

**Impact of the Slovak Tax Reform on Firms' Tax Evasion:  
A Comparative Study of the Czech and Slovak Republics**

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**Abstract**

A survey was carried out among firms in the Czech Republic and Slovakia regarding their perception of tax evasion and avoidance. The resulting dataset was analysed in order to identify the impact of the 2004 Slovak tax reform on the level of tax evasion. The difference in differences approach did not show any statistically significant decline in the level of tax evasion of Slovak firms after the reform, presumably due to high variance of the survey data and a relatively short time between the reform and the survey. On the other hand, Slovak firms show a greater satisfaction with the tax system than the Czech ones.

**Keywords:** Tax evasion, tax avoidance, tax compliance, tax system, tax reform, flat tax, transition.

**JEL Classification:** H26, H32, K34, O17, P52

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Data from this study are available upon request and we encourage readers to further the results we present here.

*“An artful taxman plucks the goose as to obtain the most feathers for the least hissing.”*

Jean-Baptiste Colbert,  
treasurer to Louis XIV

## **1. Introduction**

The problem of tax evasion is as old as collecting taxes themselves. In spite of a great endeavour to reduce tax noncompliance for the whole history of taxes, it has not been completely removed and tax noncompliance is still present. Moreover the process of transition brought a greater importance of tax evasion issue. Tax evasion has become a more widespread in transition countries than in developed economies.

Tax systems in transition countries have been negatively influenced by the dramatic development of tax legislation during the transition. The changes in tax system have been very frequent and non-systematic. The complexity of tax code has come to the level when the complexity significantly influences the effectiveness of the tax system itself. On the one hand, it has become difficult to be acquainted with the whole tax code and to report taxes correctly. On the other hand, the increasing complexity decreases the probability to prove tax noncompliance. However, the risky spiral of rising complexity was broken by introducing a flat tax in many countries.

Free-market advocates recommend the flat tax rate as the best tax system. The simple system of taxation without the endless list of exceptions, deductions and relieves and with a single flat rate significantly reduces red tape and room for possible tax evasion. Thus one reason for introducing flat tax has been a reduction of tax noncompliance.

In spite of the outstanding endeavour of some governments in the Central and Eastern Europe to simplify tax systems the standard economic literature about the impact of complexity on tax evasion is quite scarce. In the same way, it is interesting that standard literature does not deeply address the tax evasion of firms. However in Europe, the amount of government revenues definitely depends on the number of tax evading firms. The vast majority of state budget revenues either comes directly from firms, or firms are responsible for administering those taxes. Taking the Czech Republic as an example, value added taxes, excises, and social contributions, which are all administered by firms, in addition to corporate taxes constituted 70% of the Czech state budget revenues in 2005. Despite these facts, there exists some theoretical work, but only a few economists have tried to measure the extent of tax evasion by firms.

We enquired 930 Czech and Slovak firms in manufacturing industry for their experience and attitude to tax evasion. We want to identify a change in behaviour of Slovak firms after the radical tax reform in 2004. Further, we compare the results of Slovak firms with the development in the Czech Republic. Our main argument is that the decline of complexity by simplifying taxation has had a positive impact on tax compliance of Slovak firms.

We argue that the Czech and Slovak Republics can be viewed as a natural experiment. They formed one state until 1993 sharing the same socio-economic background. In addition, the Czech and Slovak tax system had both similar structure and development until January 2004 when Slovak government introduced a new tax system including a flat tax. Nevertheless, we are aware that though very similar, their economic environments were not identical. For the purpose of measuring tax evasion, where many of the agents' incentives change very slowly, we believe the idea of natural experiment is suitable.

We use this method for the purpose of evaluating the effect of the tax reform on tax compliance. Because of the tax reform that took place in Slovakia and not the Czech Republic and given the common characteristics mentioned above, we can treat the latter country as the control and the former as the treatment group. For our econometric analysis, we shall thus adopt the difference in

differences approach. This allows us to control for hidden factors in our analysis that could otherwise not be identified.

The paper consists of four major parts. First, we shortly overview literature on tax evasion, especially about tax changes and tax evasion in transition. Secondly, we provide economic background for both the Czech Republic and Slovakia. We mention the common economic history and the similar development of both tax systems after splitting of Czechoslovakia. Further, we describe main features of the Slovak tax reform in 2004, which simplified the tax system and lowered tax burden. In the third part, we analyze survey data and estimate the effect of the tax reform on evasion. Finally, we conclude with the final results.

## **2. Literature Review**

### ***2.1. Standard Approach to Firms' Tax Evasion***

The literature on tax evasion has lately grown. Many articles concerning theoretical models of tax evasion have been published; see e.g. Slemrod and Yitzhaki (2002) for a thorough survey on both theoretical and empirical work. Yet, the majority of the literature, including that survey, is devoted to the analysis of individuals' behaviour, while the literature on firms' evasion is significantly smaller.

Johnson et al. (2000) offer three main reasons for explaining why firms turn to hidden economy. First, companies may go underground when the direct and indirect tax burden is excessive. Afterwards reducing taxes and red tape are the main ways to increase tax compliance. Second reason is ineffective and inadequate state services. Typical example is corruption or ineffective court system. When firms feel that it is difficult to enforce contracts at court, they have little motivation to fully report their activities and taxes. Finally, companies cheat when their business is directly or indirectly connected with other illegal activities like drugs, violent crime or mafia. The last and the second reason correspond to the corporate environment in a given economy. Thus they can be reduced rather by increasing the rule of law than by solely changing the tax system.

Besides the fiscal impact, there might be another reason why government should be interested in tax compliance of companies. As Palda (2001) shows, it might happen that less efficient firms in production but more efficient in tax evasion can crowd out firms that are more efficient in production but less efficient in tax evasion. This could result in deepening production inefficiencies, which is of course an undesired effect.

### ***2.2. Tax Evasion and Complexity***

Standard economic literature usually attributes only a marginal importance to tax law complexity as the reason for tax evasion (Andreoni, Erard, Feinstein 1998). Empirical studies usually emphasize factors like the marginal rate of income tax or the level of taxable income. However there are exceptions like Potas (1993) who suggests that the simplification of Australian tax laws would result in a more efficient tax collection system. He mentions the evidence for the Australian tax system, where the tax noncompliance is significantly influenced by uncertainty and complexity of the tax law. One of the pioneer studies in this issue for transition countries is College and Easter (2003). They provide an overview of building a system of tax collection for Russia as a transition economy. College and Easter conclude that the complexity is a serious problem for the Russian tax system and a simplification can increase the collected revenues for the federal budget.

The results of Russian tax reform verified College and Easter's assumptions. The Russian government decided for a deep tax reform including a flat tax in 2001. At the end of 90's, Russia

represented an extreme example of tax system complexity. Since the Russian tax code consisted of nearly 200 different taxes; augmented by 1200 presidential decrees and government orders; 3000 legislative acts and 4000 regulatory acts and instructions from ministries and agencies (College and Easter 2003). Therefore the tax reform had two goals – to simplify the system and increase the compliance. The personal income tax (PIT) can be used as an example (Ivanova, Keen, Klemm 2005). Before the reform there were three marginal rates (12%, 20%, 30%) and the list of various deductions and exclusions (i.e. different for occupation, specially military servicemen).

The tax reform in 2001 brought one single rate of 13% and a simplified system of deductions. The results were impressive. In the following year, real revenue from the PIT rose by 26% despite the decreased tax rate. According to the estimates of Ivanova et al. (2005), the tax compliance improved by one third.

In general, the literature on tax evasion in transition countries is still scarce. There are many studies focused on the issue of shadow economy (or informal sector) in transition countries since late 90's, which mention the tax noncompliance as a part of shadow economy issue.

One of the first studies estimating tax non-compliance in transition countries is Hanousek and Palda (2002). The authors examine the impact of institutional and sociological factors as a taxpayer's satisfaction with government services. The authors conclude that tax evasion in the Czech Republic had a growing pattern in 1995-2002.

In their later paper, Hanousek and Palda (2003) partly mention tax evasion as one issue of the informal sector in the Czech Republic, Poland and Hungary. In the same way, tax evasion issue is mentioned by Schneider (2000), Fassman (2002), and Fassman (2003). All these studies consider tax evasion as an important problem, but do not pay attention to it deeply or make any analysis of the tax evasion issue.

### **2.3. Data Sources**

In general, data constitutes the main problem when dealing with the phenomenon of tax evasion empirically. Different methods of acquiring data on firms' evasion can be found in the literature. As the prevailing source, the data from audit records by national tax agencies (e.g. the IRS) are used. Among such studies concerning business tax audits are Clotfelter (1983) and Giles (1998). Clotfelter (1983) was the first to use the TCMP data to assess how noncompliance changes with the changes of the environment. Giles (1998) analyzed a large sample of New Zealand firms' tax report audits in order to reveal the characteristics of complying and evading companies.

Another possible source of data are surveys made among a selected sample of firms that should constitute a representative sample of the whole population of companies. This approach was used by Gauthier and Reinikka (2001) and Johnson et al. (2000). The former examined the prevalence of tax exemptions and evasion among firms in Uganda for which they used the survey method. The latter authors performed a survey among companies in Russia, Ukraine, Poland, Slovakia and Romania in order to assess the size of, and decision to be in, the underground sector. However, they only marginally deal with tax evasion, as it definitely is an activity belonging to the shadow economy.

The most relevant studies for our purpose are two papers by Hanousek and Palda (2002, 2004) since they use surveys to obtain data and deal with the Czech and Slovak Republics. More specifically, Hanousek and Palda (2002) analyze the determinants of the probability that a taxpayer will switch from evading status in one period to complying status in the next period. Hanousek and Palda (2004) examine the linkage between the perceived quality of government services and the taxpayers' willingness to pay their tax liabilities.

### 3. Czech Republic and Slovakia – Too Much in Common

#### 3.1. General Economic Overview

The Czech Republic and Slovakia formed one state – Czechoslovakia for 70 years. In other words, these two states shared a common economic system for seven decades. After splitting Czechoslovakia in 1993, the development of both states was not completely identical, mainly because of politics. The Czech government continued the transformation process and aimed the country toward the Western structures – NATO and the EU. On the other hand, Slovakia was criticized by Western politics for an autocratic style of administration and lack of respect for democratic order by Prime Minister Vladimír Mečiar in the period 1993-1998. Therefore Slovakia was temporarily put aside of the integration toward Western Europe and it was as well on the fringe of interest of foreign investors. However the political situation changed at the end of 90's and the Slovak government endeavoured to catch up the delay in the integration process. Thus the inflow of FDI gradually increased and in 2004 Slovakia was from political point of view in the same position as the Czech Republic – ahead joining the EU and NATO membership.

The Czech and Slovak economies show very similar characteristics. Both are small and very open. The Czech GDP reached 108 bn USD in 2004 while exports share on GDP was 71% (export/GDP). The Slovak economy was smaller – 42 bn USD – and the impact of foreign trade was even slightly higher – the ratio export to GDP was of 75%. In addition, the biggest trading partner for both countries is Germany. Further, the second biggest trading partner for Slovakia is the Czech Republic and vice versa. Moreover, the economic growth of both states has been crucially affected by FDI inflow to automotive industry in the last years.

#### 3.2. Tax Systems – Rise of Complexity

Until the reform by the Slovak government, both economies had similar tax systems from the point of view of structure and to a certain degree also the level of taxation. The level of taxation is higher in the Czech Republic than in Slovakia, but still significantly below the level of EU. The focus of tax burden in both countries was on social security contributions. See table No.1

as % of GDP	Total taxes	Indirect taxes	Direct taxes	Social security contributions
Czech Republic	35.5	11.9	8.7	15.0
Slovakia	32.5	12.3	7.2	13.0
Hungary	38.9	16.1	9.8	13.0
Poland	35.5	14.5	7.2	13.7
EU15	41.6	13.9	14.0	13.7

Table No. 1: Tax burden in 2002

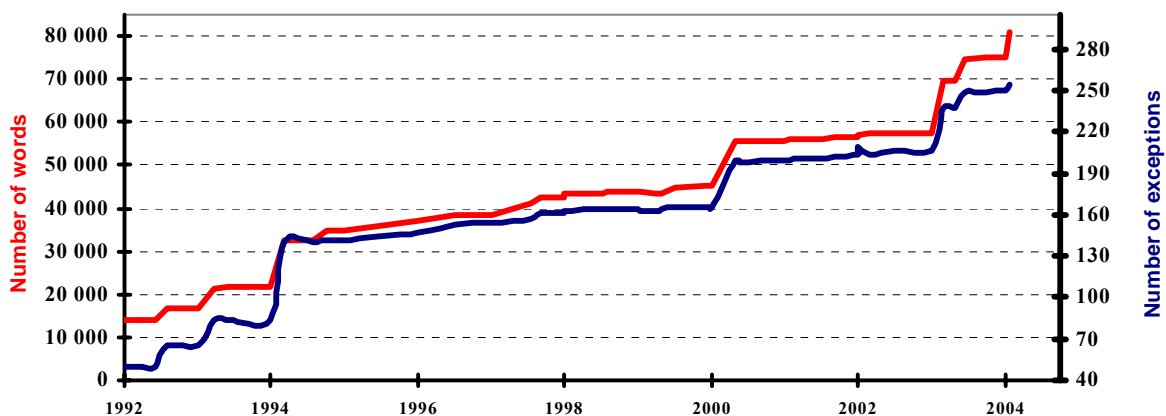
Source: Eurostat

Finally, the most important characteristic for our research is a presence of a similar rise of complexity in both tax systems until 2004. The tax systems in the Czech Republic and Slovakia (in fact in all transition countries) were negatively influenced by the dramatic development of tax

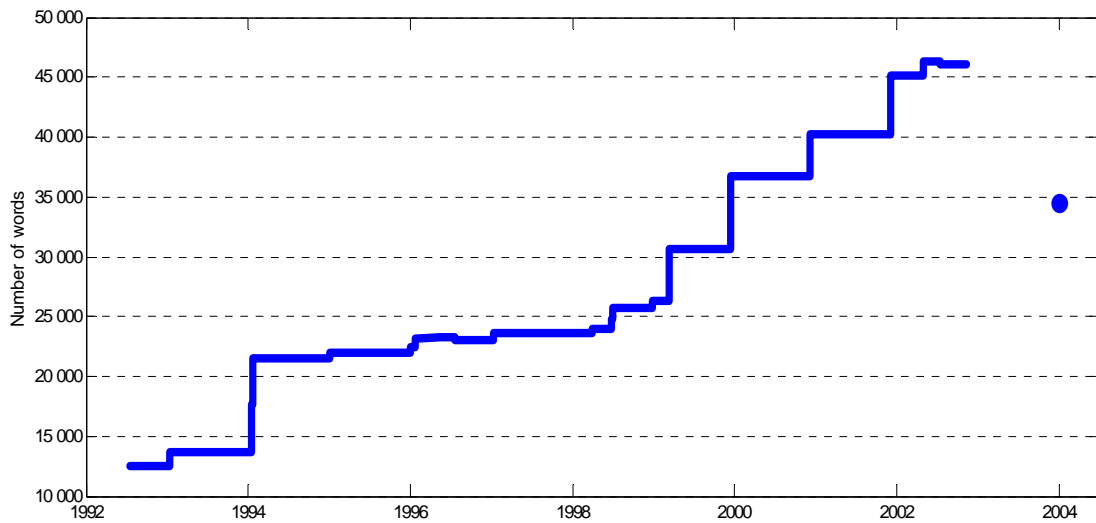
legislation during the transition. The changes in tax codes were very frequent and often non-systematic so there logically was a strong rise of complexity.

As an example we can use the Czech Income Tax Act which had 45 amendments during the period 1993-2003 - approximately one modification each quarter. Not only did the income tax law change substantially in its character, it also became extensive. We can consider the number of words as a proxy measure of complexity. The first version of the law in 1994 contained less than 14 thousands words, whereas the version at the beginning of 2004 was composed of more than 69 thousand words: a five-fold increase. In addition, beside the tax code, there were many regulations issued by ministries that explain certain paragraphs of the law in more detail. The word count of these regulations is nearly as heavy as that of the Income Tax Law itself.

Moreover, the Income Tax Act modifications were typically introduced to correct previous mistakes or to launch new policies, though sometimes they emerged in reaction to lobbying. Thus as the income tax law increased in size, it naturally allowed for more and more exceptions. The frequency of phrases “with exception of ” increased four times in period 1993-2003 – from 50 to 238. For the given period, the Slovak tax system showed the similar rise of complexity. However, after the tax reform in 2004 the number of word in the Slovak Income Tax Law dropped by one quarter. On the other hand, the number of word in the Czech Income Tax Law increased by 20% at the same time.



**Graph No. 1:** Number of Phrases "with exception of" and Total Number of words in the Czech Income Tax Law (1993-2005)  
**Source:** Act No. 586/1992 Coll., as amended



**Graph No.2:** Total Number of words in the Slovak Income Tax Law (1993-2004)  
**Source:** Ministry of Finance of the Slovak Republic

### 3.3 Slovak Tax Reform

The Slovak government run several fundamental economic reforms since 2003, which led to increase general knowledge about Slovakia. The most mentioned reform has been definitely tax reform because of a flat tax. In general, the tax reform was aimed at two effects – maintain stability of public finance and support investment and economic growth. Chalupka (2004) emphasizes the Slovak government followed four principles in rebuilding the system of public finance.

- *Equity*. In a sense taxpayers with equal incomes are taxed equally.
- *Neutrality*. Taxation should not distort decisions of economic agents and economic processes generally.
- *Simplicity*. Rules must be simple and allow minimal administrative costs
- *Effective*. The system should minimise room for tax non-compliance. The lower the number of exceptions, the more difficult the possibility of tax avoidance and evasion.

As macroeconomic goals of tax reform, the government wanted to attract foreign investors and in general support investment and spur the economic growth.

The Slovak flat tax system has gone further than its predecessors in introducing flat tax. Slovakia imposed a uniform rate on personal and corporate income as other countries<sup>2</sup> but in addition set the same rate for its value-added tax (VAT). Since January 2004, the single 19% rate replaced 5 brackets (10%, 20%, 28%, 35%, and 38%) and eliminated the 21 different types of taxation of personal income. Simultaneously the corporate tax fell from 25% to 19%. Finally, the Slovak VAT was overhauled where the reduced 14% rate and the standard 20% rate were unified to a single, 19 % VAT rate.

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<sup>2</sup> Estonia, Lithuania, Latvia, Russia, Serbia and Ukraine (The Economist, 2005)

However besides uniting the rates, as Durajka (2005) points out the taxation itself was significantly simplified. For income and corporate tax many exceptions, deductions and relieves were cancelled or replaced by one personal allowance in income taxation. Furthermore, the Slovak government removed some taxes and duties with negligible fiscal impact and the tax burden was shifted from direct taxes to indirect ones, primarily to the value added tax (VAT).

The last important change brought by Slovak tax reform was the reduction of the overall tax burden, which fell to 29.3% of GDP, from 30.9% in 2003 and sky-high 40.6% in 1995 (Eurostat, 2005). In spite of a fast decline of the tax burden, due to structural reforms (health care, welfare state, pensions) the Slovak public finance are in a good shape and the Slovak economy has the best credit rating (A from S&P) in the CEE region.

The simplification of the tax law has improved its transparency and business-friendliness. It eliminated one of the main business barriers identified in Slovakia by business surveys – the excessive complexity and frequent changes in the tax law.

The results of the tax reform overcame in many aspects the expectations. Even there was a fall of corporate tax rate from 25 to 19 percent the revenue of corporate tax increased by 2% in 2004 and further by an impressive 45% in 2005.

We argue that the Czech and Slovak Republics can be viewed as a natural experiment. They shared the same socio-economic background until 1993. Moreover, Hanousek and Palda (2003) estimate that the level of household's tax evasion in both countries is equal. In addition until 2004, the Czech and Slovak tax system had both similar structure and a common characteristic - complexity and very frequent changes of the tax law. However the Slovak tax reform brought a simplified system of taxation with a low flat tax of 19%. On the other hand, the Czech tax system has kept the path of rising complexity and ambiguity.

The decline of direct burden as well as indirect one (red tape) and the unambiguous tax system reduced room for tax non-compliance, since it became more difficult to cheat and hide some income within a simple system. Hence it increased the attitude to tax compliance of Slovak taxpayers resulting in a robust growth of tax revenues.

## **4. Data - Questionnaire and Sample Design**

### ***4.1. Sample Design***

In cooperation with a market research agency, we enquired 930 Czech and Slovak firms in manufacturing industry for their experience and attitude to tax evasion. The ratio within the sample – 573 Czech firms to 357 Slovak firms – corresponds to the ratio of the Czech economy to the Slovak one. Since 90.2% of the total number of firms in the industry has less than 10 employees, the sample was designed as a stratified one in order to get a reasonable proportion of small, medium and large sized enterprises. Therefore, the sample was weighted during the analysis in order to correspond to the whole population of firms in the manufacturing industry.

We also decided to omit from the sample those firms that are subject to additional state supervision, e.g. firms dealing with military material, radioactive material, alcohol, drugs etc.

Concerning the data sample, we focused solely on firms in the manufacturing industry. Firstly, it is better to have one sector well documented than the whole economy poorly described. Secondly, the whole spectrum of sizes of firms is represented in this sector so we can well capture the size effect. Third, the manufacturing industry is an important sector in both economies from the point of view of GDP growth source as well as employment and FDI inflow. Finally, by choosing firms in manufacturing industry we can deeply focus on compliance of



corporate tax since in other sectors as services or constructions there is a higher importance of evading the consumption taxes (above all the VAT) than corporate tax.

We designed a survey questionnaire in close cooperation with the market research agency. The questionnaires were constructed in such a way as to minimize the interviewees' reluctance to share information about their firms' tax evasion, since this information might be perceived somewhat sensitive in nature. To remedy this expected reluctance, an approach similar to Johnson et al. (2000) was employed. The firms were thus asked about their perception of tax evasion and tax avoidance of other firms in their branch.

The firms were assured about the anonymous nature of the survey, and the survey was presented as being aimed at examining the companies' satisfaction with the business environment and with the role of the state in influencing this environment (similar to Hanousek and Palda 2003). Since we wanted to filter out different determinants of evasion the questionnaire includes questions on perceived probability of being audited as well as on satisfaction with the tax system. Answering these questions does not pose any legal threat to the firms, therefore we expect the answers to be relatively honest. You can find the questionnaire in the appendix.

#### 4.2. Data Analysis

The survey shows that Slovak and Czech firms have a different attitude to tax systems in their respective countries, and in general a different perception of the indirect burden. Only 35% of Slovak firms consider the current tax system as too complicated and 56% evaluate the system as simple or optimal. The Czech firms show completely an opposite opinion – 65% of firms are unsatisfied with the complexity.

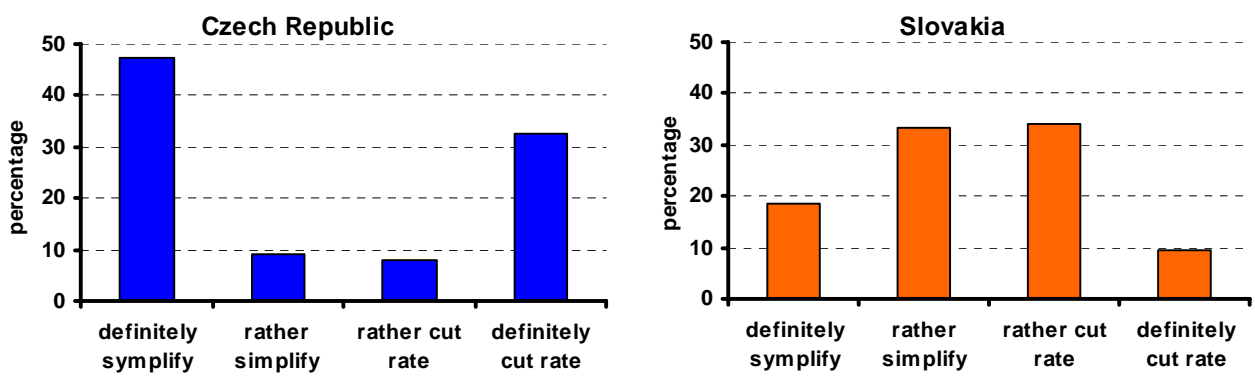
	Too complicated	Simple or optimal	Do not know
<b>Slovakia</b>	35.0%	<b>55.5%</b>	9.5%
<b>Czech republic</b>	<b>64.5%</b>	28.0%	7.5%

**Table No.2:** How do you evaluate current tax system?

**Source:** Authors' computations

The same conclusion was obtained regarding possible tax reform preference. Almost 80% Czech firms call for the change of tax system, especially for simplification. On the other hand, only 28% of Slovak firms express a need for radical reforms.

At this point we can conclude that the Slovak tax reform met one of its targets. Slovak firms in contrast to Czech ones are satisfied with the tax system and in general do not see a need for change. On the other hand, the Czech firms perceive the tax system as too complicated and call for simplification.



**Graph No. 3:** How to possibly change the tax system  
**Source:** Authors' computation

Similarly as Hanousek and Palda (2003), we expect agents to be rational observers of their environment, and thus their opinions about the extent of tax noncompliance to be a fair estimate of the actual level. Moreover, Hanousek and Palda (2005) proved that such estimates are consistent in time. For example the estimates of the levels of tax evasion in 2000 were the same if the question was put in 2000 or in 2002.

Therefore we run a battery of t-tests whether there is a difference between the estimated levels of tax evasion in time in each country. In addition, we test for a difference in perceiving tax evasion between firms from the Czech Republic and Slovakia. The Czech entrepreneurs have observed no change in nonpaying taxes during the period 2000-2004. Similarly, the Slovak firms see the level of tax evasion unchanged from 2000 to 2002. Further, the Slovak companies perceive the slightly lower level of tax evasion among firms in their segment in 2004. However, the decline of perceived tax evasion is almost insignificant.

	Percentage of tax evading firm in			Significant difference
	2004	2002	2000	
<b>Czech Republic</b>	41.8	43.6	44.0	no difference
<b>Slovakia</b>	34.5	37.9	37.7	15% no difference

**Table No.3:** Estimate, what percentage of firms in your segment evades taxes illegally?  
**Source:** Authors' computations

Finally, we examine the change of the perceived tax evasion between Czech and Slovak companies before and after the tax reform. Thus we test the difference between the difference of estimated level of tax evasion between the Czech and Slovak firms in 2002 and 2004. However we conclude the difference is insignificant ( $p\text{-value} > .2$ ). While the main reason for such conclusion is the high variance of estimated tax evasion and in fact it does not allow an alternative answer in statistical testing.

	Czech Republic	Slovakia	Difference
Percentage of tax evading firms in 2004	41.8 (35,6)	34.5 (31.3)	7.3
Percentage of tax evading firms in 2002	43.6 (36.1)	37.9 (32.4)	5.7

**Table No.4:** Estimate, what percentage of firms in your segment evades taxes illegally? (standard deviations in brackets)

**Source:** Authors' computations

In addition, we apply the McNemar's test to assess whether the firms perceive the change of tax compliance. We divide the firms into three groups – seeing no change in the development of tax evasion; the decline of tax evasion after 2004 or the rise of tax evasion after 2004. In the case of Slovakia, the result of test indicates entrepreneurs have noticed an increase of tax compliance. On the contrary, the Czech firms have seen no change of behavior in paying taxes.

	No change	Increase	Decline	p-value
Czech republic	227	46	49	.838
Slovakia	144	48	31	.071

**Table No.5:** McNemar's test - perceived change of tax compliance; number of firms

**Source:** Authors' computations

Hanousek and Palda (2003) emphasize that satisfaction with the quality of government services is one of the factors influencing the willingness to pay taxes, mainly the dynamics of compliance. However, our data clearly shows there is no significant difference between Czech and Slovak firms in apperceiving the quality of public services. It is very interesting that the Slovak structural reforms have not influenced the satisfaction of Slovak firms with government services.

	Satisfied	Unsatisfied
Slovakia	18.2%	81.8%
Czech Republic	19.5%	80.5%

**Table No.6:** Are you satisfied with the services provided by the state, considering the taxes paid?

**Source:** Authors' computations

Standard economic literature (e.g. Slemrod and Yitzhaki 2002) stresses the expected probability of being audited as an important factor influencing tax evasion. However Czech and Slovak firms estimate the chance of tax audit equally. Czech firms expect that 31% firms of their segment will be audited by the Financial Office this year. Slovak firms assess 30% firms. We run a standard t-test for means equality and we cannot reject the null hypothesis there is no difference.

	Czech Republic	Slovakia	Significant difference
Probability of being audited	30.1	31.1	no difference

**Table No.7:** Estimate, what percentage of firms in your segment will be audited by the Financial Office this year?

**Source:** Authors' computations

Finally, we run a standard regression equation for applying the difference-in-difference method. The dependent variable  $Y_i$  is the estimated level of tax evasion. Further, the independent variable  $T_i$  takes two values – 0 for year 2002 and 1 for 2004. Similarly, the variable  $C_i$  splits the sample into groups according to countries – value 0 indicates the Czech firm and 1 the Slovak ones. The results of regression permit only one answer: the change of tax evasion between Czech and Slovak firms after the tax reforms is insignificant.

### Difference in differences regression equation

$$Y_i = 43.0 + 0.45 T_i - 10.60 C_i - 2.73 C_i T_i$$

(1.78)    (2.51)            (2.79)            (3.94)

R Square=0.03

**Source:** Authors' computations

## 5. Conclusion

We enquired 930 Czech and Slovak firms in manufacturing industry for their experience and attitude to tax evasion. We wanted to test for change in behaviour of Slovak firms after the radical tax reform in 2004. The results of the difference in differences method show that no statistically significant change in the level of tax evasion of Slovak firms took place after the reform.

There are two obstacles that made all statistical testing very difficult. Firstly, the obtained survey data has very high variance from its very nature. Applying non-parametric tests might be a way to remedy this difficulty and reach more accurate results. Secondly, the attitudes of firms towards tax evasion change rather slowly. Therefore, it would be probably necessary to wait longer for the full effect of the tax reform to develop.

However, we were able to identify differences between the Czech and Slovak firms regarding the respective tax systems. The Czech companies markedly call for a change of the tax system, mostly simplification. On the other hand, Slovak firms are relatively satisfied and 56% of them see the current tax system as optimal. Their higher satisfaction with the tax system and smaller range of tax evasion possibilities could gradually lead to increased tax compliance, as we have already seen in the development between 2002 and 2004.

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## Appendix - Questionnaire

### I) Information about the firm

- 1) Who is being questioned? *top management/finance department/accountant/self-employed*
- 2) How long has the person questioned been working for the firm/within the same industry?  
(we require min. 3+ years)
- 3) Branch (classification of economic activity)
- 4) Legal form: *self-employed / Ltd. / Corp. / other*
- 5) Region
- 6) Does the registered seat of the company geographically differ from the manufacturing plant?
- 7) Is the firm legally required to undergo an audit by an independent company?
- 8) Number of employees? *<10 / 10-25 / 25-50 / 50+*
- 9) Percentage of goods manufactured for foreign customers: *0 / <10% / 10-25% / 25-50% / 50%+*
- 10) Does the firm use legal tax avoidance (e.g. services of a tax advisor, services of an 'associated' firm, e.g. rent) *yes/no/don't know*

### II) Questions regarding the tax system

- 11) Do you consider the current tax system to be: *too complicated/appropriate/relatively simple/don't know*
- 12) Do you think that a simplified tax system with a smaller tax rate could lead to greater revenues for the state budget than the current system? *yes/no/don't know*
- 13) Are you satisfied with the services provided by the state, considering the taxes paid?  
*satisfied / partially satisfied / partially dissatisfied / dissatisfied*
- 14) Estimate the tax liability related costs of your firm (tax advisor, special tax bookkeeping etc.) in percent of total earnings before taxes *<1% / 1-5% / 5-10% / 10%+ / don't know*
- 15) IF II.11 = *too complicated/appropriate*  
Assess by how many percent the corporate tax rate should decrease so it would have the same effect for your firm as very considerable simplification of the tax system.
- 16) IF I.10 = *yes*  
Assess, whether your firm would significantly reduce expenditures on tax avoidance if the funds raised would be directed at a large scale to your municipality/region. *yes/no/don't know*

### III) Tax Avoidance / Tax Evasion

QUESTIONS ON SPECIFIC SEGMENT ONLY (firms of your size, your branch, i.e. your competitors)

- 17) Estimate, what percentage of firms in your segment (your competitors etc.) uses tax avoidance (tax advisor etc.)?
- 18) Estimate, what percentage of firms in your segment (your competitors etc.) used tax avoidance (tax advisor etc.) in 2002?
- 19) Estimate, what percentage of firms in your segment (your competitors etc.) used tax avoidance (tax advisor etc.) in 2000?
- 20) Estimate, what percentage of firms in your segment (your competitors etc.) evades taxes illegally?
- 21) Estimate, what percentage of firms in your segment (your competitors etc.) evaded taxes illegally in 2002?
- 22) Estimate, what percentage of firms in your segment (your competitors etc.) evaded taxes illegally in 2000?
- 23) Assess, what percentage of firms in your segment (your competitors etc.) will be audited by the Financial Office this year?
- 24) Please state what amount of corporate tax have you paid for the year 2004.  
*<50 thousand CZK / 50-250 thousand / 250 thousand-1 mil / 1-5 mil / 5 mil*
- 25) Have your firm ever helped another firm to evade taxes (e.g. by taking goods without receipt, by issuing fictive invoices) *never/sometime/often*