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## Efficiency of Tax Controls and Collection of VAT in the Slovak Republic

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### Abstract

*The priority of individual state institutions lies on their protection of the financial interests of state or of the European Union and therefore on the tax revenues. Currently the countries of the European Union do not use any uniform approach for the organizational structures which fight the tax frauds. Individual states have created their own institutions that have competences based on legislative possibilities and state needs. The fight against tax evasion and tax avoidance in the area of VAT required a closer cooperation of the administrative authorities of individual member states, which are responsible for the application of the provisions in a given area. Possible methods of fraud detection are represented by local investigations, tax controls, disclosure of information and their receipt from other state authorities. In the Slovak tax administration, between the most used methods of fraud fight belongs the tax control at the tax offices.*

**Key words:** tax controls, tax revenues, value added tax, local investigations

**JEL Classification:** H21, H25, H26

### 1 Introduction

Tax and Customs Administration of the Slovak Republic, Authorities police, prosecution, courts and other state institutions in the Slovak Republic are the most participated organizations when comes to tax evasion. Those listed organizations of state government cooperate and exchange information. Each organization proceeds in accordance to its own procedural rules - Tax Administration proceeds with the Tax Administration Act (Tax Code) and the police force in accordance with the Criminal Procedure Code and the Penal Code.

### 2 Partial Results From Tax Controls During the Period 2004 – 2012

Analysed indicators from tax controls and local investigations stated in the following tables were obtained from internal materials of Slovak Tax Directorate (TD of the SR). It can be stated, that tax revenues of Slovak state budget during monitored period were increasing and the tax collection efficiency developed positively. According to the tax findings volume, stated in Tab. 1 and Tab. 2, findings of VAT have the decisive share on total tax findings and have in every year a

share greater than 55 %. In year 2010 those findings topped a share over 76.3 % - which requires the attention of tax makers as well as the tax control.

**Tab. 1 Findings from performed tax controls during the period 2004 - 2008**

<b>TD of the SR total</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Findings from tax controls (thousand SKK)	8 395 706	7 888 960	8 722 184	8 399 579	11 474 041
From them VAT (thousand SKK)	5 237 344	4 992 959	4 823 452	6 047 476	7 317 271
Share of VAT findings on total findings	62.4 %	63.3 %	55.3 %	72.0 %	63.8 %

Source: Tax Directorate of the SR

A substantial increase in the findings from tax controls was recorded in 2008-more than 11 billion SKK (381 million EUR). This can be seen as a positive outcome of the implemented measures of the tax controls at the first place, but on the other hand, it can be seen as a growth in tax evasion as a result of the emerging crisis. The first reason is confirmed by data illustrated in Tab. 3 and Tab. 4. The average finding per one controller and the average finding per one control has a growing trend.

**Tab. 2 Findings from performed tax controls during the period 2009 - 2012**

<b>TD of the SR total</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Findings from tax controls (thousand EUR)	435 549	556 278	707 097	525 096
From them VAT (thousand EUR)	304 619	424 437	519 754	305 212
Share of VAT findings on total findings	69.94 %	76.30 %	73.51 %	58.10 %

Source: Tax Directorate of the SR

During the period 2009-2011, development in findings from tax controls had a constantly increasing trend and a similar situation was also recorded in the VAT control findings. The highest tax findings', of which 73.51% were VAT findings, absolute value of 707,097 thousand EUR (21,302,004 thousand SKK) was recorded in 2011. Absolute value of VAT findings in that year was 519,754 EUR (15,658,109 thousand SKK), which was the highest value in 2004 to 2012.

**Tab. 3 Tax controls during the period 2004 - 2008**

<b>TD of the SR total</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Number of tax controls	33 747	35 333	31 243	24 711	21 357
Number of tax controllers	1 742	1 732	1 749	1 647	1 638
Average finding per one controller (thousand SKK)	4 820	4 555	4 987	5 100	7 005
Average finding per one control (thousand SKK)	248	223	279	340	537

Source: Tax Directorate of the SR

**Tab. 4 Tax controls during the period 2008 - 2012**

<b>TD of the SR total</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Number of tax controls	19 820	18 400	22 651	16 053
Number of tax controllers	1 643	1 600	1 568	1 400
Average finding per one controller (thousand EUR)	265	348	451	375
Average finding per one control (thousand EUR)	22	30	31	33

Source: Tax Directorate of the SR

Part of the tax controls of Tax Offices in the SR are local investigations, of which a significant part is focused on the usage of electronic cash registers (ERP). Since 1995 there is an obligation to use ERP in the SR, but many businesses still do ignore this obligation. The data for a nine years period stated in Tab. 5 and Tab. 6, point out that tax evasions within local investigations still represent a decisive part of the findings.

**Tab. 5 Local investigations during the period 2004 - 2008**

<b>TD of the SR total</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Volume of findings from local investigations (thousand SKK)	31 980	51 585	28 533	24 772	21 515
From them: findings on ERP (thousand SKK)	22 844	45 911	25 893	22 220	19 962
Number of local investigations	30 253	34 533	24 997	35 974	35 365
From them: Number of local investigations on ERP	12 221	18 932	8 154	16 282	16 089

Source: Tax Directorate of the SR

**Tab. 6 Local investigations during the period 2008 - 2012**

<b>TD of the SR total</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Volume of findings from local investigations (thousand EUR)	515	457	674	438
From them: findings on ERP (thousand EUR)	478	431	644	429
Number of local investigations	38 959	44 262	38 272	33 031
From them: Number of local investigations on ERP	16 117	20 805	17 601	15 137

Source: Tax Directorate of the SR

## 2.1 Effectiveness of Tax Controls

Tax Directorate of the SR admitted the Strategic plan for years 2004-2008 in 2004. This document defines new objectives and determines directions of the tax administration for achieving higher effectiveness and quality of operations, tax collection and reduction in tax arrears. It also introduces an indicator of tax controls effectiveness, which is calculated as the share of the number of controls with finding to performed controls.

**Tab. 7 Effectiveness of tax controls during the period 2004 - 2012**

<b>Tax Administration in SR</b>	<b>Effectiveness of tax controls in %</b>								
	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Total TD of the SR</b>	51.5	57.8	63.5	59.5	59.4	59.5	53.6	49.3	56.6

Source: Tax Directorate of the SR

According to data in Tab.7, the effectiveness of tax controls oscillated around 56.7 % during the period 2004-2012. The lowest tax controls effectiveness was in 2011 with 49.3 % and the highest was in 2006 with 63.5 %.

## 2.2 Effectiveness analysis of VAT Collection

Supreme Audit Office of the SR (SAO of the SR) for ensuring effectiveness and efficiency of the tax unification implementation status in the year 2012 carried out a value added tax effectiveness assessment in Slovakia. The basis for this evaluation was an indicator of the VAT effectiveness, which compares the real collection from this tax with its potential collection. This indicator shows the potential VAT tax revenues when considering only the macroeconomic base taxed by standard tax rate. The resulting values express the level of VAT collection effectiveness. The larger value the more effective the VAT collection. Calculation of the VAT collection effectiveness according to the methodology used by the Institute of Financial Policy of the Ministry of Finance is carried out according to this basic formula:

$$X = \frac{A}{(B + C + D - A) * \frac{E}{100}} \quad (1)$$

Legend:

X = Effectiveness of VAT collection

A = Value added tax collection

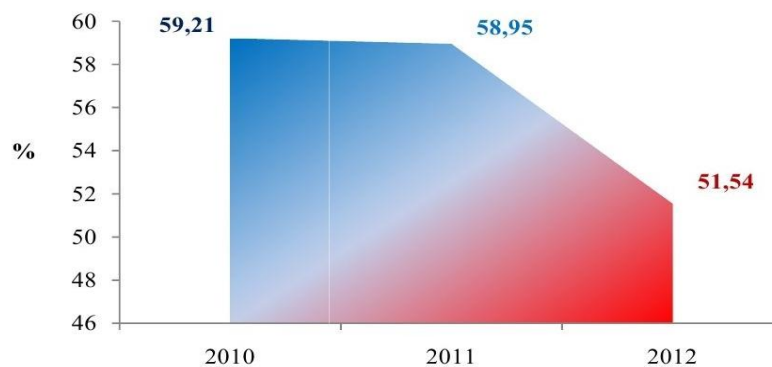
B = Final consumption of household

C = General government's gross fixed capital formation

D = Intermediate government consumption

E = Standard VAT tax rate

Comparison of the VAT effectiveness indicator development during the period 2010-2012 illustrates Fig. 1.



**Fig. 1 VAT effectiveness indicator development during the period 2010-2012**

Source: SAO of the SR based on preliminary data Financial Directorate of the SR and Statistical Office of the SR

According to SAO of the SR calculations, there was a significant deterioration in indicator of VAT effectiveness in 2012. Partial explanation can be found when analysing the economic indicators used for this indicator calculation and these are stated in Tab. 8.

**Tab. 8 Effectiveness of VAT collection and basic variables for its calculation**

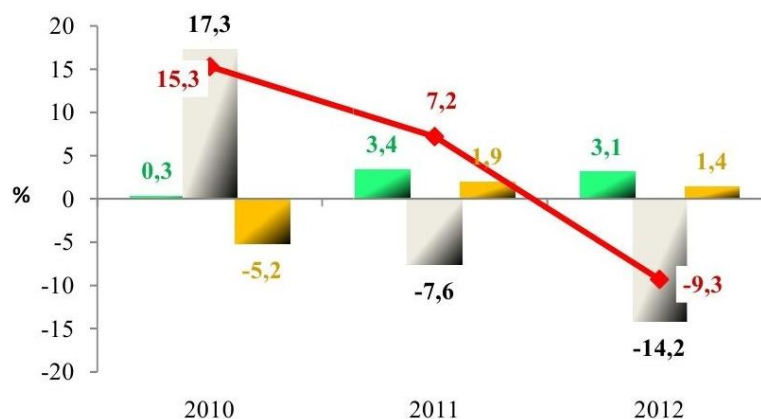
Indicator	2010	2011	2012
Effectiveness of value added tax collection (%)	59.21	58.95	51.54
VAT collection based on accrual basis ESA 95 (mil. EUR)	4 422.01	4 741.31	4 298.79
Final consumption of household (mil. EUR)	37 735.40	39 003.78	40 215.38
Gross fixed capital formation of general government (mil. EUR)	1 715.82	1 586.03	1 361.55
Intermediate general government consumption (mil. EUR)	4 282.46	4 364.45	4 426.97
Standard VAT tax rate (%)	19.00	20.00	20.00

Source: Financial Directorate of the SR, Statistical Office of the SR and SAO of the SR

Impacts of nominal household's final consumption growth and intermediate government consumption were positively reflected in the development of macroeconomic base in 2012. These impacts were partially eliminated by a lower value of general government's gross fixed capital formation at current prices. They did not affect the base significantly.

The decisive factor of VAT collection effectiveness indicator deterioration, at unchanged standard tax rate of 20 %, was a significant decrease in the tax obligation payments in 2012. The cause of this decline could be the growing motivation to tax avoidance. To a lesser extent, could be the cause of mentioned decline distortions caused by the economic decisions of the government focused on public finance consolidation and problems associated with implementing a new information system of tax administration. SAO of the SR for the main causes of negative development in VAT collection in 2012 mainly included the growth of exports of goods and services and the associated increase of VAT refund claims that were paid to key exporters mainly in the automotive, electrical, petrochemical industries; and information technology issues associated with the financial administration transition to a new information system. This negative effect could to some extent be related to the political instability and the subsequent fall of the government.

Results of the VAT collection growth analysis based on accrual principle within the ESA 95 methodology, and results of the nominal growth in household final consumption, gross fixed capital formation of general government and intermediate consumption of general government at current prices during the period 2010-2012 are illustrated in Fig. 2.



Legend:

Green columns	Nominal growth in household final consumption
Gray columns	Nominal growth in gross fixed capital formation of general government
Yellow columns	Nominal growth in intermediate consumption of general government
Red line	Nominal growth in VAT collection

**Fig. 2 VAT collection development and its macroeconomic base during the period 2010-2012**

Source: Financial Directorate of the SR and Statistical Office of the SR

According to the Statistical Office of the SR, final consumption of household reached a level of 40,215.38 million EUR in 2012. The largest share on this consumption have categories of housing, water, electricity and other fuels, which aggregated value represented 10,516.34 million EUR, food and soft drinks with 7,313.50 million EUR and miscellaneous goods and services amounted to 3,880.06 million EUR. During the slight decrease of nominal growth in household's final consumption, household's disposable income reduced due to the gradual increase in the tax burden.

Development in final consumption of household was in 2012 influenced by several factors, particularly by total employment and average nominal monthly wage. Comparison of the household's final consumption development at current prices, total employment's development and average nominal monthly wage's development during the period 2010-2012 are illustrated in Tab. 9.

**Tab. 9 Development of final consumption of household during the period 2010-2012**

Indicator	2010	2011	2012	Difference 2012-2011	Index (%) 2012/2011
Final consumption of household (mil. EUR)	347 735.4	39 003.8	40 215.4	1 211.6	103.11
Total employment (person)	2 169 822	2 208 313	2 209 432	+1 119	100.05
Average nominal monthly wage per employee (EUR)	769	786	805	+19	102.42

Source: Statistical Office of the SR

According to the methodology, the calculation of the VAT collection effectiveness indicator includes variables as the nominal growth of general government's gross fixed capital formation and intermediate consumption of government public administration, which are stated in Tab. 10.

**Tab. 10 General government's gross fixed capital formation**

Indicator	2010	2011	2012
Gross fixed capital formation of general government (mil. EUR)	1 725.82	1 586.03	1 361.55
Intermediate general government consumption (mil. EUR)	4 282.46	4 364.45	4 426.97

Source: Statistical Office of the SR

Based on the analysis results can be stated, that the collection of VAT did not follow the development of the macroeconomic base in 2012. On the first place, it can be explained by an annual increase in VAT excess especially in major automotive and electronics exporters industry and by a decrease in tax payments from taxpayers on the other hand.

### 2.3 Results of VAT collection analysis

The Supreme Audit Office of the SR carried out an analysis assessing the effectiveness of VAT collection on a cash basis with an assumption of successful tax collection by tax administration, which can be expressed as the ratio between the paid and the prescribed tax liability. Tax liability was perceived as a tax, including interest and penalties. Comparison of the VAT collection development collected by tax administration on a cash basis during the period 2010-2012 is documented in Tab. 11.

**Tab. 11 VAT collection during the period 2010-2012 in million EUR**

Indicator	2010	2011	2012	Difference 2012-2011	Index (%) 2012/2011
VAT collection (mil. EUR)	4 431.60	4 753.18	4 307.12	-446.06	90.62
From that: By tax administration (mil. EUR)	2 243.70	2 199.58	1 611.82	-587.76	73.28
Included:					
- VAT collection	7 617.10	8 440.57	8 027.83	-412.74	95.11
- excessive VAT deductions	-5 373.4	-6 240.99	-6 416.01	-175.02	102.80
- customs administration (mil. EUR)	2 287.90	2 553.50	2 695.30	141.80	105.53

Source: Statistical Office of the SR

Despite the reduction in VAT collection in 2012, there was a positive annual increase in VAT collection by tax administration, while in 2011 there was a significant decrease in VAT collection by tax administration that could be the result of reduction in tax payment obligations, as well as a result of excessive deductions increase. Comparison of the share of individual components on total VAT collection by the tax administration during the period 2010-2012 is documented in Tab. 12.

**Tab. 12 Share of individual components on total VAT collection by tax administration during the period 2010-2012**

Indicator	2010	2011	2012	Difference 2012-2011
Own tax liability	99.73 %	99.74 %	99.16 %	-0.58 %
Other tax collection on VAT	0.01 %	0.02 %	0.66 %	0.64 %
Tax liability deducted from tax control	0.14 %	0.10 %	0.08 %	-0.02 %
Penalties	0.12 %	0.14 %	0.10 %	-0.04 %
Summary	100 %	100 %	100 %	0

Source: Financial Directorate of the SR

Data in Tab. 12 suggest that the highest share on the actual VAT collection in tax administration has own tax liability deducted from returned tax declarations and during the monitored period it represents more than 99 %. The highest increase was recorded in other tax collection on VAT in 2012, that annually increased by 51.5 million EUR. This increase could be caused by the increase in prescribed tax along with the payment due to the limited functionality of the information system. Overview of the own tax obligation effectiveness, i.e. ratio between paid own tax liability

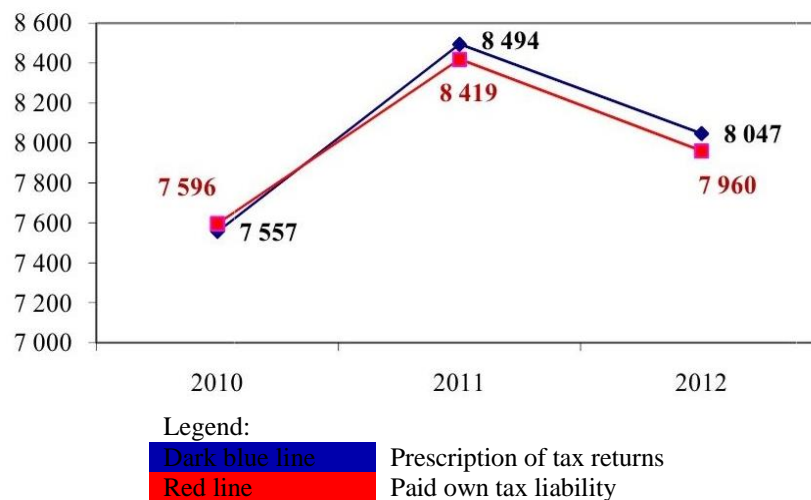
and potential VAT collection based on prescription of tax returns during the period 2010-2012 is documented in Tab. 13.

**Tab. 13 Overview of VAT collection effectiveness during the period 2010-2012**

Indicator	2010	2011	2012
Prescription of tax returns	7 556 613	8 494 470	8 046 589
Paid own tax liability	7 596 208	8 419 033	7 960 266
Difference	39 595	-75 437	-86 323
Share	100.52 %	99.11 %	98.93 %

Source: Financial Directorate of the SR

Results of the analysis show that the effectiveness of own tax liability collection, which is what the taxpayers admitted in tax declarations, is at high standard level due to the willingness of taxpayers to pay VAT, they themselves declared in tax returns Comparison of the tax obligation effectiveness in the VAT (thousand EUR) during the period 2010-2012 is illustrated in Fig. 3.



**Fig. 3 Effectiveness of own tax liability on VAT during the period 2010-2012**

Source: Financial Directorate of the SR

### 3 Conclusion

Value added tax belongs to the most important sources for general government's budget revenues. In the recent years the growth of VAT revenues did not correspond to the macroeconomic base. This discrepancy is attributed to the increase in VAT evasion.

Within tax controls effectiveness and VAT collection's effectiveness research in SR was found that selected tax control indicators and local investigations point to the fact that tax evasion and fraud are also inherent in Slovak reality. The volume of findings points to the positive results of the implementation of the tax evasion concept. It can be stated that the total VAT collection effectiveness in tax administration during the monitored period was about 50 %. Between years



2010-2012 there was a gradual decrease in VAT collection effectiveness. It was found that tax evasion and frauds are influenced by several factors. It can be stated that the volume of tax evasion in the economy is largely dependent on the maturity and prosperity of the country. If a business entity in an adverse economic or bad financial situation, it may attempt to change the situation in the form of evasion. Therefore, the tax legislation is very important. Higher the quality of legislation the lower the possibility of distortion. It may be also a demonstration of disagreement with the government's tax policy.

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