

# TAX COMPLIANCE COSTS OF COMPANIES IN CROATIA\*

HELENA BLAŽIĆ\*\*

Keywords: compliance costs of taxation, profit tax, companies, VAT, Croatia, social security contributions, wage tax

## Abstract

The paper measures the tax compliance costs of business units that pay profit tax (corporate income tax) tax in Croatia for the period 2001/2002. They comprise all taxes (except customs and excise duties) and all sorts of compliance costs (including also non-labour internal costs). The research was carried out by an interview survey (face to face).

As expected, the regressivity is established for the entire size range. Concerning the tax structure, although internal labor time costs are in general predominant, the percentage of non-labor internal costs is substantial also. This suggests that these costs should not be omitted from such a type of research. VAT is on the first place in the structure of compliance costs concerning types of taxes.

The percentage of aggregate tax compliance costs in GDP is around 1.2%, which is not extremely high. The same can be said for the percentage of different

---

\* This research was supported by a grant from the CERGE-EI Foundation under a program of the Global Development Network. Additional funds for grantees in the Balkan countries have been provided by the Austrian Government through WIIW, Vienna. All opinions expressed are those of the author(s) and have not been endorsed by CERGE-EI, WIIW, or the GDN.

Additional funds were provided by Institute of Public Finance, Zagreb, Croatia – the institution that has conducted the project «Administrative and Compliance Costs of Taxation in Croatia». This paper is part of that project.

We thank John Hasseldine, Marsha Blumenthal, Jeffrey Pope, Maarten A. Allers and Cesar Cordova (OECD) for being so kind to provide us with their questionnaires as well to thank John Hasseldine and Binh-Tran Nam for their advices.

\*\*Assistant Professor, Faculty of Economics, University of Rijeka

taxes in relevant tax revenues. The highest is percentage of the profit tax, calling for a simplification in a profit tax calculation.

## 1. Introduction

Compliance costs of taxation have, in the last twenty-five years, been the subject of growing interest, especially in developed countries – on the part of both academics and governments. Still research of this kind is very rare among transition countries, mostly because it requires complicated surveys involving the collection of large amounts of data not available from published sources, but also because this problem has been neglected for a long time.<sup>1</sup>

This paper focuses on the tax compliance costs (of all taxes except customs and excise duties) of the business units that pay profit tax<sup>2</sup>.

Unlike some previous research about the compliance costs of taxation that have conveyed partial surveys for different types of taxes<sup>3</sup>, we decided to make

---

<sup>1</sup> The comparative study of three countries (Institute for Private Enterprise and Democracy, Poland; Institute for Market Economics, Bulgaria; Institute for Liberal Studies, Slovakia, 1998) should be mentioned here treating the problem of the compliance costs only implicitly (without measuring them). The results of small-scale questionnaires advocate simplification of tax system (especially for small firms and favoring lump sum taxation), less frequent changes of the tax system and reporting obligations. Also in Slovenia (Klun, 2002) this problem is recognized and partially measured (only concerning VAT and personal income tax returns of individuals). The reasons for the lack of such a research in Croatia are explained in Ott and Bajo (2001, p. 230-235).

<sup>2</sup> The term «corporate income tax» is not completely applicable, because in Croatia not only corporations, but also one part of the non-corporate sector (companies with unlimited tax liability) pays profit tax.

<sup>3</sup> For instance Sandford, Godwin, Hardwick and Butterworth, 1981; Sandford, Godwin and Hardwick, 1989; Bannock and Albach, 1987 (synthesis in Bannock, 2001); Pope, Fayle and Chen, 1994, Pope, 1995, Collard, Godwin, 1999; Klun 2002. This partial surveys often encompassed all (or only some) taxes and the entire amount of (business) tax compliance costs was obtained by adding all the costs together (for instance Sandford, Godwin and Hardwick, 1989; Pope, 1995). The research in selected Asian economies (Ariff, 2001) falls into that category too (comprises only corporate income tax), but this choice is logically (objectively) caused by the specific structure of these tax systems.

synthetic research that encompasses all the taxes at the relevant business level.<sup>4</sup> Furthermore, it is recognized (International Tax Compliance Costs Symposium, 2000) that it is difficult to state the compliance costs of each type of tax precisely. Even if it were possible, such a technique (the addition of the incremental compliance costs of different taxes) could underestimate the total compliance costs of business taxes (Sanford, 1995). That is why businesses in our survey are asked about the compliance costs of all the taxes together<sup>5</sup> and after that about the structure of all the costs concerning the different types of taxes (profit tax, VAT, personal income taxes on wages and social security contributions).<sup>6</sup>

As usually, compliance costs are defined as costs incurred by taxpayers in meeting the requirements laid on them by the law and revenue authorities, over and above the actual payment of tax and over and above any distortion costs inherent in the nature of the tax (Sandford, 1995, p.1). They entail labor costs (owner(s), managers, unpaid help, internal bookkeeper/accountant or other employee who handles taxes), external costs (bookkeeping/accounting office, another company connected with our company, tax advices of auditing firms or some other firms) as well as some other internal non-labor costs (software and hardware (additional), forms

---

<sup>4</sup> As for instance in Allers, 1994; Evans, Ritchie, Tran-Nam, Walpole 1997, OECD, 2001 and in some way also in Sandford and Hasseldine, 1992 (acc to Hasseldine, 1995). This last research lies in fact «in between» of the two stated approaches, because surveys were synthetic. First questionnaire covered PAYE, various other withholding taxes and Fringe Benefit Tax and the second one covered both business income tax as well as VAT. Both surveys were integral part of the same research and the second questionnaire was sent a few weeks later. It was avoided that the same taxpayers receive both questionnaires (the taxpayers who received the first questionnaire were eliminated from the database). The distribution of two different questionnaires was deliberately made in order to avoid one extremely lengthy questionnaire.

The same is only partially true for the research about effects of the tax reform in Sweden on compliance costs of taxation (Malmer, 1995), where the same questionnaire encompassed VAT and preliminary tax and payroll charges (income tax was missing).

<sup>5</sup> Similar as in OECD, 2001, but that study did not try to get the data about the tax structure of compliance costs.

<sup>6</sup> As opposite to the technique where taxpayers are asked concerning the different sorts of compliance costs (labor costs, external costs...) about the amount dedicated to each type of tax (with the ultimate addition of all the components).

and stationery, postage and telephone, literature and seminars, traveling costs, court costs). Tax planning is included as the inherent part of the tax compliance costs. This research did not attempt to measure psychological costs. No attempt has been made to distinguish “regular” and “initial” (“temporary” or “commencement”) costs, not only because this would be extremely hard for the taxpayers, but also because tax changes are almost “regular” in Croatia.

In order to make it easier for respondents they were asked about the relevant tax compliance costs for the last 12 months. The size data (number of employees) was also for the last 12 months.<sup>7</sup> So, the research comprises tax compliance costs from around second half of the 2001 and first half of the 2002.

Due to the lack of relevant data and the fact that most of the companies do not claim tax refund and use it as the advance payment of future tax liabilities, the research comprises only “social” or “gross” compliance costs.

The research has tried to test several hypotheses:

- Tax compliance costs are regressive
- Smaller companies rely heavily on external professional accountants; as the size of business increases, they appear to spend proportionately more money expanding internal resources for tax compliance
- Labor costs are the most important part of the tax compliance costs
- VAT is responsible for the bulk of compliance costs
- Share of tax compliance costs in the relevant tax revenues is relatively high

---

Something similar is employed in Collard and Godwin (1999, Appendix), where a checking question concerning “reported” compliance costs of only PAYE and National Insurance (entailing all the sorts of compliance costs) was put and after that its division concerning PAYE, NICs and SSP/SMP.

<sup>7</sup> There is some imperfection here concerning the stratification and weighting (as well gross-up) which were done by 2001 data (businesses that have paid profit tax classified by the number of employees), but it was impossible to do it otherwise.

The paper is divided in two parts. In the first part, methodological elements about the survey that are not already mentioned in the introductory part are explained and in the second one the results are analyzed.

## **2. Survey and sample**

The research was carried out by face-to-face interviews conveyed by commercial polling agency (PULS). A postal survey was rejected because of the very small response rate in Croatia and because of the very high postal costs. Furthermore, interviews guarantee a better understanding of the stated questions and more reliable results. Unfortunately, they are, of course, more expensive.

A couple of accounting offices, company owners and a representative of an accounting union were engaged as a consulting team that have corrected the questionnaire and helped us to test it on some relevant business units (“pilot”)<sup>8</sup>. The questionnaire was accompanied by the covering letter explaining the necessity of the research and its benefit to the taxpayers. The instructions for interviewers were added to the questionnaire and the seminar for them was held.

It was planned to interview 400 companies out of 70,179, which amounts around of 0.57% of total population. The sample was stratified according to size (number of employees) and the data (including addresses) were obtained through Tax Administration.

---

<sup>8</sup> The «pilot» confirmed our belief that taxpayers are not aware of what is meant by tax compliance costs and that itemizing them was the proper solution. It changed our first draft of the questionnaire in the way that some questions that were originally planned to be put to the owner were redirected to the person who handles tax work (in some cases, of course, it could be owner too). To a lot of remaining questions for the owner the instruction for the interviewers was added to ask the person who handles taxes, in the case owner can not answer them. The consulting team warned us in general that the owners are more interested in the amount of taxes they pay, and do not have great insight in the tax

The start of the research was May 2002, because companies have to submit their profit tax return as well as all the accounting reports for the last year until the end of the April. The interview process went with a lot of difficulties. The responding taxpayers complained that there had been very hard for them to assess the number of hours spent on tax matters, there were suspicious concerning the promised anonymity, complained that it takes too long...<sup>9</sup> The biggest problem for the interviewers in the cases where the entrepreneur had the accounting/bookkeeping office was to convince both sides to cooperate.<sup>10</sup> Furthermore, often, even inside the business, more than one person should have been interviewed (owner and other person who handles taxes). We paused in August and continued with interviews in September and October. We were running out of time, exhausted all the obtained addresses from the Tax Administration (1200) and hardly succeeded to get 339 responses (0.48% of the total population, which is relatively high for this type of research).

The structure of sample according to the size (number of employees) and the structure of total population of 70,179 businesses is presented in Table 1:

Table 1: Structure of sample and total population in terms of number of employees

<b>Number of employees</b>	<b>Sample (N)</b>	<b>Sample (%)</b>	<b>Total population in %</b>
Up to 2	68	20	58
3-5	60	18	20

---

compliance activities and specific tax issues (unless they handle taxes on their own, which is rarely the case).

<sup>9</sup> So the last questionnaire question concerning different taxes paid was dropped.

<sup>10</sup> Following the experience of the disadvantages of previous surveys (in: Sandford, 1995), we decided that it would be impossible for the entrepreneur (or some of his employees) to assess the part of the external fees that relates to tax work (including tax structure), as well as to answer some other qualitative tax compliance questions (the same was confirmed by our consulting team). So, we decided, in a case where an accounting/bookkeeping office is engaged (or some other company connected with our company: parent-subsidiary relation), to put that question as well as other tax related questions to that office.

6-20	107	31	15
21-250	77	23	6
>250	27	8	1
Total	339	100	100(N=71,179)

The sample was weighted to reflect the population structure by size, since smaller companies were strongly underrepresented. After weighting, the share of companies which are exempt from VAT in the sample turned out to be the same as in the entire population (around 7%), which made the sample representative in that way too.

The sample was not weighted by sector of activity, because there was no positive relationship established concerning tax compliance costs.<sup>11</sup>

### 3. Average tax compliance costs of company

Tax compliance costs of companies are the synthetic term, which comprises costs of all types of analyzed taxes (profit tax, VAT, wage taxes and social security contributions, other taxes<sup>12</sup>), as well as different types of costs (internal labor costs<sup>13</sup>, internal non-labor costs<sup>14</sup> and external costs<sup>15</sup>).

<sup>11</sup> This is maybe due to the sample being too small, but the result was also expected, because it is normal in Croatia to register for all the economic activities and later even not to concentrate only on one, but to perform other activities besides the «main one», even on a large scale.

<sup>12</sup> Except customs and excise duties, which were encompassed by other parts of research.

<sup>13</sup> The value of working hour comprises, as suggested by Sandford (1995, p. 398) not only “wage rate”, but also employer social security contributions. Unpaid help is valued at half of the hourly value of owner (similar as in Allers, 1994, p.12).

<sup>14</sup> We have decided to take some “intermediate approach” between including all such a costs (including all overheads) and not inclusion of such costs at all. So, we did not include “pure” overhead costs such as office space, heating, lighting, which would mostly exist even without taxes. The same holds even for hardware (compute) already bought and used for all other tasks inside the business. But if computer

Since the distributions were not normal, mean was concluded to be inappropriate to implement directly as a measure of average. So, the logarithm was used to achieve normality, and after that, mean was calculated, and then recalculated to get to the more reliable average measure.

Mean of total tax compliance cost (TCC) by number of employees as well as mean of tax compliance costs per employee<sup>16</sup> are presented in the Table 2.

Table 2: Average tax compliance costs (TCC) (mean) by number of employees and average costs per employee, unit of profit and unit of turnover

-in Croatian kunas (HRK)

<b>Number of employees</b>	<b>TCC (mean)</b>	<b>TCC per employee (mean)</b>	<b>TCC per unit of profit*(mean)</b>	<b>TCC per unit of turnover (mean)</b>
up to 2	19,824.34	16,641.96	0.7421	0.0402
3-5	30,217.11	8,033.79	0.4159	0.0283
6-20	45,063.22	4,715.68	0.1844	0.0105
21-250	80,686.39	1,168.64	0.1198	0.0047
More than 250	120,130.59	267.08	0.0183	0.0009
Total	27,112.77	9,988.55	0.5861	0.0321

\* only for companies that have taxable profit

The rise of average compliance costs with the rise of the size of company proves the validity of our results.

---

and especially software is bought mostly because of / especially for tax work then the yearly depreciation (linear and not for instance immediate write-off, which is also possible in Croatia) could be included. Other costs include software maintenance, stationery, forms, postage, telephone, seminars, travel costs, court (litigation) costs... We did not bother taxpayers with the detailed specification of all these costs one by one. Instead of that, we opted for one "catch-all" question concerning other internal non-labor costs giving a few examples of such costs.

<sup>15</sup> Part of fees to accounting offices (or related companies that do the accounting work) that relates to tax work, possible additional fees for special tax advises of, for instance, auditing firms or (other) accounting offices (for the time being, the institution of approved tax advisers in Croatia was still not established).

<sup>16</sup> Costs per employee were calculated for each company and then average for every stratum (class size) as well as total population was established.



As expected from all previous research of that subject, total compliance costs proved to be regressive measured as costs per employee, but also as costs per unit of profit or unit of turnover. The average is measured as mean of compliance costs per employee/unit of profit/unit of turnover of each business in the stratum and for all businesses together.

As already known, this regressive impact is the result of the fixed element inherent in compliance costs. It causes them falling proportionally heavier on small firms. The tax compliance costs per employee of the smallest companies are 62 times higher than those of the firms with 250 and more employees, cost per unit of profit 40 times higher and costs per unit of turnover 45 times higher.

#### 4. The structure of total tax compliance costs by type of costs

Internal labor costs are the most important part of tax compliance costs. They are usually presented in hours. In calculating the average we wanted to get really representative values for businesses handling taxes and not just pure statistics, so we have taken into account only businesses where relevant person exist / handles taxes.<sup>17</sup>

Table 3: Time spent on tax compliance by different persons employed in company (hours)

Number	%* of	Average	% of	Average	% of	Average	% or	Average
--------	-------	---------	------	---------	------	---------	------	---------

<sup>17</sup> So, for instance when talking about the average time spent by an unpaid helper, only businesses that have unpaid helpers are taken into account. Otherwise we would end with a lot of zeroes with no meaningful results.

Nevertheless, the full information about the meaning of the time costs of different subjects in the total compliance costs of the stratum as a whole can be obtained from Table 4.

of employees	<i>companies having owners/managers dealing with taxes</i>	time spent by the owner/manager	<i>businesses having unpaid help with taxes</i>	time spend by unpaid helper(s)	<i>businesses having accounting (and other) personnel dealing with taxes</i>	time spent by accounting (and other) personnel	<i>businesses having some internal person(s) dealing with taxes</i>	total time spent
Up to 2	68	277.15	7	99.00	37	477.68	87	437.14
3-5	57	274.71	6	144.00	62	536.35	85	716.22
6-20	42	382.73	4	90.00	79	1146.94	88	1305.97
21-250	20	448.87	-	-	91	2835.41	92	3376.99
>250	50	319.31	-	-	100	2559.33	100	2760.74
Total	59	291.47	6	107.74	52	910.08	87	818.31

\* all businesses in relevant size stratum (class) = 100

First, it is clear that the hours of persons involved generally rise as the size of the business rises, as expected. The important exception from that trend is the last size class (companies with more than 250 employees)<sup>18</sup>. The result can be explained by the fact that the owners and/or managers are more inclined not to engage so much in taxes<sup>19</sup> and to leave the specialized tax tasks to the highly qualified and experienced accounting staff, but also by their greater proficiency, better equipment... in general “economies of scale” effect.

It can be seen that the percentage of owners/managers dealing with taxes is shrinking, as expected, with the already mentioned exception for the last size stratum. This “involvement” in taxes may range from doing all/part the tax work by their own or simply cooperating with others. It is obvious that concerning taxes owners and managers strongly cooperate with the other internal (as well external persons) as the company size rises. Although the percentage is especially high for the smallest

<sup>18</sup> As well as the use of unpaid help in the third size class, which is caused by the use of that help partially as supplementary source of tax work.

<sup>19</sup> Here, the ownership and control are more divided, with the great dispersion of the former and managers are, of course, not so strongly interested in lowering the tax bill. Furthermore, the percentage of them engaged in taxes at all is much higher than for the two lower size classes, indicating a lot of smaller amount of hours, which brings to the lower average.

businesses, it is remarkably lower than for the businesses that pay personal income tax of the same size (above 90%) and the same is true for the higher size classes too. The reason can be found in the greater complexity of the profit tax return than the personal income tax return (as well as more businesses being registered for VAT), but also in more tax planning (avoidance and especially evasion) possibilities concerning personal income tax.

The percentage of unpaid help diminishes as company size rises, as expected. It is, of course, remarkably lower than in the case of business units that pay personal income tax (37%).

On the other hand, the percentage of businesses engaging their own employee(s) to handle tax work rises as the size rises, as expected, with 100% for last size class. As expected, this percentage is remarkably higher than for the business units that pay personal income tax, comparing the business units of the same size<sup>20</sup>.

Full picture about the tax compliance costs structure can be seen from the following table.

Table 4: The structure of tax compliance costs by types of costs (%)

<b>Number of employees</b>	<b>Owner/manager (%)</b>	<b>Unpaid helper (%)</b>	<b>Other internal labor costs (%)</b>	<b>Other (non-labor) internal costs (%)</b>	<b>External costs (%)</b>	<b>Total (%)</b>
Up to 2	17.46	0.39	18.45	47.95	15.75	100.00
3-5	11.90	2.60	31.39	24.75	29.36	100.00
6-20	6.95	0.97	40.58	37.55	13.95	100.00
21-250	7.02	-	40.98	37.92	14.09	100.00
>250	1.96	-	62.00	32.65	3.39	100.00

<sup>20</sup> Even the biggest business units that pay personal income tax (6-50 employees, with the average of 10 employees) have percentage of only 25% (the average for all being 10%).

As expected, the percentage of time costs of the owner/manager is shrinking as the size rises and the opposite trend is being presented concerning costs of other employees that handle tax work (their share is rising constantly).

As already mentioned and explained, other internal labor costs (mostly “overheads”) are very difficult to measure. That is why a lot of studies from this field, especially the older ones (when there was almost no computerized evidence in companies) omitted these costs.<sup>21</sup> In our opinion, these costs are too important to be omitted. Although they were explained to the taxpayers in detail, it seems that mostly smallest entrepreneurs overestimated these costs.

The share of external costs rises first tremendously as the result of a lot of owners in the second size class getting rid of tax work and giving it to the accounting offices and falls again in the third size class as a result of the engaging more internal sources (accountants) for accounting and tax work. It is obviously extremely small in the last size class with the entire accounting (including tax) work being made inside the company and external sources being mostly used for specialized tax advising.

## **5. Aggregate costs at the state level and their composition by type of tax**

The aggregate tax compliance costs of business units that pay profit tax (also called “social”<sup>22</sup> or “gross” tax compliance costs) in Croatia can be calculated using the classical gross-up method. Costs are calculated per size class and added together.

The results are shown in Table 5.

---

<sup>21</sup> Sandford et al., 1981; Sandford et al., 1989; Evans et al., 1997; even the OECD study (OECD, 2001) tried to capture costs of software and hardware, but omitted them in the end.

<sup>22</sup> As pointed out in Evans et. al., 1997 and Tran-Nam et. al., 2000; but without including managerial benefits to taxpayers, which were impossible to measure

Table 5: Aggregate yearly compliance costs of business units that pay profit tax in Croatia 2001/2002

- in millions of HRK

Number of employees	TCC in Croatia for all taxes (100%)	TCC of profit tax (%)	TCC of VAT (%)	TCC of wage tax* and social security contributions (%)	TCC of other taxes (%)
Up to 2	<b>760.39</b>	24.15	42.42	23.67	9.75
3-5	<b>431.69</b>	18.85	46.75	28.35	6.05
6-20	<b>472.85</b>	20.40	46.86	24.14	8.60
21-250	<b>324.92</b>	10.59	55.95	27.88	5.59
>250	<b>48.75</b>	10.49	65.01	22.00	2.50
Total	<b>2,038.60</b>	19.31	47.49	25.34	7.86
		<b>393.65**</b>	<b>968.13</b>	<b>516.58</b>	<b>160.23</b>

\* personal income tax on wages and local surtax on wages and social security contributions

\*\*absolute numbers in bold (last row)

It may be surprising that one third of all costs is borne by the companies with 2 and less employees, but this is maybe less surprising taking into consideration that they comprise almost 60% of population (see Table 1). Furthermore, more than half of the tax compliance costs is borne by the companies with 5 and less employees, which amount to almost 80% of the population (Table 1). The very small share of tax compliance costs of companies with more than 250 employees (2.39%) is the result of small number of these companies - only 419 - 0.49% (rounded to 1% in the Table 1)), but also of the fact that maybe only 27 companies in this stratum were too little to be representative concerning the huge size dispersion.

VAT is on the first place in the cost structure by tax type, as expected, followed by wage taxes and social security contributions and profit tax.

The changes in tax structure by size classes are completely expected. The share of compliance costs of profit tax is declining, due to the profound fixed element of that tax. The share of compliance costs of VAT is rising due to the rise in turnover being steeper than rise in size class (measured by number of employees). The share of compliance costs of the wage taxes and social security contributions, that are in direct relationship with the size classes, is more or less constant.

The share of total aggregate tax compliance costs of business units that pay profit tax in GDP is around 1.2%.<sup>23</sup> This is not extremely high, but still large amount. It must be recalled that the share of business units that pay personal income tax (more than 10 (103.451 business units) is around 0.81% of GDP, and that both amounts do not include customs and excises.

The “efficiency” is usually assessed by the share of tax compliance costs in relevant revenues. For the profit tax this percentage amounts around 11.76%. This is acceptable since it is somewhere around the usual share in similar surveys (see for instance Evans et al., 1997, p.76). As it can be seen further, it is higher than the shares for other taxes. This is the result of the profit income tax rate being relatively low, numerous tax incentives being introduced (especially immediate write-off) and almost half of the companies having loss. It must be also borne in mind that the new profit tax act was introduced with a completely new calculation of the profit tax.

---

<sup>23</sup> An alternative calculation with «normal» mean (based on the original data) results in the aggregate tax compliance cost for Croatia of 3,665.65 mil HRK (2,1% of GDP).

The share of tax compliance costs of VAT in the VAT revenues from businesses that pay profit tax <sup>24</sup> is around 4.47%. This is the strong proof about relative efficiency of that tax concerning its compliance costs at the level of companies. It is in accordance with the results of the similar surveys.<sup>25</sup> Nevertheless, it should be noted that this low share is influenced also by the relatively high standard VAT rate (22%) with no reduced rate and only very narrow application of the zero rate.

Since there is no evidence about wage tax and social security contributions payable on and from wages separately for businesses that pay profit tax, the rough assessment was made according to the assessment of number of employees employed in the analyzed sector. This share is around 2.9%. Again it is not result of compliance costs being small<sup>26</sup>, but revenues from wage taxes and especially social security contributions being extremely high.

## **6. Conclusion**

The regressive effect of tax compliance costs is proven even in the case of Croatian companies, as expected. In the cost structure time cost is predominant in general, although the structure is changing across the size range (the percentage of time costs of the owner/manager is shrinking as the size rises and the opposite trend is

---

<sup>24</sup> Assessed according to internal documentation of the Tax Administration. Data for 2002 assessed according to detailed breakdown of the data for 2001 (since such a breakdown does not exist for the 2002).

<sup>25</sup> For instance this share was 3.69% for Great Britain (Sandford et al., 1989, p. 192), 6% for Netherlands (Allers, 1994, p. 139).

being presented concerning costs of other employees that handle the tax work). The percentage of non-labor internal costs is substantial, suggesting that they should not be omitted from such a type of research.

Concerning the type of tax VAT is on the first place, followed by wage taxes including social security contributions.

The percentage of aggregate tax compliance costs in GDP is around 1.2%, which is not extremely high. The same can be said for the percentage of different taxes in relevant tax revenues (4.47% for VAT, 2.90% for wage taxes including social security contributions, but even 11.76% for profit tax). This calls for a simplification in profit tax calculation. It should be better adjusted with the accounting system

The research turned out to be very exhausting, long lasting and complicated by institutional obstacles. The relevant business population had no experience with studies of that type and was even reluctant to give some details, which contributed to the complexity of the research.

## REFERENCES

- Allers, M. (1994), *Administrative and Compliance Costs of Taxation and Public Transfers in the Netherlands*, Groningen: Woltersgroep.
- Ariff, M (1995), Compliance cost research in selected Asian economies, in: C. Evans, J. Pope and H. John (eds.), *Tax Compliance Costs: A Festschrift for Cedric Sanford*, Prospect Media Pty Ltd.
- Bannock, G. (2001), Can small scale surveys of compliance costs work?, in: C. Evans, J. Pope and H. John (eds.), *Tax Compliance Costs: A Festschrift for Cedric Sanford*, Prospect Media Pty Ltd.
- Dimitrić, M . (2003), *A qualitative analysis of the costs of tax compliance in the Republic of Croatia*, unpublished
- Evans, C.; Ritchie K; Tran-Nam, B. and Walpole, M. (1997), *Taxpayer Costs of Compliance*, ATAX, UNSW.

---

<sup>26</sup> The results of qualitative analysis suggested that the taxpayers complain mostly concerning this field of tax compliance (Dimitrić, unpublished).



- Collard, D. and Godwin, M. (1999), Compliance Costs for Employers: UK PAYE and National Insurance, 1995-96.
- Hasseldine, J. (1995), Compliance Costs of Business Taxes in New Zealand, in: Sandford, C. (ed.), *Tax Compliance Costs Measurement and Policy*, Bath, UK, Fiscal Publications.
- Institute for Private Enterprise and Democracy, Poland, Institute for Market Economics, Bulgaria, Institute for Liberal Studies, Slovakia (1998), *Needs for Deregulation of the Tax Systems in Central Europe: A Comparative Study*.
- Klun, M. (2002.), Troškovi ispunjavanja porezne obveze u Sloveniji, *Financijska teorija i praksa*, vol. 26, no. 4, pp. 775-792.
- Malmer, H. (1995.), The Swedish Tax Reform in 1990-1991 and Tax Compliance Costs in Sweden, in: Sandford, C. (ed.), *Tax Compliance Costs Measurement and Policy*, Bath, UK, Fiscal Publications.
- Ott, K. and Bajo A. (2001), Compliance costs in transitional economies: the Croatian experience, in: C. Evans, J. Pope and H. John (ed.), *Tax Compliance Costs: A Festschrift for Cedric Sanford*, Prospect Media Pty Ltd.
- OECD (2001), *Businesses' Views on Red Tape*, Paris: OECD.
- Pope, J., Fayle R. and Chen D.L. (1994), *The Compliance Costs of Companies' Income Taxation in Australia*, Sydney, Australian Tax Research Foundation, Research Study No 23.
- Pope, J. (1995), The Compliance Costs of Major Taxes in Australia, in: Sandford, C. (ed.): *Tax Compliance Costs Measurement and Policy*, Bath, UK: Fiscal Publications.
- Sandford, C. T.; Godwin, M.R.; Hardwick P.J.W. and Butterworth M.I. (1981), *Costs and benefits of VAT*. London, Heinemann Educational Books.
- Sanford, C.; Godwin, M.; Hardwick P. (1989), *Administrative and Compliance Costs of Taxation*, Bath: Fiscal Publications
- Sandford, C. (ed.) (1995), *Tax Compliance Costs Measurement and Policy*, Bath, UK, Fiscal Publications.
- Tran-Nam, B.; Evans C.; Ritchie K. and Walpole M. (2000), *Tax Compliance Costs: Research Methodology and Empirical Evidence from Australia*, National Tax Journal, vol. III, no.2, pp. 229-252.