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Mutual learning for reducing tax gaps in V4 countries and Ukraine: Final report

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Mutual Learning for Reducing Tax Gaps in V4 Countries and Ukraine Final Report

lakov Frizis Krzysztof Głowacki

> Contributions Katerina Hoskova

No 490 (2017)



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Abstract

The paper is a summary of the exchange of knowledge and experience that took place in the course of the project "Mutual Learning for Reducing Tax Gaps in V4 Countries and Ukraine" co-financed by the Visegrad Fund in the years 2016–2017. Five institutions took part in the project: Center for Social and Economic Research (Warsaw, Poland), Center for Social and Economic Research Ukraine (Kiev, Ukraine), INEKO Institute for Economic and Social Reform (Bratislava, Slovak Republic), EUROPEUM Institute for European Policy (Prague, Czech Republic), and Kopint-Tárki Institute for Economic Research (Budapest, Hungary).

Introduction

Tax gaps, or the differences between tax amounts that are due by the taxpayers and the amounts that are actually collected by the state, remain a challenge for many European Union (EU) Member States, including for the V4 countries. Tax gaps also present a formidable challenge for Ukraine, which is currently reforming many aspects of its financial and legal systems. To help increase awareness about tax compliance and exchange knowledge on the state-of-the-art methods used to combat tax gaps, the project Mutual Learning for Reducing Tax Gaps in V4 Countries and Ukraine has been implemented. The project was co-financed by the International Visegrad Fund in the years 2016–2017, and five institutions participated in it: Center for Social and Economic Research (CASE) (Warsaw, Poland), Center for Social and Economic Research Ukraine (CASE Ukraine) (Kiev, Ukraine), INEKO Institute for Economic and Social Reform (Bratislava, Slovak Republic), EUROPEUM Institute for European Policy (Prague, Czech Republic), and Kopint-Tárki Institute for Economic Research (Budapest, Hungary).

The present Final Report summarises the exchange of knowledge and experience that took place in the course of the project. The Final Report is based on a literature review, the lessons learned during the seminar held 5–6 December 2016 at the CASE head-quarters in Warsaw as part of the project, as well as four peer review papers delivered as part of this project:

- Dubrovskiy, V. (2016), *Peer country paper Ukraine*, Center for Social and Economic Research Ukraine;
- Frizis, I., Głowacki, K., & Mirecka, K. (2017), Peer country paper Poland, Center for Social and Economic Research;
- Hajko, J. (2016), Peer country paper Slovak Republic, INEKO Institute for Economic and Social Reform;
- Kříž, E. (2016), Peer country paper Czech Republic, EUROPEUM Institute for European Policy; and
- Palócz, É., & Zoltán Á. (2016), Peer country paper Hungary, Kopint-Tárki Institute for Economic Research.

1. Czech Republic

1.1 Tax system in the Czech Republic

The tax system of the Czech Republic follows a common pattern of direct and indirect taxation. The long-term preference is to shift the tax burden from direct to indirect taxes.

1.1.1 PIT

The Czech personal income tax (PIT) has a flat rate of 15%. Subject to the tax are employees of Czech companies (including all branches), expatriate assignees with salary costs attributable to Czech entities, and statutory representatives. Those with permanent residency in the Czech Republic are taxed on their worldwide income, while non-residents are only taxed on their Czechbased income only. If a taxpayer's monthly income exceeds CZK 106,444, she or he faces not only the income tax, but also the so-called solidarity surcharge, which is levied at a rate of 7%.

Employers are obliged to remit monthly withholdings, including PIT, statutory social security, health insurance, and, in the case of employees whose earnings exceed the relevant threshold, the solidarity surcharge. Employers must also submit annual reconciliations with respect to their employees' tax liabilities.

1.1.2 CIT

Corporate income tax (CIT) applies to all companies (resident and non-resident) that perform business and generate profits in the Czech Republic. The general level of CIT is 19%. Dividends are taxed at 15%, investment funds (EU-, Norway-, and Iceland-based) and pension funds at 5%, while pension funds follow a special 0% rate.

Tax residency is established if a company has a fixed place for carrying out business activities on the territory of the Czech Republic and does so for at least 6 months in twelve consecutive months, or if it has a dependent agent. A foreign company can establish a branch in the Czech Republic, which entails the obligation to apply the Czech CIT to its local profits.

1.1.3 VAT

In 2013, the rate of the value-added tax (VAT) in the Czech Republic was increased from 20% to 21%. Certain goods follow the lower levels of 15% (e.g. groceries) and 10% (e.g. medicaments, books, and baby nutrition).

Any company with a seat in the Czech Republic and turnover greater than 1 million CZK in twelve consecutive months must register as a VAT payer.

1.1.4 Excise tax

Excise taxes are used in the Czech Republic since 1 January 1993. Through several amendments of excise tax law, Czech legislation was harmonised with that of the EU in 2004. Excise tax is imposed on producers or importers of: mineral oils, alcohol, beer, wine and its intermediaries, tobacco products, and raw tobacco. The tax can be levied only once on a good.

1.2 Trends in collectability

The tax-to-GDP ratio has increased from 32.5% in 2000 to 33.5% in 2015 (OECD, 2016a). The highest revenues are presently obtained from social security contributions, corresponding to 44% of all collections. The revenues from VAT are also high in comparison with other countries, amounting to 22% of the overall collections. Taxes on corporate income equal 11%, a figure which is also considered to be relatively high. In contrast, taxes on good and services excluding VAT (e.g. excise), as well as taxes on personal income, profit, and gains (11%), are considered well under the OECD average (OECD, 2016a). Please see *Graphs* 1.1–5 for a visualisation of the trends in tax collection in the Czech Republic in the years 19932015.

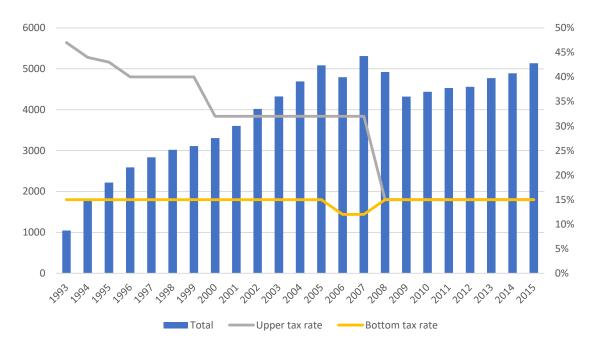


Figure 1.1: PIT collection in the Czech Republic and PIT rates, 1993-2015 (in EUR million)

In the period of 1993-2005, PIT revenues grew steadily, followed by a one-year decline in 2006. Collection peaked in 2007 (EUR 5.3 billion) and abruptly declined for two consecutive years as a result of the economic crisis. Collection rebounded after 2009 and continued to grow until 2015, when it reached the second highest level of PIT revenues in the recent history of the country (EUR 5.1 billion).

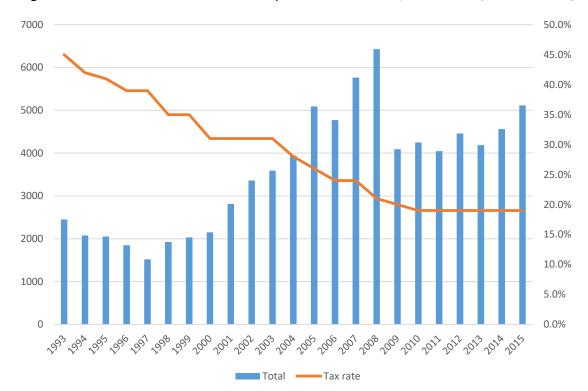


Figure 1.2: CIT collection in the Czech Republic and CIT rates, 1993-2015 (in EUR million)

CIT collection reached its highest value in 2008, amounting EUR 6.4 billion. A year after, in relation with the economic crisis, collection decreased by EUR 2.3 billion. In the years 2009–2012, the amounts collected showed volatile behaviour, and, after 2013, resumed a steady growth.

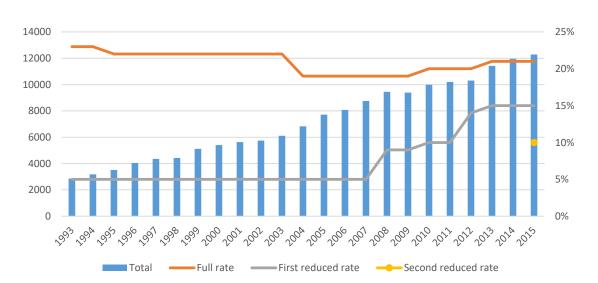


Figure 1.3: VAT collection in the Czech Republic and VAT rates, 1993-2015 (in EUR million)

VAT collection has been constantly growing since 1993 with the exception of a subtle decrease in 2009. In 2015, VAT collection amounted to EUR 12.3 billion.

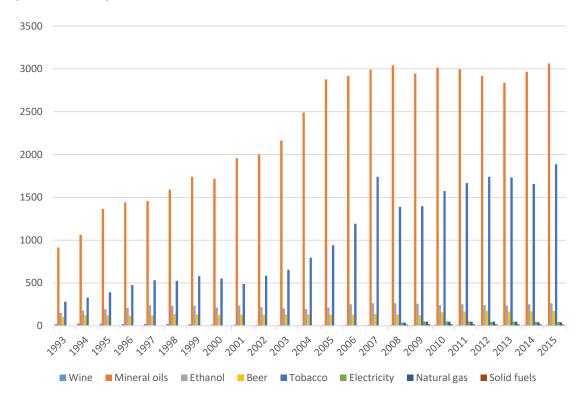


Figure 1.4: Excise tax collection in the Czech Republic by product category, 1993-2015 (in EUR million)

Excise tax collection from mineral oil products has been the highest from all product categories. In 2015, the amount equalled EUR 3.1 billion. Mineral oil products are followed by tobacco and ethanol, with EUR 1.9 billion and EUR 263 million in 2015, respectively.

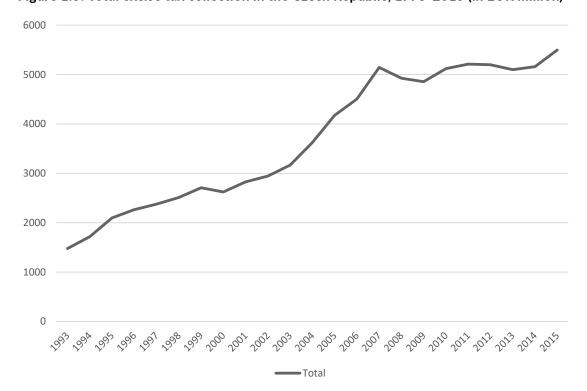


Figure 1.5: Total excise tax collection in the Czech Republic, 1993-2015 (in EUR million)

Excise tax collection has shown an increasing trend since 1993, although it has become more volatile since 2007. The highest amount, EUR 5.5, billion was collected in 2015.

1.3 Magnitude of the tax gaps

The PIT gap has been estimated at EUR 70 million for 2014 (Kříž, 2016). Estimates of the CIT gap vary from 4% to 38%, with the majority of sources assessing the gap as between 10% and 20% (ibid.). The VAT gap has been estimated as 20% for 2014 (Poniatowski et al., 2016). Information about the excise tax gap is not available (Kříž, 2016).

1.4 Methods used to combat tax non-compliance

1.4.1 Electronic records of sales (Elektronická evidence tržeb – EET)

Minister of Finance Andrej Babiš¹ introduced the system of Electronic Records of Sales of Goods and Services (EET) in December 2016. All legal and natural persons with business activity are obliged to electronically record their sales of goods and services. As per the Czech Financial Administration: "Every real-time payment has to be recorded through the internet in the central data repository of the Financial Administration" (Financial Administration of the Czech Republic, 2016). Every payment by cash or card goes through four phases of the record: first, a seller's device (a PC, tablet, cash register, or smartphone) sends a message about the transaction to the Financial Administration. Then, the Financial Administration sends back an acknowledgement of the transaction containing a unique code for the awaited receipt. Finally, the customer receives the receipt. He or she can then check the electronic record of the sale by using an application of the Financial Administration (2016).

The system of Electronic Records of Sales is a heavily discussed topic in the Czech Republic not only among politicians, but also among entrepreneurs and the general public. Many entrepreneurs, especially those in villages and towns, were not able to meet the digital requirements of the system and had to end their business activity. Evaluations of the effects that the measure had on businesses vary. For instance, Minister of Finance Andrej Babiš said that 104 restaurants ended their activity because of the EET by January 2017. In contrast, Czech breweries, based on their sales figures, claim that number was four times as large (iROZHLAS, 2017a). The Ministry of Finance also stated that in December 2016, the first month of the EET, revenues of businesses in catering and accommodation services had grown by 100% year-on-year (iDNES.cz, 2017). By contrast, the Czech Statistical Office (CZSO) reported that the year-on-year growth had been 15.7%. This notable discrepancy and ambiguity could have been caused by different methodologies: The Ministry based their findings on a sample of 1,559 entities, and the CZSO used data from the entire population of relevant businesses. The CZSO stated that it could not confirm the effect of the system (Český statistický úřad, 2017).

¹ Andrej Babiš was replaced by the current Minister of Finance Ivan Pilný on 24 May 2017

1.4.2 Reverse VAT charge (Přenesená daňová povinnost k DPH)

The aim of the reverse VAT charge is to avoid the missing trader fraud by shifting the obligation of paying VAT from sellers to buyers of goods and services. The charge only targets VAT payers: legal persons and entrepreneurs. Only selected goods and services fall under the charge, including gold, metals, mobile phones, and grains.

One of the goals of the Minister of Finance Andrej Babiš was to implement the reverse VAT charge on the EU level. He has been an advocate of the system since 2014, claiming that the reverse charge on the EU level would be the most powerful tool to combat missing trader fraud. The Czech Republic had proposed to the European Commission to establish a pilot reverse charge project which would target all transactions over EUR 10,000. The Commission reacted by publishing a proposal which departed from the initial concept of the Czech Republic and Austria (which supported the Czech Republic in this matter). Andrej Babiš presented his dissent with the proposal to the Council of the EU in January 2017 (Ministry of Finance of the Czech Republic, 2017).

1.4.3 VAT control statement (Kontrolní hlášení DPH)

Since 1 January 2016, VAT payers are required to report all VAT-relevant transactions. The original 2004 Tax Act was amended after the Slovak Republic's implementation of the VAT control statement (Kontrolný výkaz DPH) in 2014, due to the threat that Slovak tax evaders might be lured to misuse the tax system of the Czech Republic. The VAT control statement is one of the main tools of detecting tax avoidance and fraud (especially the missing trader fraud).

The addressees of the reform are all registered VAT payers in the Czech Republic (around 500,000 entities) (Český rozhlas, 2017). Legal persons are obliged to provide statements on a monthly basis, and natural persons must submit the VAT control statement with their VAT return monthly or quarterly. The submission is provided electronically. The list of transactions which must be submitted is as follows: domestic taxable supplies or the receipt of advance payments, domestic acquisition of goods/services or the provision of advance payments, received transactions subject to VAT, and transactions with investment gold.

The Deputy Minister of Finance Alena Schillerová claims that the Financial Administration of the Czech Republic has collected CZK 10-12 billion through the VAT control statement in 2016. However, some economists find this statement and, generally, the influence of the VAT control statement on overall VAT collection questionable (E15.cz, 2017). In March 2017, the former Minister of Finance Andrej Babiš decided to make the system of fines more lenient for those who had not submitted

the statement duly. This amendment will pardon up to two fines from 2016. This move has been criticised not only by the opposition, but also by the Association of Entrepreneurs and Tradesmen of the Czech Republic (Český rozhlas, 2017).

1.4.4 Tax Cobra (Daňová Kobra)

Tax Cobra is a joint group that consists of the Unit for Combating Corruption and Financial Crimes (Útvar odhalování korupce a finanční kriminality), the General Financial Directorate (Generální finanční ředitelství), and the General Directorate of Customs (Generálního ředitelství cel). The aim of the group is to combat tax evasion and tax fraud, predominantly in the areas of VAT and excise tax (Daňová Kobra, 2017). The Czech concept of Tax Cobra was established based on the Slovak version of a similar group from 2012 (see Section 4.47).

The Customs Administration of the Czech Republic declared in January 2017 that Tax Cobra had managed to disclose CZK 7.66 billion in attempted tax fraud since 2014 (podnikatel.cz, 2017). The most recent and one of the biggest cases thus far is the prosecution of two companies and 21 suspects involved in the overpricing of advertising services worth CZK 415 million (iROZHLAS, 2017b).

1.4.5 Collaboration of the Czech Republic and the Slovak Republic

Since 2014, the Czech Republic and the Slovak Republic have collaborated in order to secure better communication and the exchange of information to combat tax non-compliance. In November 2014, the conference "Cooperation as a Tool Towards the Higher Level of the Region's Efficiency and Competitiveness" (Spoluprácou k zvýšeniu efektivity a konkurencieschopnosti regiónu) was held in Bratislava, during which two documents on future cooperation were signed (Finančná správa, 2014). The General Directorate of Finance of the Czech Republic has pointed out the importance of the agreements (Komora daňových poradců České republiky, 2015).

2. Hungary

2.1 Tax system in Hungary

The tax system in Hungary is analogous to that of advanced European economies, annually contributing to the central budget revenues close to 40% of GDP. In recent years, the tax system in Hungary has undergone several important reforms. The most important of them concerned:

- the introduction of the online cash machine register;
- the introduction of the electronic public road trade control system; and
- simplification of the CIT and the introduction of a flat-rate CIT at 9%.

Until recently, the reduction of the tax burden was not possible due to high public spending. However, following the recent acceleration in GDP growth and cuts in government expenditures (mainly from interest payments), the government now appears more able to manoeuvre towards reducing the tax burden.

2.1.1 PIT

According to the PIT Act of 1995 and its amendments, income to be consolidated includes income from employment, income from entrepreneurial activities, income from other self-employment activities, rental income, and other income. Capital gains, income from private businesses, and income arising from the sale of both movable and immovable assets are taxed separately in Hungary. Since 2011, PIT in Hungary is flat-there is currently a single rate of 15% regardless of level of income. This rate was reduced from 16% to 15% in 2016.

There are several tax exemptions, including:

- state support for fostering and raising a minor;
- state support for newlyweds;

- scholarships paid by non-residents to students studying in a foreign educational institution or researchers working abroad; and
- pensions.

Moreover, the following regulations apply:

- income from capital gains is taxed at a 19% rate. Certain types of capital gains are exempt from tax up to EUR 500;
- non-cash benefits, dividend income, and income from the sale of shares are subject to health insurance contributions; and
- dividend income is not subject to tax, but is subject to health insurance contributions at a rate of 14%, up to 60 times the average monthly salary from two years prior (EUR 51,480 in 2016).

Tax residency is established if the period of a person's stay in Hungary is at least 183 days in the tax year. PIT is charged on worldwide income, regardless of whether the income is remitted to Hungary or not. Hungary is one of the only countries in the EU (together with Bulgaria) where the personal allowance equals zero.

2.1.2 CIT

Resident companies in Hungary are subject to unlimited CIT liability, while for non-resident companies, only the income derived from their branch of business activities in Hungary is subject to CIT. Since 1 January 2017, Hungary applies a 9% flat tax on corporate income, marking a substantial break from the previous two-rate structure: 10% for income up to HUF 500 million (EUR 1.8 million) and 19% for income in excess of it. In addition to the standard CIT rate, there are five additional provisions that determine the final amount of corporate tax paid by a registered corporate entity in Hungary:

- real estate holding companies: in Hungary, the proprietor of a real estate holding company is subject to 9% CIT in the event of alienation/withdrawal of the proprietor's shares in the company. In this case, the tax base of the proprietor equals the value of shares in consideration minus the value of acquisition (costs of acquisition and administration included);
- energy suppliers' income tax: energy suppliers (mines, energy producers, and energy distribution system operators, including both universal suppliers and authorised distributors of electricity and gas) in Hungary are subject to a higher CIT rate 31%. However, in the event that the energy supplier qualifies for a development tax incentive or a tax incentive relating to investment with the aim of achieving higher efficiency, it is possibly to claim a tax credit equalling up to 50% of the income tax liability;

- advertisement tax: advertising services (including online advertisement) published in Hungarian or in another language on a website that is primarily in Hungarian are subject to an advertisement tax. Since 1 July 2017, the effective rate is set at 7.5%. This applies to a tax base of up to HUF 100 million;²
- local business tax (LBT): municipalities in Hungary reserve the right to impose an LBT tax on corporations active within their jurisdiction. However, an LBT is deductible for CIT purposes. The Hungarian LBT tax base equals net sales revenues minus (partially) the cost of sold goods, materials, mediated services, research and development, and subcontracting; and
- innovation contribution: with the exception of small- and medium-sized firms, companies registered in Hungary are subject to 0.3% innovation contribution, the tax base of which is the same as that for the LBT.

Hungary also offers a range of tax credits and incentives:

- tax credit for foreign income tax paid abroad, at a maximum of 90% of income tax paid abroad;
- development tax incentive in the form of tax relief up to 80% of payable tax can be claimed for a 13-year period (starting after the completion of the development) on CIT returns over a maximum period of 16 years since the time of original application;
- tax incentives are granted to small- and medium-sized enterprises and business start-ups;
- · tax credit for investment initiatives aimed at reducing overall energy consumption; and
- deferral of the tax payment liability for companies qualifying for the Tax Credit for Growth program.

2.1.3 VAT

Hungary has the following VAT brackets:

- 27% basic rate;
- 18% reduced rate, applicable to certain foodstuffs, admission tickets to certain openair concerts, and hotel accommodation, restaurants meals, and internet access;
- 5% reduced rate, applicable to certain foodstuffs, including the bulk supply of live pigs, cattle, sheep, lambs, goats, pharmaceutical products intended for human use, medical equipment for disabled persons, books, newspapers, and periodicals.

² Specific provisions vary between primary and secondary taxpayers. See: http://taxsummaries.pwc.com/ID/Hungary-Corporate-Taxes-on-corporate-income

Hungary only applies a VAT registration threshold at HUF 8.8 million for EU VAT registered companies (distance selling).

2.1.4 Excise tax

Excise tax in Hungary is applied to tobacco, alcohol beverages, and energy. See *Table 2.1* for an overview of applicable rates.

Table 2.1 - Excise tax rates for the most important products

Excise rate	Product
HUF 333,385/1 hectolitre	ethyl alcohol 100% volume
HUF 1,620/1 hectolitre/degree of alcohol	beer
HUF 0/1 hectolitre	wine (non-sparkling)
HUF 9,870/1 hectolitre	other fermented beverages (non-sparkling)
HUF 16,200/1,000 pieces	cigarettes
HUF 110,350/1,000 litres	gas oil, if the world market price of crude oil is greater than 50 USD/barrel
HUF 120,350/1,000 litres	gas oil, if the world market price of crude oil is equal to or below 50 USD/barrel

Sources: European Commission (2017a-c)

2.2 Trends in collectability

Tax receipts in Hungary oscillate between 38% and 40% of GDP per annum, which is markedly higher than in other V4 countries. The structure of tax receipts in the country is also different compared to that of other V4 countries. Consumption tax is above the V4 average, while capital tax is slightly below. Over the past years, the Hungarian government has consistently preferred to draw revenues from corporations than individuals.

Revenues from PIT reached HUF 1,689 billion in 2015, corresponding to 14% of central budget revenues. For 2016, it is expected that this revenue will amount to HUF 1,695 billion, 16% of central budget revenues. PIT is thus the third single most important tax revenue of the central budget (after VAT and the social contribution tax, which is used to finance state pensions and public healthcare from the Social Security Funds). VAT revenues in 2015 reached HUF 3,286 billion (28% of central budget revenues), while in 2016, receipts are expected to reach HUF 3,389 billion (32% of

central budget revenues). Conversely, corporate tax in Hungary generates a relatively small, although growing, source of revenue for the central budget.



Figure 2.1: Major tax revenues in percent of central budget revenues

Source: Hungarian State Treasury (retrieved from Palócz and Zoltán, 2016)

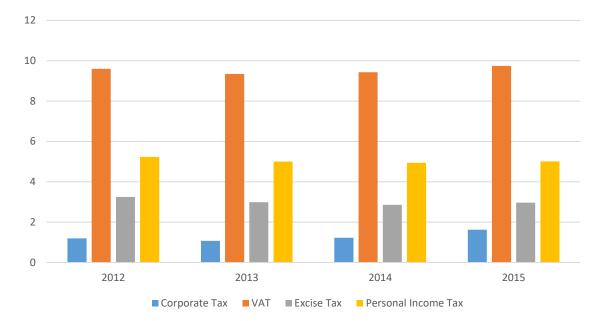


Figure 2.2: Major tax revenues in percent of GDP

Source: Hungarian State Treasury and Central Statistical Office (retrieved from Palócz and Zoltán, 2016)

2.3 Magnitude of tax gaps³

Most recent estimates (2014) place the VAT gap in Hungary at 18% (EUR 2.1 billion), down from 22% in 2013 (Poniatowski et al., 2016). This makes Hungary the second-best performer among V4 countries, behind the Czech Republic, which in 2014 reported a VAT gap of 16.14%. Recent improvements in tax collection efficiency and discipline in Hungary, as well as the introduction of online cash machines significantly contribute to the observed increase in VAT collection.

Available PIT gap estimates in Hungary principally focus on tax evasion via performing unregistered work (black work) or declaring only part of the salary received for

³ Due to the lack of recent estimates on the tax gap in Hungary, this section builds on the most up-to-date available literature—the majority of the reports the paper uses were published in the mid-2000s. In order to account for this gap in the literature, we complement existing findings with a careful consideration of the changing conditions within the Hungarian fiscal environment since then.

their labour (grey work). Research places black work at a magnitude between 10% and 17% of total employment for the period between 2001 and 2007. Since then, the intensification of control activities and a substantial hike in the penalty for undeclared work have contributed to the limitation of black work close to 10%. Moreover, the number of workers employed under a minimum wage contract provides a gauge for the magnitude of grey work, placing the figure between 45% and 50% of workers receiving minimum wage. However, in Hungary, the share of grey work presents great variation across sectors – from 15% among cleaners to close to 100% among university graduates. In terms of foregone central government revenue, the sum of black and grey work translates to a figure close to 1% of GDP.

2.4 Methods used to combat tax non-compliance

The use of the **online cash machine register** in Hungary was first introduced in 2014 as a step towards whitening the economy and improving tax compliance in two sectors where the use of offline cash registers was already required – retail and hospitality. This involved the fitting of approximately 400,000 cash registers with a device that provided a connection to the National Tax and Customs Administration (NTCA). In 2016, the use of online cash machine registers was also made mandatory for the service sector and car dealerships/car part dealers. Since 1 January 2017, the list of mandatory users in the country also includes taxi drivers (Limbek & Mako, 2016).

Central to the functioning of the online cash machine register system is the control unit, which is fitted with a SIM card that connects the cash register, via the internet, to the service of the tax office. Every cash register is allocated with a control unit unique code, activated upon first operation. The core feature of this electronic method to combat tax avoidance is the provision of real-time transaction data to the tax office. Due to this form of direct connection between the register and tax office, authorities are also able to disconnect any taxpayer from the system given suspicion of illegal business transactions (Sales Data Controller, 2014).

In terms of impact evaluation, data collected by the Hungarian Central Statistical Office suggests a positive revenue effect associated with the introduction of the online cash machine register. Opinion polls further support this finding as both businesses and individuals appear positive as to the use of the machines, given the government's continuous financial support of the exchange/upgrade to the online system (the government supplied businesses with HUF 50,000 worth of grants as an implementation aid during the first wave of the policy in 2014). By September 2014, 170,000 online

cash registers were installed, and entrepreneurs could choose from 146 different licensed models. Within the first year of its introduction, VAT receipts increased by 15% (HUF 150-200 billion) in the sectors where compliance was mandatory, exceeding the costs of the policy implementation incurred by the government. Since then, the use of online cash machine registers has consistently contributed to the gradual whitening of the economy as an increasing number of employees have registered. In 2015, the policy generated an extra HUF 60-90 billion of revenue, while the state news agency MTI sets the additional revenue produced by the inclusion of the service sector in 2016 between HUF 20-30 billion (Central European Financial Observer, 2016).

Hungary might not have been the first country to introduce online cash register legislation, but at the time of introduction, the Hungarian framework was the most technologically advanced in the EU. As a result, a number of countries (Germany, Poland, Sweden, and Greece) have chosen to emulate the Hungarian experiment. In 2013, Croatia introduced the mandatory use of online cash registers, leading to a reported one-third rise in turnover within the first month of operation. Other countries that have successfully introduced the use of electronic data recording technology include, among others, Austria (an additional EUR 900 million in tax revenues), Belgium (an 8% rise in reported restaurant sales), and Rwanda (a 20% rise in VAT collection within two years since implementation) (OECD, 2017).

The Electronic Public Road Trade Control System (EKÁER) was introduced in 2015 by the National Tax and Customs Office of Hungary (NAV), as a novel measure aimed at combatting VAT fraud via monitoring the traffic of goods in the country (EKAER, 2015). The system makes it possible to track the actual route of goods by recording transport-related data (type and quantity of goods, value, consignee, consignor, and registration number of vehicle, among others) in a central electronic system.

The EKÁER specifically targets three groups of Hungarian taxpayers: taxpayers who engage in the intra-community (within the EU) acquisition of goods; taxpayers who engage in the intra-community supply of goods; and taxpayers who are involved in the first taxable sale of the good to a non-consumer, via the use of a vehicle that is subject to customs duty. If one of the above entities fails to register, the system foresees the seizure of goods and the imposition of fines that may reach up to a maximum of 40% of the total value of the goods (EKAER, 2015).

After initial hurdles of a technical and administrative nature, the system became operational, earning positive feedback from businesses. Over the past years, the EKÁER has successfully increased the scale of registered trade in vegetables and fruits – according to the National Agency for Food Safety (NÉBIH), about 80% of the black

market in Hungary is linked to the food industry.⁴ Since its implementation in 2015, the EKÁER's registration count is 60,000 tax payers and 6,500 transporters (National Tax and Customs Administration, 2017). More importantly, there have been drastic improvements in VAT performance as VAT receipts increased from 8.9% of GDP in 2014 to 9.7% of GDP in 2015 (IMF, 2017). This translates to a HUF 140 billion increase in VAT receipts in 2015, compared to the previous year—an improvement that Mihaly Varga, Minister of National Economy of Hungary, attributed to the joint effect of the EKÁER and the online cash register (Varga, 2015).

While the EKAER has been recently receiving significant positive feedback from businesses, local entrepreneurs greeted the initial launch of the system in 2015 with scepticism. In particular, vendors and corporations engaged in cross border goods trade voiced strong concerns as to the additional administrative burden levied on day-to-day operations by the control system (Sztanko, 2015; BUSINESSEUROPE, 2015).

The EKÁER is not only a novel system of electronic fiscal control, but early signs of success suggest that the EKÁER may soon function as a model for the region. Tax authorities in the Slovak Republic plan to introduce a similar framework of electronic monitoring in order to prevent pervasive VAT fraud (Budapest Business Journal, 2017), while in Poland, a similar system of monitoring the road transport of goods has been in effect since April 2017 (Raben, 2017).

On 1 January 2011, Hungary introduced the **flat-rate PIT**, at 16%. The aim of the policy was to improve the competitiveness of the tax system in the country via providing a greater degree of simplification. In particular, the introduction of the flat PIT system reduced tax avoidance as incentives for non-declaration and self-employment decreased (Ministry of National Economy of Hungary, 2010). Although, the 2011 PIT reform was not limited to the provision of a flat rate, it also included a reduction in the tax liability of families with children via the provision of a tax credit for each child. Within the first year of implementation, the tax receipts of the Hungarian government rose by 7.6% (despite a 1.6% GDP decline attributed to the Eurozone crisis), while by 2012, government revenues exceeded the pre-crisis level (income and profit tax revenue increased only slightly after the introduction of the flat tax). Most importantly, tax revenues from the sale of goods and services in 2012 rose by 8.5% compared to the previous year, as the introduction of the flat PIT provided significant support to consumer spending – according to the OECD, private consumption was focal to the Hungarian economic recovery following the Eurozone crisis.

⁴ No data exists on the exact effect of the EKÁER on the reduction of tax evasion.

Since 2010, Hungary has embarked on an ambitious program aimed at increasing competitiveness via an easing of the tax burden levied on businesses. By maintaining a focus on the **simplification of the CIT**, policies have played an important role in pushing back on tax avoidance among corporations. Furthermore, the recent **reduction of the CIT rate** to 9%, the lowest in Europe, will likely further reduce the incentive to underreport profits.

On 22 November 2016, the Hungarian parliament approved legislation that increases the ceiling on revenue for payment of itemised tax for small businesses (KATA) from the previous threshold of HUF 6 million to HUF 12 million and that increases the threshold for taxation on the total assets held by companies registered for small business tax (KIVA) to HUF 1 billion, maintaining the current KIVA eligibility threshold at HUF 500 million annual revenue. This legislation package also increases the limit on VAT exemption status up to HUF 8 million in income (from the previous of HUF 6 million) and simplifies regulations on healthcare contribution, thereby further lowering incentives for non-compliance (Zeldin, 2016).

Finally, in order to safeguard the implementation of the different elements of the Hungarian reform agenda, the government recently expanded the staff and the budget of the tax authorities, which led to an **increase in the diligence of its tax authorities** in investigations involving both persons and corporations. These included some high-profile investigations against border guards charged with customs fraud for smuggling tobacco into the country. On the other hand, firms considered to be the clientele of the government have been described as enjoying less stringent tax monitoring.

3. Poland

3.1 Tax system in Poland

3.1.1 PIT

PIT in Poland is progressive, and there are two rates: 18% for income under PLN 85,528 and 32% for income above this amount. Sole entrepreneurs can be taxed under PIT or under the flat-rate CIT at 19%. The personal allowance is currently between PLN 0 and PLN 6600, depending on level of income. Individuals are taxed on earnings from employment, self-employment, rental income, capital gains, and other passive income, with Polish residents taxed on worldwide income, and non-residents on Polish-sourced income only. Residency for tax purposes is established if an individual's "centre of economic or personal interests" (ośrodek interesów osobistych lub gospodarczych) is located in Poland, or if their stay in Poland is more than 183 days in the year.

3.1.2 CIT

CIT in Poland has a flat rate of 19%, and it applies to companies, foundations, associations, and other organisations. Entities are taxed on worldwide income if they are tax residents, or on Polishsourced income only if they are non-residents. Tax residency is established if an entity's seat or management is located in Poland.

3.1.3 VAT

VAT in Poland has four rates: 23% (basic), 8% (first reduced), 5% (second reduced), and 0% (intra-Community delivery of goods and exports). VAT has been the most important source of tax revenue in Poland, and is the largest contribution to the state budget (40% in 2016) (Główny Urząd Statystyczny, 2017). See *Table 3.1* for an overview of applicable rates with important examples of products to which they apply.

Table 3.1 - VAT reduced rates with examples

VAT rate	Important examples
8%	meat products; sugar; passenger transportation.
5%	bread; fish; books.
0%	intra-Community delivery of goods; exports to non-EU countries.
Exemption	enterprises with annual turnover below PLN 200,000; services in the areas of education, culture, sport, and health.

Source: Frizis et al. (2017)

3.1.4 Excise tax

Excise tax in Poland is applied to tobacco, alcohol beverages, passenger cars, and energy. See *Table 3.2* for an overview of applicable rates.

Table 3.2 - Excise tax rates for the most important product

Excise rate	Product
PLN 5,704/1 hectolitre	ethyl alcohol 100% volume
PLN 7.79/1 hectolitre per Plato degree	beer
PLN 158/1 hectolitre	wine
PLN 97/1 hectolitre	cider and perry below 5% volume
PLN 206.76 for 1,000 pieces and 31.41% of the maximum retail price	cigarettes
PLN 1,540 /1,000 litres	gasoline
PLN 1,171/1,000 litres	diesel fuel

Source: Ministry of Finance of Poland (2016)

3.2 Trends in collectability

In 2016, tax revenues amounted to PLN 89.3 billion (PIT), PLN 33.8 billion (CIT), PLN 126.6 billion (VAT), and PLN 65.7 billion (excise). The trends in collectability in the years 2003–2016 can be traced on *Graphs 3.1–2*. Collection measured in relation to GDP peaked

in the period 2007–2008, with PIT at 5.2% (2008), CIT at 2.7% (2007), VAT at 8.1% (2007), and excise tax at 4.1% (2007).

120 000

100 000

80 000

40 000

20 000

2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

VAT excise CIT PIT

Figure 3.1 - Tax collection in Poland 2003-2016 (in PLN millions)

Source: Ministry of Finance of Poland (2017a-b) and Główny Urząd Statystyczny (2017)

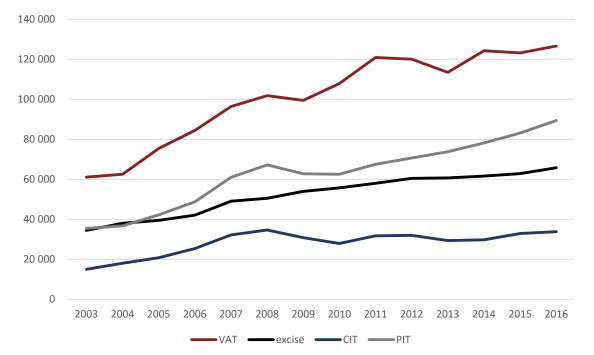


Figure 3.2 - Tax collection in Poland 2003-2016 relative to GDP

Source: Ministry of Finance of Poland (2017a-b) and Główny Urząd Statystyczny (2017)

3.3 Magnitude of tax gaps

Dominik Gajewski (Wyborcza.biz, 2015; Money.pl, 2017; Rp.pl, 2017) estimates the CIT gap in Poland at PLN 4346 billion. The VAT gap in Poland was 24% in 2014 (Poniatowski et al., 2016). The annual excise gap is estimated at PLN 2 billion on alcohol products, 3 billion on tobacco products, and 1.5 billion on fuels (Gazeta Prawna, 2016). There are no estimates of the PIT gap in Poland.

3.4 Methods used to combat tax non-compliance

For a detailed analysis of the methods used to combat tax non-compliance in Poland, please see the companion paper: Frizis, I., Głowacki, K., & Mirecka, K. (2017), Peer country paper – Poland, Center for Social and Economic Research.

4. Slovak Republic

4.1 Tax system in the Slovak Republic

In 2004, the tax system in the Slovak Republic underwent a fundamental reform. The following changes were introduced:

- introduction of flat rate for CIT, PIT, and VAT—at 19%;
- · elimination of a number of tax derogations; and
- abolishment of a number of taxes: tax on dividends, gift tax, and real estate transfer tax.

This tax reform made the tax system less complex and more transparent, and it contributed to the Slovak Republic's economic performance. At the same time, the Slovak Republic became the first OECD country to have introduced a flat PIT. On the other hand, the new system featured a relatively distortive tax mix and high tax wedge for low-income workers, and resulted in a low level of tax revenues and poor levels of tax compliance. To address these issues, a new reform was carried out in 2012-2013. PIT progressivity was restored, and the CIT increased to 23% (later reduced to 22% and 21%).

4.1.1 PIT

In the Slovak Republic, income for PIT purposes includes income from employment, income from entrepreneurial activities, income from other self-employment activities, rental income, and other income. There are two PIT rates:

- 19% for income up to 176.8 times the subsistence level (EUR 35,022.31 in 2016); and
- 25% for income in excess of that amount.

Moreover, the following regulations apply:

- income from capital gains is taxed at a 19% rate. Certain types of capital gains (gains on the sale of shares, rental income from real estate) are exempt from tax up to EUR 500 annually;
- non-cash benefits, dividend income, and income from the sale of shares are subject to health insurance contributions; and

dividend income is a subject to tax since 1 January 2017, the measure establishes a 7% withholding tax on dividends.

Tax residency is established if the period of a person's stay in the Slovak Republic is at least 183 days in the tax year. PIT is charged on worldwide income, regardless of whether the income is remitted to the Slovak Republic or not.

The personal allowance, equal to 19.2 times the minimum subsistence amount (which is announced on 1 January of each year—EUR 3,803 in 2016), is available to all individuals whose annual tax base does not exceed a certain limit. If the tax base of a taxpayer exceeds a certain limit, the personal allowance is reduced progressively.

4.1.2 CIT

Tax residency is established if the company's seat is in the Slovak Republic. CIT is charged on worldwide income, and international treaties are used to avoid double taxation. As of 1 January 2017, corporate income is taxed at 21% (instead of 22%).

4.1.3 VAT

The Slovak Republic has the following VAT brackets:

- 20% basic rate;
- 10% reduced rate, applicable to: certain medical products, printed materials, and basic foods (e.g. milk, butter, and meat);
- 0% exports; and
- exemption applies to postal services, financial and insurance services, education, public radio and TV broadcasting services, health and social services, the transfer and leasing of real estate (with exceptions), and lottery services.

4.1.4 Excise tax

The following products are subject to the excise tax: tobacco products, wine, spirits, beer, mineral oil, electric energy, coal, and natural gas. Excise tax rates are fixed in EUR per unit of good.

4.2 Trends in collectability

The tax-to-GDP ratio in the Slovak Republic has had an increasing tendency in recent years, having grown from 28.4% in 2012 to 32.3% to 2015 (OECD, 2016b). The highest revenues are currently obtained from social security contributions, corresponding to 44%

of all collections. Revenues from VAT are also high in comparison with other countries, amounting to 21% of overall collections. Taxes on corporate income equal 11%, a figure which is also considered to be relatively high. Taxes on goods and services excluding VAT (e.g. excise) equal the OECD average (13%). In contrast, taxes on personal income, profit, and gains are below the average (10%) (OECD 2016b).

2 500 000

1 500 000

1 000 000

500 000

2 000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

Budget Actual

Figure 4.1: PIT - budgeted versus actual collections (in EUR thousands)

Source: Hajko (2016)

Figures 4.1-4 illustrate the trends in collectability of taxes in the Slovak Republic. Graph 4.1 shows two noticeable declines of the PIT collection: in 2004 and again in 2009–2010. The decline in 2004 was caused by the introduction of a flat PIT rate of 19%, while the fall of revenues in 2009–2010 was one of the results of the economic crisis. Revenues rebounded since then, peaking at EUR 2.2 billion in 2015.

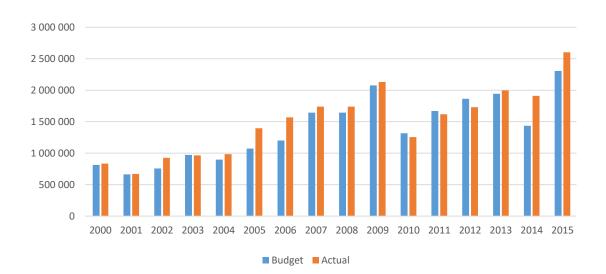


Figure 4.2: CIT - budgeted versus actual collections (in EUR thousands)

Source: Hajko (2016)

As in the case with PIT, CIT collection showed a decline in 2004, the year in which the single flat rate of 19% was introduced for PIT, CIT, and VAT. Another period of falling revenues came after 2009 as a result of the economic crisis. In 2015, CIT collection exceeded the former revenue peak of 2009 (EUR 2.1 billion), reaching EUR 2.6 billion.

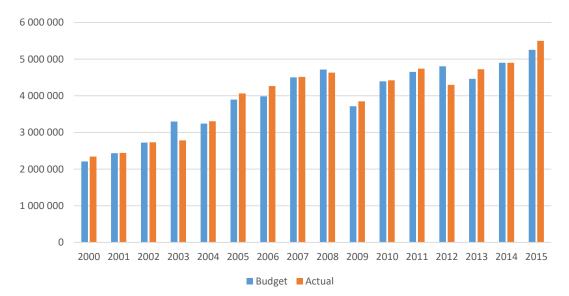


Figure 4.3: VAT - budgeted versus actual collections (in EUR thousands)

Source: Hajko (2016)

VAT collection grew monotonously in the years 2000–2008, peaking in 2008 at EUR 4.6 billion before falling to EUR 3.9 billion in the following years. By 2015, it recovered and reached an all-time high of EUR 5.5 billion.

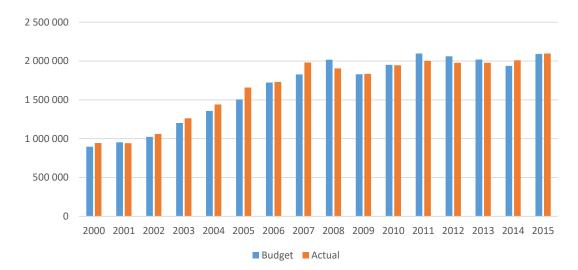


Figure 4.4: Excise - budgeted versus actual collections (in EUR thousands)

Source: Hajko (2016)

Revenues from excise tax grew steadily in the years 2000-2007 before falling in the years 2008-2010. The years 2011-2014 showed a stagnant performance, with revenues eventually peaking at EUR 2.1 billion in 2015.

4.3 Magnitude of tax gaps

No estimates of the PIT gap and the excise gap are available. Similarly, there is no estimate of the CIT gap, although the government is cooperating with the International Monetary Fund to establish a relevant methodology. The VAT gap in the Slovak Republic was 30% in 2014, one of the highest in the EU (Poniatowski et al., 2016).

4.4 Methods used to combat tax non-compliance

As part of the 2012–2016 Action Plan to Combat Tax Fraud (Akčný plán boja proti daňovým podvodom na roky 2012 až 2016), a number of counter-fraud measures were adopted. Since the plan had met with success, resulting in a tax revenue increase of EUR 2.1 billion in the period of 2012–2015 (podnikajte.sk, 2015), the Ministry of Finance and the Ministry of the Interior of the Slovak Republic implemented additional measures to combat tax avoidance

in 2015. According to the President of the Financial Administration (Slovak customs and tax administration) František Imrecze, the 2012-2016 measures have paid off, resulting in the highest level of tax collection not only in 2016, but also in the history of the Slovak Republic (sme.sk, 2017). The section bellow presents the most important measures of the Action Plan.

4.4.1 VAT control statement (Kontrolný výkaz DPH)

On 1 January 2014, the Financial Administration established the VAT control statement as one of the tools to combat tax avoidance. The statement is used to provide comprehensive information about taxable transactions that are reported on the basis of invoices (or other documents) drawn up and received by the VAT payer. Every invoice has its own unique code and contains data about suppliers, customers, type of goods or service, tax base, tax rate, and actual tax amount (Hajko, 2016). The statement does not stipulate deliveries which are part of the "summary statement" (Súhrnný výkaz DPH) or the export of goods and services to third countries (Finančná správa Slovenská republika, 2017). The Financial Administration controls and reviews uploaded data and searches for tax fraud and any inconsistencies or ambiguities (such as invoice replacement and other manipulations in the accounting books). All VAT payers are obliged to submit their VAT control statement on a monthly or quarterly basis. The statements must be submitted electronically, separately or jointly with the tax form no later than 25 days after the end of the tax period. The implementation of the VAT control statement has had an ambiguous effect on the tax system, with increased attempts at tax optimisation by taxpayers quoted as one of the results (Hajko, 2016).

4.4.2 Tax guarantee (Zábezpeka na daň)

Since October 2012, all newly registered VAT taxpayers who are categorised as "potentially risky" (*rizikové osoby*) are obliged to deposit a sum of money with the tax office (*daňový úrad*) for twelve consecutive months. Among the factors which classify taxpayers as being risky are: past unpaid balances, revoked registrations, or declared bankruptcy or liquidation. The level of tax guarantee (from EUR 1,000 to EUR 500,000) is established by the finance office.

4.4.3 Electronic cash registers (Elektronické registračné pokladnice)

All entities selling goods or services are required to record their sales since 2015. By law, all transactions in cash and by other means of payment, in particular, by electronic means of payment or by a voucher entitling a purchase of goods must be registered through an

electronic registration device equipped with a built-in registration system, memory, display device for customers, clock, keyboard, and printer (Zákon č. 289/2008 Z. z., 2008).

4.4.4 Reverse VAT charge (Mechanizmus samozdanenia)

The purpose of the reverse charge is to avoid carousel fraud by shifting the obligation of paying VAT from the sellers to the buyers of goods and services. In the Slovak Republic, goods like mobile phones, scrap iron, or gold follow this measure.

4.4.5 Limitation of payments in cash (Omedzenie plateb v hotovosti)

Since 1 January 2013, it is established that all payments exceeding the threshold of EUR 5,000 must be non-cash payments. In the case of a payment between two natural persons who are not entrepreneurs, the limit is raised to EUR 15,000. According to the government, the measure limits tax fraud, as well as money laundering and corruption.

4.4.6 Receipt lottery (Národná bločková lotéria)

The receipt lottery, established in September 2013, is a competition in which valid cash receipts are used in participation. The aim of the competition is to hinder tax evasion as well as raise awareness about tax compliance. Every week, 100 people win EUR 100, and one person wins the jackpot. There is also the so-called third chance for participants who sign themselves in as registered participants. Finally, participants have the possibility to participate in a TV contest called TV CHANCE (TV ŠANCA) and win prizes.

Initially, society showed much interest the lottery, with 9 million views of the official webpage in the first week. Although the popularity of the lottery has declined since, the data from the lottery is still a valuable source of information for the tax offices. Since 2013, it is anticipated that the government has registered nearly 120 million cash receipts.

4.4.7 Tax Cobra (Daňová kobra)

Tax Cobra teams up the Financial Administration, the General Prosecutor's Office, the Police Presidium, and the National Criminal Agency in order to tackle serious tax crimes since 2012.

According to the President of the Financial Administration František Imrecze, Tax Cobra managed to retrieve a total of EUR 710 million. Currently, there are 192 running tax checks, the total worth of which is estimated at EUR 85 million (sme.sk, 2017).

4.4.8 Tax license (Daňová licencia)

Introduced in 2014, the tax license works as a CIT floor. The tax license is applied as follows:

- small companies without VAT registration: EUR 480;
- small companies with VAT registration: EUR 960; and
- large companies (turnover over EUR 500,000): EUR 2,880.

Although some exemptions are applicable (for companies in the first year of operation or non-profit organisations, among others), the measure has provoked controversy being referred to as a "tax on losses". Hence, it has been decided that the measure will be abolished on 1 January 2018.

4.4.9 Collaboration of the Slovak Republic and the Czech Republic Please see Section 1.4.5.

5. Ukraine

5.1 Tax system in Ukraine

5.1.1 PIT

The PIT in Ukraine has a flat rate of 18%. In the past, PIT changed from a flat rate of 13% to the progressive rates of 15%, 17%, and 30%, and in 2016, back to the current flat 18% rate.

Income for PIT purposes includes income from employment and civil law contracts, as well as passive income (e.g. interest, dividends, and royalties). Tax residents are taxed on their worldwide income; non-residents are taxed on their Ukraine-based income only.

As of August 2014, a temporary military tax has been introduced on personal income. The military tax coincides with the reformation of the Ukrainian Military Forces and is related to the ongoing military operation against the Russia-inspired guerrillas in the Donbas region in the east of the country. The rate of the military tax is 1.5%, and its base is the same as that of PIT.

5.1.2 CIT

CIT in Ukraine has a flat rate of 18%, and it applies to resident entities with regard to worldwide income and to non-resident entities with regard to Ukraine-sourced income.

5.1.3 VAT

Entities that carry out business on the territory of Ukraine are obliged to register for VAT if their turnover exceeds UAH 1,000,000 for the past twelve months.

Ukraine has the following VAT brackets:

- 20% basic rate;
- 7% selected medical supplies;
- 0% exports; and
- exemption applies, among others, to domestic periodicals and books, special purpose goods for disabled persons, selected medicines, and goods for medical purposes.

5.2 Trends in collectability

The tax mix in Ukraine closely resembles that of EU countries. Its main component is VAT, which accounts for 35% of all tax revenues, followed by PIT (17.8%), excise tax (12.4%), natural resources and ecological taxes (9.6%), and CIT (7.7%) (data for 2015). See *Figures* 5.13 for an overview of the tax mix in Ukraine as of 2015, its evolution in time relative to GDP, and total tax collections.

In general, tax collection in Ukraine is characterised by high volatility, and compared to the V4 countries, they depend less on the performance of the economy than on the officials' will to enforce discretionary and largely unofficial and uncoordinated measures (Dubrovskiy, 2016).

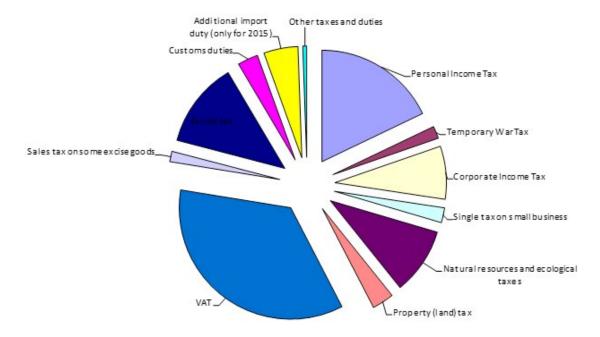


Figure 5.1: Tax mix in Ukraine in 2015

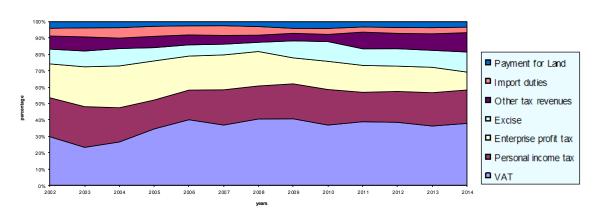
Source: Dubrovskiy, 2016

Payment for Land
Import duties
Other tax revenues
Excise
Enterprise profit tax
Personal income tax
VAT

Figure 5.2: The evolution of the tax mix in Ukraine relative to GDP (2002–2014)

Source: Dubrovskiy, 2016

Figure 5.3: The evolution of the tax mix in Ukraine relative to total tax collection (2002–2014)



Source: Dubrovskiy, 2016

5.3 Magnitude of tax gap

There exist no official estimations of the tax gaps in Ukraine. There are some unofficial estimations, which indicate significant gaps with respect to the major taxes.

The PIT gap in Ukraine is not related to the PIT burden itself, which is relatively low. Instead, it is related to the high level of social security contributions, especially relative to the value returned by the state.⁵ As a result, income is often underreported.

The magnitude of the CIT gap is exacerbated by the weak institutional environment in Ukraine, which leads many businesses to operate from off-shore locations in order to protect themselves from regulatory uncertainty and the risk of expropriation. Another factor is the use of tax havens—on average, around USD 10 billion per annum are estimated to be siphoned out to tax havens (Dubrovskiy, 2016).

VAT fraud is institutionalised in the form of organised "tax laundries" that operate on a massive scale under the patronage of top tax officials. There is abundant evidence that tax authorities are directly involved in VAT fraud (Dubrovskiy, 2016).

Excise tax evasion can be attributed to the relatively high rates, which make smuggling profitable, particularly with respect to spirits and fuels. Smuggling is exacerbated by corruption among customs officials and practiced especially across the border with Russia and Transnistria, a Russian-controlled region of Moldova. Additionally, the price elasticity of spirits is increased by the availability of popular substitutes, as well as counterfeit and homemade alcohols.

5.4 Methods used to combat tax non-compliance and lessons for Ukraine

Methods of enforcing tax liabilities in Ukraine are largely limited to inspections, which may be accompanied by raids of the tax police, arrests of assets, and criminal prosecutions (Dubrovskiy, 2016). There exists a top-down system of "personal motivation" through which tax officials at lower levels of the hierarchy are encouraged by officials at higher levels to meet specified targets of collections.

⁵ For example, pensions are decoupled from the level of social security contributions, and the pension system itself went bankrupt in the past and had to be bailed out.

Vladimir Dubrovskiy, an expert from CASE Ukraine, speaks of an "industry of tax evasion" in the context of the Ukrainian tax system and describes it as routinely involving patronage, corruption, opaque negotiations, and blackmailing.

The major problem of the Ukrainian tax system is institutional weakness and the prevalence of corruption. It can be concluded that the massive tax gap in Ukraine is principally caused by the massive gap between the condition of the institutions of the state de jure and de facto, which is typical to some emerging countries. De jure (i.e. as prescribed by the relevant legislation), the tax system in Ukraine is largely similar to those of EU Member States, including the V4 countries. However, the performance of the system de facto is quite divergent. Tax liabilities are reported and enforced through unofficial channels and with the use of unofficial means.

Institutional weakness demonstrates itself, among other things, in corruption. Corruption is prevalent among tax authorities, who are reported to use coercive methods during audits (Dubrovskiy, 2016). All these factors make tax revenues highly unstable and a fraction of actual liabilities. Moreover, they are a source of unfair competition among market players.

These systemic flaws are not specific to the tax environment, but are prevalent in many areas of the Ukrainian state and are historically conditioned. The ailing condition of institutions such as the rule of law, property rights, and the judicial system creates an environment of uncertainty and insecurity, drastically increasing the transaction costs of contracting. It also leads to the suboptimal allocation of rents – for example, by rewarding with the best opportunities oligarchs, who owe their market position not to superior market performance, but to other factors. Such factors commonly include political connections (that often date back to the beginning of the transition period or before) and are harmful to present-day market competition. In general, this set of institutions, which are called extractive in the literature (e.g. Acemoglu et al., 2005) is a serious disturbance of the free market.

Hartwell (2016) discusses in depth how the set-up of institutions in Ukraine has led to suboptimal economic outcomes. It compares Poland and Ukraine, two countries that shared similar macroeconomic conditions at the beginning of the transition period (i.e. in the years 1989–1991), but followed very different paths of economic development. At the onset of the transition, Ukraine's GDP per capita was slightly more than that of Poland; currently, it is one-third that of Poland.

These findings are consistent with the recommendations of Professor Leszek Balcerowicz, the author of the Polish economic transition in the early 1990s and former strategic advisor to the President of Ukraine Petro Poroshenko. According to Professor Balcerowicz, the main reforms in Ukraine must include combating corruption, strengthening the judiciary, and improving the rule of law. Such reforms will eventually have a

positive effect on the Ukrainian tax system and tax compliance by eliminating corruption and unofficial channels of enforcement, increasing legal certainty, and thereby improving the business environment and reducing compliance costs.

Conclusions and recommendations

Due to analogies in modern economic history, the Visegrad countries still share many similarities in their tax systems. Their tax rates are low in comparison to Western European countries (with the prime example being the 9% CIT in Hungary, the lowest rate in Europe), which is related to their current level of economic development and a lower share of their governments' expenditures in GDP. Time to comply with corporate tax obligations shows room for improvement (from 192 man-hours in the Slovak Republic to 277 man-hours in Hungary) (PwC, 2017). Legislative changes in the tax systems tend to be frequent – for example, in Poland, there were, on average, over three amendments of the PIT, over two amendments of the CIT, and two amendments of the VAT *each year* between 2008 and 2016 (e.g. Poniatowski, 2016a). Finally, tax gaps in the V4 countries are still relatively large. The V4 countries should therefore focus on fine-tuning their tax systems to make them predictable, user-friendly, and efficient.

Due to a different set of historical conditions, Ukraine has followed a different path than the V4 countries, despite similarities in initial macroeconomic conditions, and it currently faces a different set of challenges. Its tax gaps are wide, but the main problems can be characterised as systemic flaws, such as institutional weakness and corruption.

The current project resulted in a set of specific conclusions and related recommendations that can be summarised as follows:

- Tax gaps remain a considerable challenge for the V4 countries and Ukraine. For example, the VAT gap in 2014 amounted to 16% in the Czech Republic, 18% in Hungary, 24% in Poland, and 30% in the Slovak Republic. Such performance has a negative impact on public finances in those countries. It is also negative from the social point of view, as it implies that large-scale frauds are committed every year, with only a limited share disclosed and prosecuted.
- Accordingly, many new measures have recently been introduced by policymakers to combat tax non-compliance. Although the measures differ by country, some similarities emerge in the V4 group. For instance, there is an increasing trend to intensify the use of information technology in tax administration, as exemplified by the Electronic Records of Sales in the Czech Republic, the Electronic Public Road Trade Control System

in Hungary, Standard Audit File-Tax in Poland, and the Electronic Cash Registers in the Slovak Republic. This is a positive trend, as information technology may deliver more timely and accurate data, while at the same time reducing administrative costs for the tax authorities and compliance costs for companies. Another visible trend in the region is that of increasing the use of reverse VAT charge.

- Tax systems should be designed to strike the right balance between simplicity and the functions they fulfil. Experts have observed that the complexity of tax systems is one of the reasons of non-compliance. For example, the multitude of VAT rules and exemptions in Poland makes the system less transparent, giving rise to loopholes that can be abused by fraudsters. Therefore, tax systems should be kept as simple as possible at each given level of redistribution that they strive to achieve.
- Tax policies should be conducted with predictability in mind. The current tax environment in the V4 countries too often is one of unpredictability, which is not favourable to long-term corporate planning.
- The study has shown the importance of international cooperation in tackling tax non-compliance. This is crucial in case of frauds that are international by design (e.g. the Missing Trader Intra-Community and the related carousel fraud). In this respect, the voices of individual EU Members States that come up with suggested solutions (as in the case of the Czech proposal to introduce a pilot reverse VAT charge scheme on the EU level) should be given sufficient attention. International cooperation can also involve liaison of tax police groups, exchange of information, exchange of experience between officials and experts, and joint trainings. The Czech-Slovak cooperation in the area of combating tax non-compliance is a good, if emergent, example of collaboration that should be developed in the countries of the region.
- Ukraine's effort at reducing tax gaps must be conducted as part of the general institutional reform in the country. All specific measures will remain at best partial and certainly short-lived solutions as long as there remains corruption among tax officials and distrust of the society in the institutions of the state, and as long as tax liabilities continue to be enforced via a network of half-official channels operating within the "industry of tax evasion". Accordingly, systemic measures targeted at eliminating corruption from public and private life, upholding legal certainty and the rule of law, protecting property rights, and fostering independent judiciary must be continued and considered a priority.

Bibliography

Acemoglu, D., Johnson, S., & Robinson, J. (2005), *Institutions as a Fundamental Cause of Long-Run Growth*.

Budapest Business Journal (2017), *Slovakia could adopt a Hungarian style EKAER system*. https://bbj.hu/economy/slovakia-could-adopt-a-hungarian-style-ekaer-system_135845.

BUSINESSEUROPE (2015), Annex: List of practical examples on the impact of the new Electronic Road Freight Control System (EKAER) in day-to-day operations to and/or from Hungary collected directly from the ground. http://www.ecgassociation.eu/Portals/0/Documentation/Hungarian%20EKAER/Annex_BUSINESSEUROPE%20letter%20on%20the%20EKAER%20 examples.pdf.

Central European Financial Observer (2016), *Hungary: Government to expand scope of online register system from end-September.* http://www.financialobserver.eu/recent-news/hungary-government-to-expand-scope-of-online-register-system-from-end-september/.

Český rozhlas (2017), Mírnější pokuty za kontrolní hlášení? Nejde o narovnání podnikatelského prostředí! namítají živnostníci. http://www.rozhlas.cz/radiozurnal/zajimavosti/_zprava/mirnejsi-pokuty-za-kontrolni-hlaseni-nejde-o-narovnani-podnikatelskeho-prostredi-namita-ji-zivnostnici--1705044.

Český statistický úřad (2017), Ze statistik ČSÚ nelze určit vliv zavedení EET. https://www.czso.cz/csu/czso/ze-statistik-csu-nelze-urcit-vliv-zavedeni-eet.

Daňová Kobra (2017), About Tax Cobra. http://www.danovakobra.cz/tax-cobra.html.

Dubrovskiy, V. (2016), *Peer country paper - Ukraine*, Center for Social and Economic Research Ukraine.

E15.cz (2017), Kontrolní hlášení přineslo deset miliard navíc, tvrdí Babišova náměstkyně. http://zpravy.e15.cz/domaci/politika/kontrolni-hlaseni-prineslo-deset-miliard-navic-tvr-di-babisova-namestkyne-1327955.

EKAER (2015), Electronic Trade and Transport Control System. http://ekaer.hu/en/.

European Commission (2017a), Excise Duty Tables - Part I Alcoholic Beverages.

European Commission (2017b), Excise Duty Tables - Part II Energy Products and Electricity.

European Commission (2017c), Excise Duty Tables - Part III Manufactured Tobacco.

Financial Administration (2016), *Electronic records of sales*. http://www.financnisprava.cz/en/financial-administration/electronic-records-of-sales.

Finančná správa Slovenská republika (2017), *Kontrolný výkaz DPH*. https://www.financnasprava.sk/sk/podnikatelia/dane/dan-z-pridanej-hodnoty/kontrolny-vykaz-dph.

Finančná správa (2014), *Finančná správa*. https://www.financnasprava.sk/sk/pre-media/novinky/archiv-noviniek/detail-novinky/_efek-boj-prot-dan-podv-na/bc.

Frizis, I., Głowacki, K., & Mirecka, K. (2017), Peer country paper – Poland, Center for Social and Economic Research.

Gazeta Prawna (2016), *Patologie w akcyzie to kolejny problem dla państwa. Winny węgierski spirytus*. http://podatki.gazetaprawna.pl/artykuly/942966,patologie-w-akcyzie-winny-wegierski-spirytus.html.

Główny Urząd Statystyczny (2017), Roczne wskaźniki makroekonomiczne. http://stat.gov.pl/wskazniki-makroekonomiczne/.

Hajko, J. (2016), Peer country paper - Slovak Republic, INEKO Institute for Economic and Social Reform.

Hartwell, C. (2016), Two Roads Diverge - The Transition Experience of Poland and Ukraine, Cambridge University Press.

iDNES.cz (2017), Finance se chlubí růstem tržeb kvůli EET, statistikům vyšla jiná čísla. http://ekonomika.idnes.cz/eet-trzby-csu-financni-sprava-d2I-/ekonomika.aspx?c=A170209 _202559_ekonomika_och.

IMF (2017), IMF Country Report: Hungary Selected Issues. https://www.imf.org/~/media/Files/Publications/CR/2017/cr17124.ashx.

iROZHLAS (2017a), Nezavřelo 104 hospod, ale víc než 420, tvrdí pivovary. Čísla jsou průkazná, stojí si za svým Babiš. https://www.irozhlas.cz/ekonomika/nezavrelo-104-hospod-ale-vic-nez-420-tvrdi-pivovary-cisla-jsou-prukazna-stoji-si-za-svym-babis_201701270555_pjadrny.

iROZHLAS (2017b), Dvě firmy a 24 lidí stíhá policie z daňových podvodů. Měli způsobit škodu asi 415 milionů. https://www.irozhlas.cz/zpravy-domov/dve-firmy-a-24-lidi-stiha-policie-z-danovych-podvodu-meli-zpusobit-skodu-asi-415_1705301423_pj.

Komora daňových poradců České republiky (2015), 8. ročník Slovensko-českého fóra.

Kříž, E. (2016), Peer country paper - Czech Republic, EUROPEUM Institute for European Policy.

Limbek, Z., & Mako, A. (2016), The Expected Impacts of the Introduction of Online Cash Registers into the Taxi Industry, Institute for Economics and Enterprise Research. http://gvi.hu/files/researches/490/taxi_2016_summary_170131.pdf.

Ministry of Finance of the Czech Republic (2017), *Ministr Babiš: Konečně máme návrh na reverse charge*. http://www.mfcr.cz/cs/zahranicni-sektor/rada-eu-ecofin/vysledky-ze-zasedani-rady-ecofin/ministr-babis-podarilo-se-nam-prosadit-n-27439.

Ministry of Finance of Poland (2016), *Stawki akcyzy*. http://www.finanse.mf.gov.pl/akcyza/stawki-akcyzy.

Ministry of Finance of Poland (2017a), *Wpływy budżetowe*. http://www.finanse.mf.gov.pl/budzet-panstwa/wplywy-budzetowe.

Ministry of Finance of Poland (2017b), *Wstępne szacunkowe wykonanie budżetu państwa w 2016 r.* http://www.mf.gov.pl/ministerstwo-finansow/wiadomosci/komunikaty/-/asset_publisher/6Wwm/content/wstepne-szacunkowe-wykonanie-budzetu-panstwa-w-2016-r?redirect=http%3A%2F%2Fwww.mf.gov.pl%2Fministerstwo-finansow%3Fp_p_id%3D101_INSTANCE_dNH3%26p_p_lifecycle%3D0%26p_p_state%3Dnormal%26p_p_mode%3D-view%26p_p_col_id%3D_118_INSTANCE_9Jwz_column-2%26p_p_col_count%3D1#p_p_id_101_INSTANCE_6Wwm_.

Ministry of National Economy of Hungary (2010), *Hungary's flat-rate personal income tax*. http://www.mfa.gov.hu/NR/rdonlyres/68F5E85D-7062-4001-8FD8-7946055579B3/0/Hungaryflatratepersonalincometax.pdf.

Money.pl (2017), Luka CIT niemal tak wysoka jak VAT. "To zagrożenie dla bezpieczeństwa budżetu i państwa". https://www.money.pl/gospodarka/wiadomosci/artykul/luka-vat-luka-cit-unikanie-opodatkowania,238,0,2281454.html.

National Bank of Poland (2017), *Kursy średnie walut obcych w złotych (Tabela A)*. http://www.nbp.pl/home.aspx?f=/kursy/arch_a.html.

National Tax and Customs Administration (2017), Update for 2017. Government of Hungary.

OECD (2016a), OECD Revenue Statistcs - the Czech Republic. https://www.oecd.org/tax/revenue-statistics-slovak-republic.pdf.

OECD (2016b), OECD Revenue Statistcs - the Czech Republic. https://www.oecd.org/tax/revenue-statistics-slovak-republic.pdf.

OECD (2017), *Technology Tools to Tackle Tax Evasion and Tax Fraud.* https://www.oecd.org/tax/crime/technology-tools-to-tackle-tax-evasion-and-tax-fraud.pdf.

Palócz, É. & Zoltán Á. (2016), Peer country paper - Hungary, Kopint-Tárki Institute for Economic Research.

podnikajte.sk (2015), *Nový akčný plán boja proti daňovým podvodom*. https://www.podni-kajte.sk/pravo-a-legislativa/c/2161/category/pripravovane-zmeny-v-legislative/article/boj-proti-podvodom.xhtml.

podnikatel.cz (2017), *Daňová Kobra zachránila přes 7,5 miliard korun, pochlubil se Babiš*. http://www.podnikatel.cz/clanky/danova-kobra-zachranila-pres-7-5-miliard-korun-pochlubil-se-babis/.

Poniatowski, G. (2016a), Fiscal Policy Predictability in CEE – It's Time for Change. https://medium.com/@CASEresearch/fiscal-policy-predictability-in-cee-its-time-for-change-2049a6d0b591#.7hitxuwe5.

Poniatowski, G. (2016b), VAT Non-Compliance in Poland under Scrutiny, mBank - CASE Seminar Proceedings No. 142/2016.

Poniatowski, G. et al. (2016), Study and Reports on the VAT Gap in the EU-28 Member States: 2016 Final Report. CASE Network Studies & Analyses, Nr 483 (2016).

PwC (2017), *Paying Taxes* 2017. https://www.pwc.com/gx/en/paying-taxes/pdf/pwc-paying-taxes-2017.pdf.

Raben (2017), The consequences of the introduction of the system of monitoring of the road transport of goods. https://www.raben-group.com/knowledge-warehouse-knowledge-warehouse-article/news/the-consequences-of-the-introduction-of-the-system-of-monitoring-of-the-road-transport-of-goods/.

Rp.pl (2017), Ponad 40 mld zł luki w podatku CIT. http://www.rp.pl/Budzet-i-Podat-ki/303169813-Ponad-40-mld-zl-luki-w-podatku-CIT.html#ap-1.

Sales Data Controller (2014), *Hungary: use of fiscal cash register*. http://www.salesdatacontroller.com/hungary-fiscal-cash-register/.

sme.sk (2017), *Imrecze: Slovensko vyberá najviac daní v histórii*. https://ekonomika.sme.sk/c/20490689/imrecze-slovensko-vybera-najviac-dani-v-historii.html.

Sztanko, D. (2015), Further Details of the EKAER in Hungary. http://www.vatassociation.org/vat-news/news-from-iva-members/117-further-details-of-the-ekaer-in-hungary.

Varga, M. (2015), Hungary has a number of compelling anti-tax-fraud strategies. http://www.kormany.hu/en/ministry-for-national-economy/news/hungary-has-a-number-of-compelling-anti-tax-fraud-strategies.

Wyborcza.biz (2015), *Luka w CIT straszy. Jak z nią walczyć*? http://wyborcza.biz/biznes/1,1477 68,18935406,luka-w-cit-straszy-jak-z-nia-walczyc.html?disableRedirects=true.

Zákon č. 289/2008 Z. z. (2008), Zákon o používaní elektronickej registračnej pokladnice a o zmene a doplnení zákona Slovenskej národnej rady č. 511/1992 Zb. o správe daní a poplatkov a o zmenách v sústave územných finančných orgánov v znení neskorších predpisov. http://www.elcomp.sk/pdf/zakon_289_2008_rp_2015.pdf.

Zeldin, W. (2016), *Hungary: Broad Tax Reforms Adopted*. http://www.loc.gov/law/foreign-news/article/hungary-broad-tax-reforms-adopted/.