was not present in other tax systems, there was an impression that it was not possible to compare Croatian corporate income tax with those in the neighbourhood,
- since its main components were indirect and personal income taxes with only two marginal tax rates, the overall tax system was criticised for being regressive,
- dividend relief was also seen as a cause of the state budget losses,
- since protective interest increased with the increase in the equity of an enterprise, the corporate income tax was perceived as biased in favour of capital intensive enterprises[2] .

The tax reform that started in late 2000 led to a complete redesign of the tax system, abandoning the idea of the taxation of consumption. The most striking feature of the direct tax reform was the abolition of protective interest and dividend relief. The statutory corporate income tax rate was reduced from 35 to 20 percent. Instead of two marginal tax rates of personal income tax (20 and 35 percent), first three and then, as of 2003, four marginal tax rates have been applied, ranging from 15 to 45 percent. The basic personal allowance was raised from 1,000 kuna to 1,250 and then to 1,500 kuna (NN/127/2000). A series of revisions of tax regulations passed in the period 2000 to 2004, introduced several tax exemptions and deductions into the system of direct taxation. Other taxes like VAT, social security contributions and local taxes were also subject to minor or even major changes.

The goals of the tax reform explicitly expressed by the coalition government were promotion of both domestic and foreign direct investment that would enhance

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[2] These criticisms can be found in the accompanying documents prepared by the Ministry of Finance for the new tax bills submitted for parliamentary procedure.

employment, introduction of more pronounced personal income tax progression and taxation based on the "ability to pay" principle, simplification of the tax system and its comparability with other contemporary tax systems, as well as harmonisation with the tax systems of the EU countries. Implicitly, the tax reform was also aimed at correcting the shortcomings of the previous tax system.

It would be interesting to see whether the tax reform has achieved both its explicit and implicit goals. Some conclusions on that can be more easily drawn from the analysis presented in this paper. It is, however, certain that even if the goals (such as recovery of investment or rise in employment) have been achieved, firstly, they cannot be attributed solely to the tax system and secondly, they could have been achieved only by chance since no simulations of the possible effects of the tax changes were conducted prior to their introduction. Moreover, as shown by Keen and King (2002), much of the criticism directed towards the old tax system could be easily refuted. Most of the shortcomings that were cited in regards to the old tax system simply did not exist, so that the new tax system had to correct the non-existing failures of the previous one. In addition, the criticism of the old corporate income tax that protective interest created losses to the government and provided generous tax relief seemed to be in direct contradiction to the goal of enhancing investment and employment through tax incentives and lower tax rates.

Macroeconomic performance of the new tax system

Overall tax burden

One of the most obvious macroeconomic consequences of the 2000 tax reform is the decrease of the overall tax burden. Total tax revenues, which exceeded 44 percent of the GDP in the period between 1994 and 2000, decreased by more than 3 percentage points in the period from 2001 to 2003 (see Table 1).

Table 1.

OVERALL TAX BURDEN, GENERAL GOVERNMENT, 1994 – 2003

(in % of BDP) 1	1994 – 2000 average 2	2001 – 2003 average 3	difference 4 = 3 - 2
Tax revenues	**44.1**	**40.8**	**-3.3**
Personal income tax	5.7	3.9	-1.8
Corporate income tax	1.8	1.9	0.1
Taxes on goods and services	18.5	20.2	1.7
Social security contributions	13.9	12.8	-1.0
Other taxes	4.2	2.0	-2.2

Source: Ministry of Finance, author's calculations

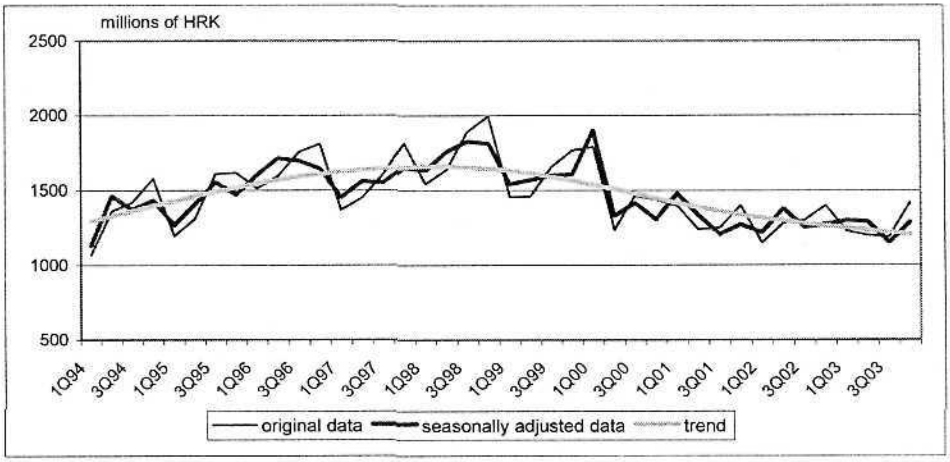
This favourable effect was mostly achieved through the fall in other taxes, and among them, the greatest contribution to that decrease of the tax burden came from the customs duties that went down after Croatia signed a number of free trade agreements and entered the WTO. A reduction of social security contributions, aimed at cutting down unit labour costs, resulted in the decrease in the overall tax burden by one percent of the GDP. The effect of the changes in the most radically reformed taxes (personal income tax, corporate income tax and taxes on goods and services) on the overall burden was neutral. As revenues from personal income tax decreased by 1.8 percent in terms of GDP in the period after the tax reform, the government had to compensate the loss of revenue by increasing revenues from taxes on goods and services (i.e. excise taxes) by the same amount.

Development of revenues from personal and corporate income taxes

It would be interesting to take a look at the evolution of personal and corporate income taxes in the period from 1994 onwards. Although not so significant in the structure of total tax revenues, those taxes greatly influence perception of the country's investment climate and usually indicate the theoretical background on which the entire tax system rests. In the 2000 tax reform, they were among the taxes that underwent major changes.

Figure 1.

PERSONAL INCOME TAX REVENUES, GENERAL GOVERNMENT, 1994 - 2003, 1995 = 100



Source: Ministry of Finance, author's calculations

After the 2000 slowdown caused by the (economic) recession, revenues from personal income tax continued to fall as a consequence of changes in the Personal Income Tax Act (see Figure 1)[3]. The reasons for the steady fall of personal income tax revenues are the increase in the basic personal allowance and the reduction of the lowest marginal tax rate. Both effects seem to offset the positive impact of the introduction of third and fourth tax rates on tax revenues. The downward trend is expected to continue even in 2004, due to the introduction of non-standard tax relief Croatian taxpayers were able to claim in their 2003 tax returns.

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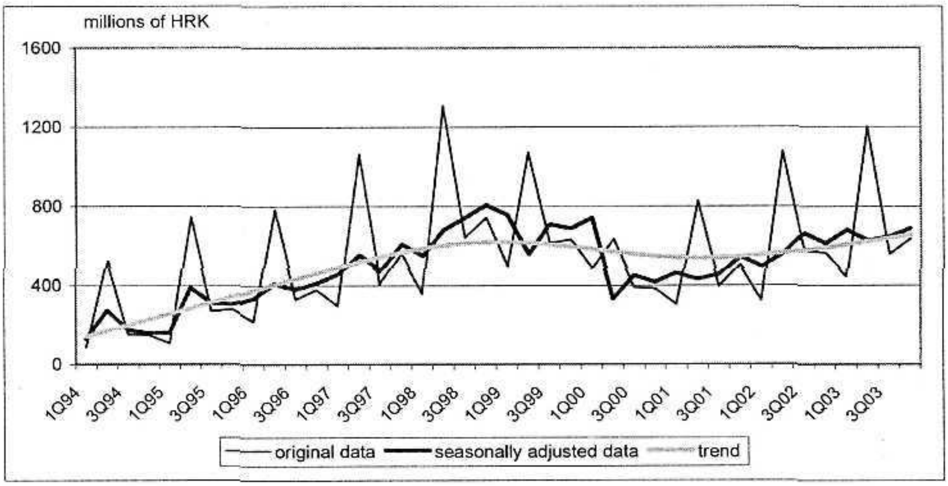
[3] The Ministry of Finance does not publish quarterly data on general government accounts. Fiscal statistics according to the economic classification are available on monthly basis for the consolidated central government, whereas for the local government the same data are available only on annual basis. The quarterly data used in this paper are constructed using monthly data on tax revenues for the consolidated central government, and adding estimates of quarterly tax revenues for the local government. Quarterly data on local government tax revenues are estimated using the assumption that the collection of local government revenues from personal and corporate income tax follows the same dynamics as the collection of consolidated government revenues from personal and corporate income tax. This assumption is based on the fact that both personal and corporate income taxes are taxes shared between the levels of government, and are levied on the same tax base. The timing of tax collection by the local and central government should, therefore, coincide.

The development of corporate income tax revenues follows the opposite trend. Like with personal income tax, corporate income tax revenues also faced certain slowdown during the recessionary 2000, but then recovered and even started to rise in real terms. It is evident that the lower statutory tax rate introduced by the 2000 tax reform did not reduce the burden of corporate income taxes, and that the new corporate income tax per se could not therefore create a stimulus to investment.

Figure 2.

CORPORATE INCOME TAX REVENUES, GENERAL GOVERNMENT, 1994 - 2003, 1995 = 100

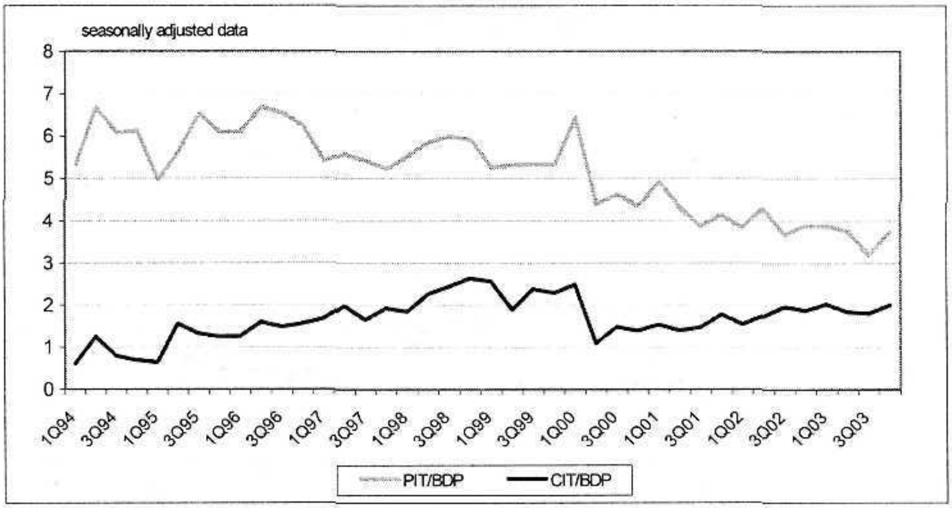


Source: Ministry of Finance, author's calculations

The same can be seen if we express the revenue from personal and corporate income taxes in terms of GDP. The share of revenue from personal income tax, which ranged between 5 and 6½ percent of the GDP on quarterly basis before the tax reform, went down to 4 percent after the introduction of the changes in personal income tax rates and then began to fall even further (see Figure 3). At the same time, revenues from corporate income taxes rose from below 1 to more than 2½ percent of the GDP on quarterly basis during the period 1994-2000, fell rapidly to 1 percent of the GDP at the end of that period and then started to recover, reaching 2 percent of the GDP in 2003. The data on corporate income tax revenue cannot confirm any problems with revenue generation from that source prior to 2000, and surely cannot prove that the corporate income tax reform brought any significant relief to enterprises.

Figure 3.

PERSONAL AND CORPORATE INCOME TAX REVENUES IN % OF GDP, GENERAL GOVERNMENT, 1994 - 2003



Source: Ministry of Finance, author's calculations

Average elasticity and average rate of personal income tax

One of the criticisms against the pre-2000 tax system was that it did not take into account the economic situation of the taxpayers, failing to make any significant differences in the relative tax burden between the rich and the poor. The goal of the tax reform was to insist on equality in taxation. This should have been achieved through a more pronounced tax progression, i.e. mainly through the introduction of two additional marginal tax rates of personal income tax.

The data on personal income tax (together with surtax on personal income tax) and income by income brackets allow us to calculate the average constant elasticity as a measure of tax progression. Any elasticity above 1 indicates tax progression, and the higher the elasticity, the higher the progression[4]. Table 2 presents the average constant elasticities of personal income tax for all taxpayers and for the subgroup of employees for the period between 1995 and 2002, and the averages for two sub-periods – the one before the tax reform and the other after the beginning of the tax reform.

It is evident that for both, all taxpayers and employees, personal income tax was progressive even before the tax reform. However, the tax elasticity in the second sub-period increased significantly in comparison with that before the 2000 tax reform, indicating stronger tax progression in the period after the 2000 tax reform.

Table 2.

AVERAGE CONSTANT ELASTICITY OF PERSONAL INCOME TAX AND SURTAX AND AVERAGE TAX BURDEN, 1995 - 2002

	Average constant elasticity		**Average tax burden**	
	all taxpayers	employees	all taxpayers	employees
1995	1.75	1.52	11.9	12.8
1996	1.69	1.50	12.9	14.0
1997	1.76	1.67	10.8	12.0
1998	1.53	1.57	11.4	13.3
1999	1.74	1.39	9.5	11.5
2000	1.68	1.68	9.0	10.8
2001	1.94	1.78	7.5	8.9
2002	1.84	1.75	7.5	9.5
1995 – 2000 average	**1.69**	**1.56**	**10.9**	**12.4**
2001 – 2002 average	**1.89**	**1.77**	**7.5**	**9.2**

Source: Tax Administration, author's calculations

[4] A detailed description of the calculation of average constant elasticity using the Tax Administration data can be found in Madžarević-Šujster (2001). The formula used in this paper for the calculation of tax elasticity is: $\frac{PIT_2 - PIT_1}{PIT_1 + PIT_2} * \frac{w_1 + w_2}{w_2 - w_1}$.

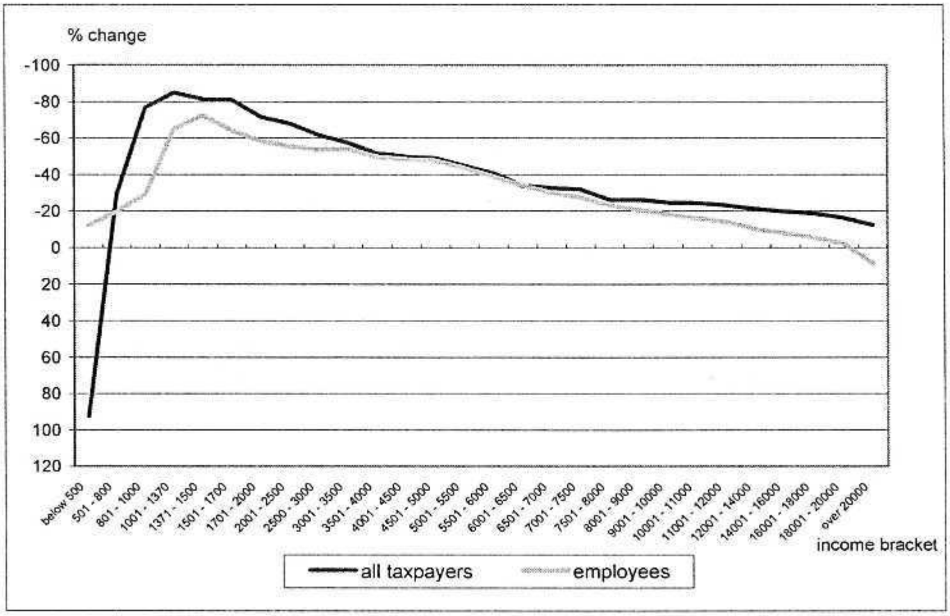
It can also be observed that higher relative taxation was not accomplished through higher average taxation of those in the higher income brackets. On the contrary, even for those in high income brackets the average tax rate decreased, but this decrease was less pronounced than for those in the lower income brackets. Figure 4 and Table A1 in the Appendix show that for almost all the income brackets the average personal income tax burden went down, lowering also the average tax burden of all taxpayers and all employees. It is only the degree of the reduction of the average tax burden that differs between those in the lower and those in the higher income brackets. Those who profited most, i.e. those whose average tax rate decreased by 50 percent or more, were the taxpayers earning between 800 and 4,000 kuna net per month, i.e. those employees whose monthly wages ranged between 1,000 and 3,500 kuna net per month. The average tax rate increased only for the employees earning more than 20,000 kuna net per month.

The reason why almost all those obliged to pay personal income tax were better off after the 2000 tax reform can again be found in the increase of the basic personal allowance and the reduction of the lowest marginal income tax rate to 15 percent, but also in the fact that the highest marginal tax rate of 45 percent applies only to a relatively high tax base of 21,000 kuna per month.

It seems that the same level of tax progression could have been attained through a higher level of the average tax rate, i.e. so that those in the higher income brackets would have to pay higher taxes than before. This would imply the government's stronger reliance on direct taxes and less need for turning to other sources of financing. The government, however, chose to increase excise taxes to compensate for the loss of revenues from personal income tax.

Figure 4.

AVERAGE TAX RATE BY INCOME BRACKETS, 1995 – 2000 AVERAGE/ 2001 – 2002 AVERAGE, % CHANGE



Source: Tax Administration, author's calculations

Structure of tax revenues

The previous tax system was often criticised for a high share of inherently regressive tax forms (like VAT and excise taxes) as compared to the progressive tax forms and, by the same token, for a high share of indirect in comparison with direct taxes. Table 3 shows what happened to the tax structure after the 2000 tax reform in that respect, if looking only at the major groups of tax revenues (personal and corporate income taxes, social security contributions and domestic indirect taxes). Although just the opposite would be expected, the share of indirect taxes rose after the reform, while the share of explicitly direct taxes fell significantly.

The move towards greater progression of the whole tax system brought about by a greater progression of personal income tax was simply offset by an increase in indirect taxes. It has to be mentioned that the share of indirect taxes in tax revenues rose mostly due to the rise in excise taxes. It can be argued that many of the excises are also progressive in their nature since they are paid on more luxurious goods, but it seems that the reason for relying on the excises was not to make the tax system more progressive, but to exploit them as an easy and efficient way to provide extra revenues for the government.

Table 3.

STRUCTURE OF NON-TRADE TAX REVENUES, 1994 - 2003

	1994 – 2000 average	2001 – 2003 average
Personal and corporate income taxes	18.7	14.9
Social security contributions	34.8	33.1
Domestic indirect taxes	46.5	52.0

Source: Ministry of Finance, author’s calculations

Tax incentives and FDI: what can be learned?

In order to fulfil the goal of stimulating investment (most importantly foreign direct investment, often viewed as a panacea) through tax measures, the coalition government made tax incentives one of the key elements of the tax reform. The tax system introduced in 1994 initially provided only one important tax incentive – deduction for the imputed cost of equity, or the so-called protective interest deduction (Official Gazette NN/109/1993). As it was perceived as a very generous incentive, which did not discriminate in any way, there seemed to be no need for adding extra incentives to the corporate income taxation act. However, the temptation to introduce new tax incentives was high, so that more or less important incentives were introduced even before 2000, gradually eroding the base of corporate income tax. In 1996, new tax concessions were introduced in form of reduced corporate income tax rates in the areas of special state concern and “free zones” (NN/44/1996). After that, in 2000, first the Investment Promotion Act allowed the application of a reduced rate of corporate income tax for certain types of new investments (NN/73/2000), and then the reform of corporate income tax introduced additional tax incentives in form of double deductions from the taxable base of wages of newly employed persons, and full asset depreciation provisions (NN/127/2000). In 2003, enterprises were given additional tax incentives for R&D and professional training (NN/163/2003).

Table 4.

TAX INCENTIVES IN SUPPORT OF INVESTMENT INTRODUCED AND IN FORCE SINCE 1994

Type of incentive	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Deduction for the imputed cost of equity (protective interest deduction)	······	······	······	······	······	······	···>			
Tax incentives for the areas of special state concern			······	······	······	······	······	······	······	···>
"Free zones"*			······	······	······	······	······	······	······	···>
Investment promotion incentives							······	······	······	···>
Tax incentives for employment							······	······	······	···>
Accelerated depreciation of capital costs							······	······	······	···>
Tax incentives for R&D and professional training										··>

* Note: provided with the discretionary powers of the Government to increase tax concessions in "exceptional cases".

It is clear from Table 4,which shows major tax incentives and periods of their application, that ever since 1996 more and more tax incentives have been added to the list, and that once introduced into the system they have remained there. The only tax incentive that was eventually removed is the deduction of protective interest, which was abolished by the 2000 tax reform. While the criticism that protective interest is uncommon and incomparable with tax systems in other countries may be true, it could be safely said that it was replaced by the tax incentives that are mostly biased and available only for specific investments, and can therefore be characterised as being inferior to protective interest.

It would be interesting to see how the newly introduced tax incentives influenced foreign investors' decisions to invest in Croatia and any survey that could help provide the answer would be more than welcome. However, in the absence of such surveys one can try to arrive at some conclusions based on the available data on FDI flows to Croatia, and evidence provided by various surveys conducted for groups of comparable countries[5]. The data on FDI flows to Croatia (see Table 5) reveal that Croatia attracted relatively small proportion of total FDI that came to Central and South Eastern Europe from 1994 to 2002, but at the same time their share in FDI flows to South Eastern Europe was rather high, i.e. between 14 and 46 percent.

In 1996 FDI flows to Croatia were as high as USD 500 million, which doubled in 1998 and tripled in 1999. No important changes in corporate income taxation occurred neither between 1997 and 1998 nor between 1998 and 1999, so that the reasons for the change in the size of FDI flows to Croatia have to be sought outside the tax system. Similarly, FDI in 2001 (after the tax reform) were almost of the same size as in 1999 (before the tax reform), and the 2000 tax reform obviously did not do much to enhance the country's attractiveness to foreign investors.

Table 5.

FDI FLOWS INTO CENTRAL AND SOUTH EASTERN EUROPE, 1994 - 2002, IN MILLIONS OF USD

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Central and South Eastern Europe*	6200	14613	13538	20806	22481	25145	26373	25026	28624
South Eastern Europe**	669	816	1111	3151	3908	3704	3737	4631	3906
Croatia	117	114	511	533	932	1467	1089	1561	1124
- in % of total flows to Central and South Eastern Europe	1.9	0.8	3.8	2.6	4.1	5.8	4.1	6.2	3.9
- in % of total flows to South Eastern Europe	17.5	14.0	46.0	16.9	23.8	39.6	29.1	33.7	28.8

Notes: *Central and South Eastern Europe includes following countries: Poland, Czech Republic, Russian Federation, Slovakia, Hungary, Bulgaria, Rumania, Croatia, Ukraine, Latvia, Estonia, Lithuania, Slovenia, TFRY Macedonia, Republic of Moldova, Bosnia and Herzegovina, Belarus, Albania and Serbia and Montenegro. ** South Eastern Europe includes following countries: Bulgaria, Romania, Croatia, TFRY Macedonia, Republic of Moldova, Bosnia and Herzegovina, Albania and Serbia and Montenegro

Source: UNCTAD, World Investment Report 2001 and 2003; www.unctad.org/fdistatistics

[5] See two recent documents (Emerging Markets Economics, 2003) and OECD (2003).

Some recent surveys have found that taxation or tax-based incentives play only a minor role in the choice of an investment location (EME 2003; OECD 2003). Their results show that tax issues are of greater importance for strategic investors than for opportunistic investors[6]. Contrary to the views held by most government officials, investors are mostly concerned about stability, predictability and transparency of tax systems. Moreover, excessive "stacking" of corporate tax incentives and other incentives increase complexity, thus increasing compliance and administrative costs, lead to inefficiencies in resource allocation, may contribute to concerns over sovereign risk and cast doubts over basic "enabling conditions".

Both the data on FDI flows and the relevant recent literature, support the conclusion that foreign direct investment flows to Croatia intensified once the political situation became stable in the second half of the 1990s (EME 2003; OECD 2003). In addition, sizeable FDI flows were experienced only in the years when massive privatisation processes were underway, such as privatisation of the Croatian Telecom, large state-owned banks or INA (national oil and gas company). Since most of FDI flows into Croatia resulted from privatisation opportunities and were in that respect "opportunistic" in their nature, they would have probably taken place irrespective of the characteristics of the tax system.

There are some important lessons in regard to the connection between tax systems and FDI that can surely be learned from the Croatian experience in the past decade and from the experience of other countries. Firstly, although tax incentives might seem very appealing, they should be avoided since they may have unwanted effects on tax revenues and tax system transparency. Secondly, special tax incentives are either not taken into account by potential foreign investors or may even discourage investment (see e.g. OECD, 2003). In the third place, investors' location choices are made on the basis of non-tax criteria such as political and economic stability, size and growth of the market, stability of the legal framework and the rule of law or absence of bureaucratic obstacles. Finally, if tax matters are taken into account by potential investors, the transparency and stability of the tax system are considered as the most important tax issues (see e.g. EME, 2003).

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[6] Here "strategic" refers to those investors whose investment decisions are made on the basis of wider investment considerations, such as securing presence in markets with the potential over time to become sizeable by international standards, maximising competitive advantages of scale or cost of production, or how the country fits with the wider global business strategy in terms of supplying goods and services to a particular region. "Opportunistic" investors, alternatively, focus on assessing a target investment on the basis of its profitability and do not perform comparative assessments of countries as the opportunity is usually specific to a time and place. What they hope to identify is unique projects that provide high levels of risk-adjusted returns over a short period of time (EME 2003, p. 12).

Conclusion

This paper focused on aggregate effects of the 2000 tax reform, and came up with some useful findings. It showed that the overall tax burden decreased significantly since the tax system underwent important changes in 2001. It also found out that after the 2000 tax reform progression of personal income tax rose due to the introduction of a third and after that a fourth marginal tax rate. However, a higher basic personal tax allowance and a decrease of the lowest marginal personal income tax rate brought about the fall in the average tax rate and in personal income tax revenues. At the same time, corporate income tax revenues recovered after 2000 and then remained stable at the level of 2 percent of the GDP. The analysis of tax revenues revealed that the share of direct taxes within the total tax revenues went down after 2000 although the intention of the tax reform seemed to be just the opposite. The analysis also focused on the evolution of tax incentives during the last ten years, showing how their number increased continuously. On the one hand, this certainly led to increased complexity of the tax system and tax base erosion while, on the other hand, there was no evidence that the accumulation of tax incentives played any role in encouraging FDI inflows.

The analysis presented in this paper has not exhausted research possibilities on the topic of characteristics and effects of the tax system before and after 2000 tax reform. There are many aspects of the tax reform that should be the subject of research and analysis, such as the effect of the tax changes on the marginal effective tax rate, impact of the tax changes on different types of investment, the relationship between the introduction of tax incentives on investment decisions and the burden of tax compliance and effect of the tax changes on the distribution of income and wealth. Even a basic analysis, such as the one whose results are presented here, indicates that the actual economic consequences of tax changes may be quite different from intended effects if the policymakers are not ex ante aware of the potential mechanisms that may be triggered off by various tax policy measures.

REFERENCES

1. Emerging Market Economics (EME) (2003): *A Survey on the Role of Taxation in Foreign Direct Investment in South East Europe*, (in co-operation with the OECD Tax Centre for Tax Policy and Administration and the Investment Compact Team), Directorate for Financial, Fiscal and Enterprise Affairs, April 2003.
2. Keen, Michael and John King (2002): "The Croatian Profit Tax: An ACE in Practice", *Fiscal Studies*, September 2002, vol. 23, no. 3, pp. 401 - 418.

3. Madžarević-Šujster, Sanja (2001): "Mjerenje progresivnosti poreza na dohodak u Hrvatskoj od 1995. do 1999. godine", *Financijska teorija i praksa*, vol. 23, no. 2, pp. 139 – 260.
4. OECD Tax Centre for Tax Policy and Administration and the Investment Compact Team (2003): *Tax Policy Assessment and Design in Support of Direct Investment: A Study of Countries in South East Europe*, Directorate for Financial, Fiscal and Enterprise Affairs, April 2003.
5. Official Gazette (**Narodne novine**) No. 109/1993, 44/1996, 73/2000, 127/2000 and 163/2003.
6. Rose, Manfred and Rolf Wiswesser (1998): "Tax Reform in Transition Economies: Experiences from the Croatian Tax Reform Process of the 1990s", in: Peter Birch Sørensen (ed.), *Public Finance in a Changing World*, Macmillan, Basingstoke, pp. 257 – 278.
7. Schmidt, Peter, Harald Wissel and Manfred Stöckler (1996): "The New Croatian Tax System", *IBFD Bulletin*, vol. 50, April 1996, pp. 155 – 163.
8. UNCTAD (2001 and 2003): *World Investment Report*; www.unctad.org/fdistatistics.

Appendix

Table A1.

AVERAGE TAX RATE FOR ALL TAXPAYERS AND EMPLOYEES BY INCOME BRACKETS, 1995 – 2002, in %

	Average tax rate																					
	all taxpayers											employees										
Income bracket, in kuna	1995	1996	1997	1998	1999	2000	2001	2002	1995 - 2000 average	2001 - 2002 average	% change (before / after the 2000 tax reform)	1995	1996	1997	1998	1999	2000	2001	2002	1995 - 2000 average	2001 - 2002 average	% change (before / after the 2000 tax reform)
below 500	3,0	5,3	3,1	2,2	2,4	2,3	4,7	7,1	3,1	5,9	92,4	7,3	24,7	15,5	15,1	12,5	11,7	10,7	14,6	14,5	12,7	-12,3
501 - 800	2,8	1,3	0,7	0,6	0,3	0,3	0,7	0,6	1,0	0,7	-29,4	5,6	5,0	4,3	5,6	4,8	4,2	3,9	3,9	4,9	3,9	-19,8
801 - 1000	3,4	2,3	1,5	1,1	0,5	0,3	0,4	0,4	1,5	0,4	-76,6	6,5	5,6	2,9	4,5	3,9	3,9	3,0	3,5	4,6	3,2	-29,3
1001 - 1370	6,6	6,1	3,1	2,8	1,3	0,8	0,5	0,5	3,5	0,5	-84,9	8,3	8,0	5,5	5,6	3,4	2,2	1,4	2,4	5,5	1,9	-65,1
1371 - 1500	8,9	8,5	4,5	4,4	2,4	1,1	0,9	0,9	5,0	0,9	-81,3	9,8	9,6	6,3	7,0	5,0	3,3	2,1	1,7	6,8	1,9	-72,3
1501 - 1700	10,2	9,8	5,4	5,5	3,8	2,5	1,2	1,2	6,2	1,2	-81,1	10,8	10,6	7,3	7,5	5,7	4,4	2,7	2,8	7,7	2,8	-64,0
1701 - 2000	11,6	11,6	7,3	6,9	4,7	3,7	2,1	2,2	7,6	2,2	-71,6	11,9	11,9	8,4	8,6	6,3	5,2	3,6	3,7	8,7	3,6	-58,3
2001 - 2500	13,4	13,4	9,3	9,1	6,3	5,0	3,0	3,0	9,4	3,0	-68,1	13,4	13,3	9,7	10,0	7,5	6,2	4,3	4,6	10,0	4,5	-55,4
2500 - 3000	16,2	15,7	11,3	11,6	8,3	6,9	4,5	4,5	11,6	4,5	-61,5	16,0	15,5	11,4	11,8	8,9	7,6	5,4	5,7	11,9	5,5	-53,6
3001 - 3500	18,2	18,2	13,5	13,7	9,9	8,6	5,9	5,7	13,7	5,8	-57,5	17,9	18,1	13,5	13,7	10,2	8,9	6,3	6,4	13,7	6,3	-54,1
3501 - 4000	19,4	19,2	15,6	15,5	11,4	9,7	7,3	7,3	15,1	7,3	-51,7	19,3	19,3	15,5	15,5	11,6	9,9	7,5	7,7	15,2	7,6	-49,8

4001 - 4500	20,6	20,2	17,1	17,2	12,3	10,6	8,2	8,2	16,3	8,2	-49,8	20,2	20,3	17,1	17,4	12,6	10,7	8,4	8,5	16,4	8,4	-48,4
4501 - 5000	21,7	20,5	18,1	18,3	13,5	11,4	8,9	8,7	17,3	8,8	-49,0	20,8	20,9	18,4	18,8	14,1	11,8	9,1	9,2	17,5	9,1	-47,7
5001 - 5500	22,1	21,2	19,3	18,5	14,4	12,6	10,1	9,8	18,0	9,9	-44,8	20,6	21,5	19,4	20,0	15,8	13,3	10,3	10,4	18,4	10,4	-43,8
5501 - 6000	22,9	21,6	19,1	18,2	15,2	13,5	11,1	10,8	18,4	10,9	-40,8	20,9	21,3	20,0	20,4	17,1	14,7	11,5	11,8	19,0	11,6	-38,9
6001 - 6500	23,9	21,5	18,0	16,5	14,0	15,0	12,3	11,7	18,2	12,0	-33,8	21,6	20,5	20,0	20,7	18,1	16,0	12,8	12,8	19,5	12,8	-34,2
6501 - 7000	24,0	22,8	19,3	18,5	16,8	13,6	13,1	12,6	19,2	12,9	-32,8	21,2	21,3	20,9	21,5	18,9	16,9	14,0	14,1	20,1	14,0	-30,1
7001 - 7500	25,7	23,6	20,6	21,2	18,5	16,5	14,6	13,9	21,0	14,3	-32,0	23,1	21,7	20,8	21,8	20,2	18,5	15,1	15,4	21,0	15,2	-27,5
7501 - 8000	26,1	24,0	19,9	19,8	17,5	17,3	15,7	14,9	20,8	15,3	-26,2	23,3	21,8	21,3	22,3	20,4	19,2	16,2	16,6	21,4	16,4	-23,3
8001 - 9000	26,9	25,5	22,8	21,7	20,0	19,8	17,3	16,3	22,8	16,8	-26,3	24,4	23,0	22,5	23,2	21,6	20,4	17,8	18,0	22,5	17,9	-20,6
9001 - 10000	28,0	27,1	24,2	23,8	21,4	21,3	18,9	17,6	24,3	18,3	-24,7	25,4	24,6	23,8	24,3	22,6	21,6	19,2	19,6	23,7	19,4	-18,4
10001 - 11000	28,6	28,4	25,7	25,2	23,1	22,6	20,3	18,3	25,6	19,3	-24,6	25,0	26,1	24,4	25,1	23,6	22,5	20,4	20,6	24,5	20,5	-16,1
11001 - 12000	29,2	28,5	27,0	26,4	23,6	23,8	21,3	19,3	26,4	20,3	-23,1	25,9	26,4	25,2	25,8	24,2	23,7	21,5	21,8	25,2	21,6	-14,1
12001 - 14000	29,3	29,2	27,5	27,1	24,1	24,5	22,5	20,0	27,0	21,2	-21,2	24,7	26,6	25,4	26,1	24,8	24,3	22,5	23,0	25,3	22,8	-10,1
14001 - 16000	29,7	30,2	28,2	27,9	25,3	25,7	24,0	20,7	27,8	22,3	-19,8	25,7	27,6	26,0	26,7	25,9	25,3	24,0	24,2	26,2	24,1	-8,0
16001 - 18000	29,1	30,9	29,0	28,8	26,0	26,7	25,0	21,2	28,4	23,1	-18,7	23,0	28,2	27,0	27,8	26,4	26,3	25,0	25,0	26,5	25,0	-5,6
18001 - 20000	29,5	29,9	30,0	28,4	26,1	27,5	25,6	22,2	28,6	23,9	-16,4	21,0	27,5	28,3	27,5	27,0	26,9	25,4	26,2	26,4	25,8	-2,2
over 20000	29,4	30,8	30,6	29,7	26,8	28,0	28,9	22,3	29,2	25,6	-12,4	18,1	26,5	28,0	28,3	27,4	27,0	28,1	28,2	25,9	28,1	8,6
AVERAGE	**11,9**	**12,9**	**10,8**	**11,4**	**9,5**	**9,0**	**7,5**	**7,5**	**10,9**	**7,5**	**-31,1**	**12,8**	**14,0**	**12,0**	**13,3**	**11,5**	**10,7**	**8,9**	**9,5**	**12,4**	**9,2**	**-25,8**

Source: Tax Administration, author's calculations

POREZNA REFORMA IZ GODINE 2000. U HRVATSKOJ: UZROCI I POSLJEDICE

Sažetak

Ovaj je rad nastao s ciljem da se identificiraju osnovne značajke hrvatskoga poreznog sustava (npr. razina prikupljenih poreznih prihoda, ukupno porezno opterećenje, stupanj progresivnosti poreznog sustava i struktura poreznih prihoda) nakon porezne reforme provedene 2000. godine. U radu se uspoređuje novi porezni sustav s poreznim sustavom koji je bio na snazi od 1994. do 2000. godine, a također se postavlja pitanje jesu li izmjenama poreznog sustava ostvareni ciljevi porezne reforme. Pažnja je posvećena i postupnoj eroziji poreznih osnovica poreza na dohodak i dobitak, te prošlim, sadašnjim i budućim posljedicama takve porezne erozije stvaranju "pogodnog okruženja" za izravna strana ulaganja.

Ključne riječi: porezna reforma, porezno opterećenje, progresivnost, izrava stranaulagn