# Administrative Costs of Taxation in a Transition Country: The Case of Slovenia

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#### 1. Introduction

Research into compliance costs has become important in most developed countries (Australia, Canada, United Kingdom, Netherlands, USA, etc.) and is a significant part of tax policy. The earliest research was actually carried out by individuals wanting to persuade policy makers that compliance costs were a significant part of tax-related costs.

However, research into compliance costs in the countries in transition (CITs) has only recently come into existence. The main reasons for the lack of interest in compliance costs in the CITs are well presented in the paper by Ott and Bajo (2000): lack of experts, overloaded with more pressing issues, no taxpayers' associations and no civil initiatives. There are also several obstacles within the CITs to starting such research (lack of interest, cooperation with tax authorities practically non-existent, surveys in CITs are not common, constant changes in tax systems, etc.) and we have faced almost all of them. But in spite of the obstacles, we conducted compliance costs research in 2001 for VAT. Only a year later broadbased research into compliance costs of the tax system was also launched in Croatia and the first results were presented after this paper was submitted.

#### 2. Some Facts about the VAT in Slovenia

The overhaul of the tax system initiated after the independence of Slovenia in 1991 was practically completed with the introduction of value added tax and excise duties in 1999. The emerging new system (with the exemption of property tax which is currently under assessment) is similar in structure to standard tax systems in OECD member countries. The tax system is currently undergoing reforms aimed mainly at closing the existing tax loopholes and finalising its harmonisation with the tax systems of the EU countries. All taxes are collected by the Tax Administration of the Republic of Slovenia, except for customs duties, excise duties and value added tax on imports, which are collected by the Customs Administration of the Republic of Slovenia.

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Value Added Tax entered into force in July 1999 and its framework is in line with the VAT applied in the European Union. VAT is imposed on any person who makes taxable supplies independently. Taxpayers are liable to pay tax on all amounts received or receivable by them for taxable supplies made in the course of a business, trade or similar activity. A taxpayer must apply for registration as a taxpayer if the value of his or her supplies within the period of the last 12 months exceeds the threshold of SIT 5 million (approximately EUR 22,000). There is another threshold for registration in the VAT system for agricultural activities of SIT 1.5 million (approximately EUR 6,700) in accordance with the officially registered income of agricultural and forestry land. Small businesses (including farmers) may apply for voluntary registration that must be valid for at least five years.

There are two VAT rates in Slovenia: the standard rate of 20 % and a reduced rate of 8.5%. The reduced rate applies to the following: food-stuffs (including food services in restaurants), agricultural inputs, water, pharmaceutical products, medical equipment, accessories for the disabled, public transport, books, newspapers and periodicals, services by authors and composers, cultural events, sporting events and facilities, housing, hotel and similar accommodation, funerals and waste treatment.

VAT is charged when goods are delivered or when services are performed. This is considered to occur when a VAT invoice is issued for the supply of such goods and services. If an invoice is not issued within eight days after delivery of the goods and services, VAT shall be charged on the eighth day after delivery of the goods and services. When payments are made in advance, VAT applies to those payments as they are made. Continuing services are deemed to be supplied on the last day of the tax period to which the invoice or payment relates.

VAT must be paid by the end of the month following the end of each tax period. Registered persons have to calculate their tax liability and submit a tax return for a tax period, which is a calendar month, calendar quarter or half of a calendar year. Tax credits (excess of input tax over output tax over the tax period) can be carried forward to the following VAT tax period.

# 3. Major Research Objectives

Researchers that have evaluated compliance costs in different countries (Sandford et al.), (Slemrod, Agell et al.), (Vaillancourt, Allers, Tran-Nam et al.) have arrived at following conclusions from their results:

- compliance costs are relatively high, especially for major taxes. At the same time they are higher than administrative costs and compliance costs may reach up to 10 % of tax revenues;
- compliance costs are regressive and therefore create some undesirable distributive effects;

<sup>&</sup>lt;sup>1</sup> Slovenian tolar

- high compliance costs can influence the international competitiveness of the companies;
- high compliance costs diminish voluntary compliance;
- compliance costs can cause excess tax burden.

Given these conclusions we wanted to evaluate compliance costs in Slovenia and discover whether we should draw the same conclusions.

## 4. Methodology

The evaluation of compliance costs in Slovenia was made for the 2000 fiscal year. During the period January–March 2001 we conducted a survey among VAT taxpayers. The reasons for evaluating compliance costs for VAT were:

- VAT contribute the major part of tax revenues<sup>2</sup> in Slovenia (besides social security contributions and personal income tax);
- the tax register of VAT taxpayers is publicly accessible;<sup>3</sup>
- the costs of evaluating compliance costs for the entire tax system would be too high and the surveys for all taxpayers would be more complex;
- major international research on compliance costs also covered VAT (Vaillancourt, 1986), (Sandford, 1984), (Hasseldine, 1990), (Pope, 1986).

The survey contained questions about the time spent preparing information to fill in tax forms, consultancy costs and other expenses. We tried to create a survey similar to those in other research reports, despite the fact that international comparisons of compliance costs could not be made due to several obstacles (Sandford et al., 1995).

We selected a random sample of 750 VAT taxpayers, stratified into three groups according to taxpayer size (by turnover). The majority of surveys were sent to small taxpayers (about 80 %), since the small taxpayers represent 89.9 % of all VAT taxpayers (medium taxpayers represent 8.3 % and large taxpayers 1.7 %). Taxpayers also had the opportunity to answer the questionnaire via a special web site. Response rate was 11 %. The response rate from VAT taxpayers was quite low, especially for small taxpayers (only 5 %), despite the fact that we sent questionnaires twice. Therefore the returned questionnaires formed an almost equal distribution among three groups (36 % small taxpayers, 30 % medium and 39 % large taxpayers). A possible solution to this obstacle was the use of weights when evaluating total compliance costs. We weighted average compliance costs in each group according to how representative each group was in the total population of VAT taxpayers. Despite the low response rate, the sample is comparable with other research (see *Table 1*).

To check the results we interviewed 21 VAT taxpayers. The main reason for interviews was to examine the answers related to time spent on fulfilling tax obligations. We concluded that taxpayers included in that time the obligations for other taxes (not only VAT), since some computer pro-

<sup>&</sup>lt;sup>2</sup> In 2000, VAT contributed 24.9 % of tax revenues.

<sup>&</sup>lt;sup>3</sup>Other tax registers are secret.

TABLE 1 Population coverage of the sample (%)

Country	Author / year	VAT
Australia	Pope / 1986-87	0.01ª
New Zealand	Hasseldine / 1990-91	2.3
Netherlands	Allers / 1990	0.01
Canada	Vaillancourt / 1986	0.00013ª
Slovenia	Klun / 2000	0.11

Note: a consumption tax Source: respective authors

TABLE 2 Cost/revenue ratio of the Slovenian Tax Administration in the period 1998–2000

	1998	1999	2000
Cost/tax revenue (%)	0.82	0.86	1.13
Cost/GDP (%)	0.33	0.32	0.35
Cost/taxpayer (SITa)	4,878	5,153	6,169
Cost/employee (SIT million)	4.49	4.59	5.55

 $\it Note$ : The exchange rate for SIT on 31 December 2000 was USD 1 = SIT 227.3.

Source: Annual report of the Slovenian Tax Administration, 2001

grammes allow data entry for several taxes. We therefore revised those answers according to the results of the interviews.

#### 5. Administrative costs

Tax administrations usually report on their performance using a cost/revenue ratio. The Slovenian Tax Administration also uses this ratio as a common indicator of its cost effectiveness. Therefore we will use its data to present cost effectiveness. Administrative costs in our case include the Tax Administration's operating expenses, while Customs Administration expenses (in collecting excise duties and VAT on imports), court expenses and costs relating to the work of the Ombudsman and the Police are all excluded. Other expenses (i. e. law changes) could not be evaluated properly since Slovenia is still undergoing tax reform – see Table 2.

We can conclude that operating expenses are increasing, a trend that is the opposite in most developed countries. An international comparison (see *Table* 3) of cost/revenue ratios should be made with several limitations, hence we also present the ratio between operating expenses and GDP and the ratio between number of employees in the tax administration and population.

 $<sup>^4</sup>$  In 2000, the Custom Administration collected 22.7 % of taxes; the Ombudsman handled less than 100 cases related to taxes and police dealt with 83 cases of tax evasion.

TABLE 3 International comparison of cost effectiveness

Country	Cost /revenue ratio <sup>a</sup>	Cost/GDP <sup>a</sup>	Number of employees per 1000 inhabitants <sup>a</sup>
Australia	1.2	0.32	1.0
Ireland	0.8	0.24	1.8
Netherlands	1.8	0.73	1.6
New Zealand	0.9	0.39	1.1
Singapore	0.9	0.10	4.0
Finland	0.5	0.23	1.2
Spain <sup>b</sup>	1.0	0.3	6.7
United Kingdom	1.1	0.16	1.1
USA <sup>b</sup>	0.74	0.13	5.0
Czech Republic <sup>b</sup>	2.25	-	-
Croatiac	1.17	0.55	-
Slovenia	1.13	0.35	1.2

Notes: a 2000, if not otherwise stated

Source: Richardson and Lanis, 1998 for Spain and USA; Ott and Bajo, 2000, for Croatia; Ministry of Finance of the Czech Republic; for the Czech Republic Others: Annual reports of tax administrations, 2001.

The cost/revenue ratio in Slovenia is one of the highest but does not deviate excessively from others. As is evident, the ratio between the number of employees and population is one of the lowest, which made cost/revenue ratio even worse.

#### 6. Evaluation of compliance costs of VAT

In our analysis we included consultancy costs, monthly expenses for computer programmes that manage VAT records and time spent on preparing tax returns. Taxpayers were asked how much time they spent managing VAT obligations. During the interviews we made exact analyses of all tasks that taxpayers stated were connected to VAT filing obligations. The time includes record keeping for VAT only, preparation of tax returns, checking accounts, obtaining information about filing tax returns and about changes in the law and other relevant information. We included the time for tax planning since 60 % of taxpayers agreed that tax planning and optimisation are VAT-related tasks. We only included time spent by employees of the taxpayer, therefore time spent by friends or family is excluded. We also excluded financial and non-financial benefits. The reason for excluding financial benefits is the fact that in 2000 more than 80% (81.6%) of taxpayers had to file their tax returns monthly and pay tax at the same time. Only 16.9 % of taxpayers stated that they received more than 10% of payments in cash and 14.5% more than 10%

<sup>&</sup>lt;sup>b</sup> 1994

c 1999

<sup>-</sup> no data

TABLE 4 Average time spent by taxpayer and value per hour

Taxpayer size (by turnover)	Average time spent per day (hours)	Average value of hour spent (SIT)
Up to SIT 100 million	1.2	2,038
SIT 100–1000 million	5.9	1,992
Over SIT 1 billion	11.6	1,881

TABLE 5 Structure of compliance costs (VAT) in 2000 according to taxpayer size

Taxpayer size (by turnover) Up to 9		Up to SIT 100 million	SIT 100–1000 million	Over SIT 1 billion
Time costs	V. 1	0.63	3.06	5.67
(SIT million)	V. 2	0.35	1.7	3.34
Consultancy (S	IT million)	0.16	0.25	0.09
Other costs (SI	T million)	0.22	0.29	0.36

Notes: V. 1 - taxpayers' value of hour spent

V. 2 - time cost calculated from average before-tax wage per employee in Slovenia

of payments within eight days. Most payments are made in a month or even later.

Non-financial benefits are hard to evaluate and typically excluded from empirical studies. In our survey we asked taxpayers if they think that they have some benefits from stricter record keeping (without their evaluation). Only  $30.4\,\%$  of taxpayers (mostly small taxpayers) thought that they had some managerial benefits. Since small businesses tend to value managerial information less than large ones (Tran-Nam, 2000), the aggregate value of managerial benefits may not be too large.

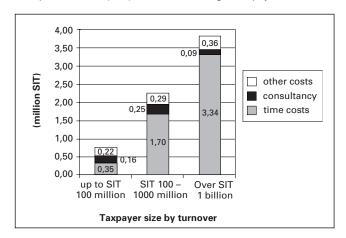
Taxpayers were asked to state monthly expenses that were related solely to VAT and consultancy expenses. Evaluating direct expenses was not difficult, but a problem arose when we wanted to evaluate the time spent by employees. In other research, different approaches were used (Sandford et al., 1995). We decided to use two different evaluations for time, the first was the value that taxpayers stated in the questionnaires and the second was the average before-tax wage per employee in Slovenia in 2000. For international comparisons and further analyses we used only the second evaluation. The time spent according to taxpayer size and their own evaluations of hours spent are shown in  $Table\ 4$ .

The comparison between the two above-mentioned evaluations of time is shown in the *Table 5*. The average monthly before-tax wage in 2000 in Slovenia was SIT 181,699.

In further analysis we used only the compliance costs evaluated with average before-tax wage per employee (V. 2). The structure and total compliance costs are shown in *Figure 1*.

We tried to find out if there was any connection between compliance costs and the size of the taxpayer. Correlation coefficients (see *Table* 6) are relatively high (at low risk), therefore we can conclude that the larger the taxpayer, the higher the compliance costs. We can see from Figure 1 that

FIGURE 1 Compliance costs (VAT) in 2000 according to taxpayer size



the larger taxpayers spend more time on VAT obligations and have higher other expenses, but they have lower consultancy costs than small taxpayers.

To evaluate total compliance costs for VAT we weighted compliance costs according to total population of taxpayers. The majority of taxpayers (89.9 %) had a lower turnover than SIT 100 million and only 1.7 % of taxpayers had a turnover of more than SIT 1 billion in 2000.

We discovered that compliance costs (see *Table* 7) were relatively high. There are several reasons for this:

- the VAT was implemented only 18 months before the survey was made, so it was a relatively new obligation; the law changed several times during that period (up until 2001 the regulations were changed 7 times);
- some situations were still not precisely defined and taxpayers spent some time finding information on how to correctly file their tax obligation;

TABLE 6 Correlation coefficients

		Compliance costs
Taxpayer size	Correlation coefficient Sig. (2-tailed) <sup>a</sup>	0.723 0.00
Number of employees	Correlation coefficient Sig. (2-tailed) <sup>a</sup>	0.511 0.00

Note: a Correlation is significant at the 0.01 level (2-tailed)

TABLE 7 Weighted VAT compliance costs (CC) in 2000

Used value	Average CC per taxpayer (SIT million)	CC for all VAT taxpayers (SIT billion)	CC/VAT revenue (%)	CC/GDP (%)
V. 1	1.31	99.9	25.0	2.5
V. 2	0.90	68.4	17.1	1.7

TABLE 8 Compliance costs/revenue ratio for VAT taxpayers

Country	Author / year	CC/revenue ratio (%)
United Kingdom	Sandford / 1986-87	3.7
New Zealand	Hasseldine / 1990–91	7.3
Netherlands	Allers / 1989	6.0
Australia	Pope / 1990–91	1.9
Sweden	Malmer / 1993	2.5
Switzerland	Carey et al. / 1998	0.55

Source: respective authors

TABLE 9 Compliance costs (CC) as a share of taxpayers' turnover

Taxpayer size	CC/turnover
Up to SIT 100 million	3.73 %
SIT 100-1000 million	0.73 %
Over SIT 1 billion	0.08 %

- larger taxpayers employed additional staff to manage VAT obligations;
- most taxpayers were obliged to file their tax return monthly (in July 2001 the situation changed and approximately 20 % of taxpayers now have to file a monthly tax return).

As we have already mentioned there are several obstacles to international comparison (different research methodologies, time evaluation, tax rates, methods of filing tax returns, etc.), but it can clearly be seen that compliance costs for VAT taxpayers are high if compared with compliance costs in some other countries see *Table 8*.

Most international researchers discovered that compliance costs were regressive. The results of our research are shown in *Table 9*. It is obvious that compliance costs in Slovenia are regressive too, since the portion of compliance costs in taxpayers' turnover is higher for small taxpayers.

### 7. Conclusions

Policy makers usually only discuss administrative costs, efficiency costs deriving from the fact that behaviour of individuals and firms changes, and the costs of transferring income from the private to the public sector. Compliance costs are often neglected, so research in that field is important. Countries in transition should develop research in that field, despite constant changes in tax systems. It is true that CITs could learn a lot from other countries but, on the other hand, the situation differs from country to country and people react differently within the same situation or tax system. Our research has shown that VAT compliance costs are high and that changes in taxes are an additional tax burden on taxpayers. The situation will probably change when VAT becomes more common and the regulations are no longer amended every three or four months.

#### REFERENCES

ALLERS, A. M. (1994): Administrative and Compliance Costs of Taxation and Public Transfers in the Netherlands. Groningen, Rijksuniversiteit, 1994.

BANNOCK, G. – ALBACH, H. (1987): The Compliance Costs of VAT for Smaller Firms in Britain and Germany. London, Bannock and Partners, 1987.

BLUMENTHAL, M. – SLEMROD, J. (1992): The Compliance Cost of the U.S. Individual Income Tax System: A Second Look After Tax Reform. *National Tax Journal*, vol. XLV, 1992, no. 2, pp. 185–202.

CAREY, D. – GORDON, K. – THALMANN, P. (1999): Tax Reform in Switzerland. (Paris, *OECD*) *Economics Department Working Papers*, no. 222.

DIAZ, C. – DELGADO, M. (1995): The Compliance Costs of Personal Income Tax in Spain. In: Sandford, C. (ed.): *Tax Compliance Costs Measurement and Policy*. Bath, Fiscal Publications, pp. 210–225.

GODWIN, M. (1995): The Compliance Costs of the United Kingdom Tax System. In: Sandford, C. (ed.): *Tax Compliance Costs Measurement and Policy*. Bath, Fiscal Publications, pp. 73–100.

HASSELDINE, J. (1995): Compliance Costs of Business in New Zealand. In: Sandford, C. (ed.): *Tax Compliance Costs Measurement and Policy*. Bath, Fiscal Publications, pp. 126–141.

KLUN, M. (2001): Evaluating Efficiency and Effectiveness in the Public Sector with Special Emphasis on Tax Administration. Ljubljana, Faculty of Economics, 2001.

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, Fiscal Publications, pp. 226–262.

Ministry of Finance of Slovenia (2002): Bulletin of Public Finance, 2002, no. 2, 2002.

OTT, K. – BAJO, A. (2000): Compliance Costs in Transitional Economies: the Croatian Experience. The paper presented at Compliance Costs Symposium, Sydney, 2000.

POPE, J. (1995): The Compliance Costs of Major Taxes in Australia. In: Sandford, C. (ed.): *Tax Compliance Costs Measurement and Policy*. Bath, Fiscal Publications, pp. 101–125.

RICHARDSON, G. – LANIS, R. (1998): The Influence of Culture on Tax Administration Practices. In: Evans, C. – Greenbaum, A. (eds.): *Tax Administration, Facing the Challenges of the Future*. St. Leonards: Prospect Media Pty Ltd, 1998, pp. 231–247.

SANDFORD, T. C. – GODWIN, M. – HARDWICK, P. (1989): Administrative and Compliance Costs of Taxation. Bath, Fiscal Publications, 1989.

SANDFORD, T. C. (1994): International Comparisons of Administrative and Compliance Costs of Taxation. *Australian Tax Forum*, vol. 11, 1994, no. 3, pp. 291–309.

SLEMROD, J. (1998): On Voluntary Compliance, Voluntary Taxes, and Social Capital. *National Tax Journal*, vol. LI, 1998, no. 3, pp. 485–491.

Slovenian Tax Administration: Annual Reports of Slovenian Tax Administration for the years 1999, 2000 and 2001.

TRAN-NAM, B. (2000a): Tax Compliance Costs Methodology: A Research Agenda for the Future. The paper presented at Compliance Costs Symposium, Sydney, 2000.

TRAN-NAM, B. (2000b): Tax Compliance Costs: Research Methodology and Empirical Evidence from Australia. *National Tax Journal*, vol. LIII, 2000, no. 2, pp. 229–252.

VAILLANCOURT, F. (1989): The Administrative and Compliance Costs of the Personal Income Tax and Payroll Tax System in Canada. *Canadian Tax Paper*, No. 86. Toronto, Canadian Tax Foundation, 1989.

WALLSCHUTZKY, I. (1995): Costs of Compliance for Small Business: Results from Twelve Case Studies in Australia In: Sandford, C. (ed.): *Tax Compliance Costs Measurement and Policy*. Bath, Fiscal Publications, pp. 275–298.

# **SUMMARY**

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# Administrative Costs of Taxation in a Transition Country: The Case of Slovenia

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The evaluation of taxpayers' compliance costs has grown in significance in research on tax systems over the last fifteen years. The paper presents results of research in Slovenia. In 2001 the authors conducted a survey of VAT taxpayers to evaluate compliance costs for the 2000 fiscal year. Administrative costs and some international comparisons of both administrative and compliance costs are presented. The results show that compliance costs for VAT are relatively high.