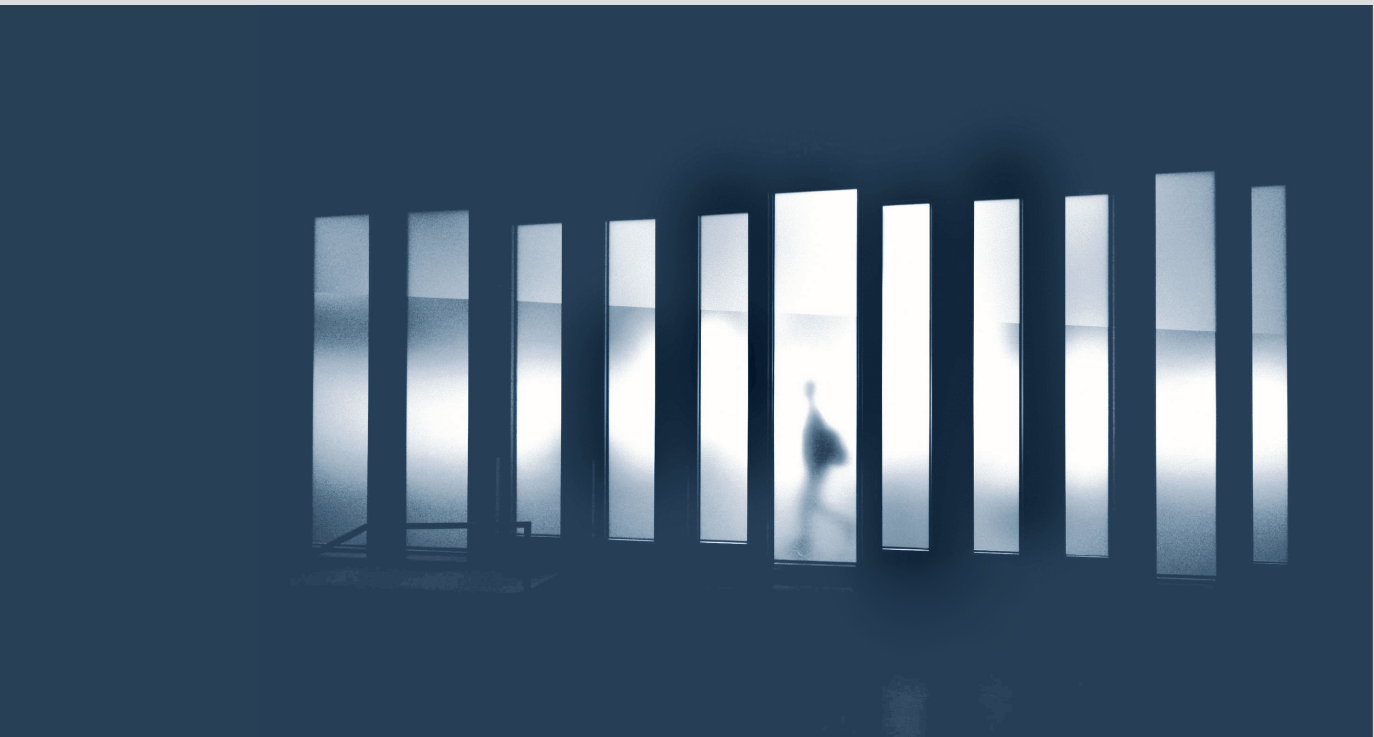


# Reducing Shadow Economies

## From Drivers To Policies



Reducing Shadow Economies  
From Drivers To Policies

Vytautas Žukauskas  
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Vytautas Žukauskas

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2019



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## INTRODUCTION

Across Europe, shadow markets constitute a significant portion of the economy. According to some estimates (Schneider, 2019), an average of 16 percent of GDP in EU member states is generated by the shadow economy. In Eastern and Southern Europe, the share of GDP produced by the shadow economy is even higher. On the one hand, governments admit that activities carried out within shadow markets create added value – they are included in official estimates of GDP among EU member states. On the other hand, governments have attempted to combat the shadow economy by introducing all kinds of policy measures aimed at reducing its operations as far as possible. This aim of eradicating the shadow economy at all costs is often counterproductive; it leads to punitive measures and less productive economic activity. As demonstrated by the great extent of shadow economies in some European countries, these efforts by governments are not always successful. In this report, we argue that one of the reasons why governments are often unsuccessful in reducing the extent of the shadow economy is that the policy measures are not directed towards those causes that *drive* the shadow economy.

Most studies of the shadow economy focus on measuring its extent. Researchers use a range of techniques to estimate the size and assess the dynamics of shadow economic activity within various sectors of the economy, and within different countries. The novelty of this study is that it focuses not only on the *scale* of shadow economic activities, but also on the *motives* of those who participate in them. In addition to questions surrounding **how much** activity takes place in the shadow economy, we also ask **why** people choose to engage in such activities. We believe that this question is absolutely critical to achieving an understanding of the shadow markets in various countries. The successful reduction of the shadow economy is only possible once we know what drives it.

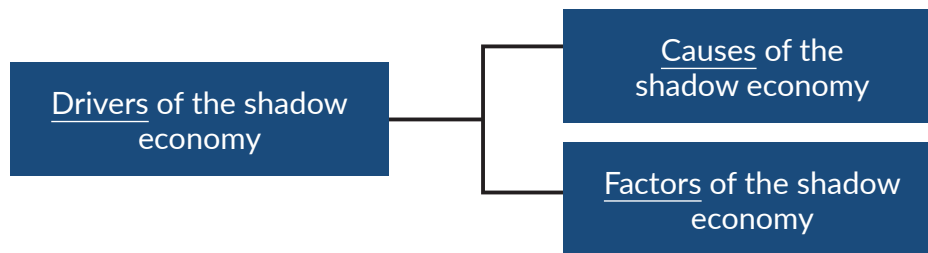
This report employs a direct (micro), survey-based approach to investigating the shadow economy. We use regression analysis to identify the significant drivers of the shadow economy. Data come from representative population surveys into public perceptions of the shadow economy and engagement in illicit activities. These surveys were conducted in six countries – Lithuania, Latvia, Estonia, Poland, Sweden and

the Czech Republic – during March and April 2018. This study is part of an ongoing series. The first similar study was conducted in 2015 by the Lithuanian Free Market Institute (2015). The volume of data gathered and the geographical span of the survey, covering six countries, provide a unique opportunity to undertake a quantitative analysis of what drives the shadow economy.

Moreover, this publication discusses the various measures and policies that have been adopted by the aforementioned countries to combat the shadow economy, and analyzes the extent to which these policies correspond to the drivers of the shadow economy that are identified. In doing so, this report provides evidence on the effectiveness with which governments are addressing the drivers of the shadow economy.

The shadow economy can generally be defined as economic activities (labor, goods produced, and services rendered) that are conducted in non-compliance with applicable laws, for the purpose of avoiding taxes and/or regulations. **Taxes and regulations are therefore the primary causes of the shadow economy.** In order to effectively counteract the shadow economy, it should not simply be viewed as a source of criminal offences. Instead, it is important to recognize that the shadow economy is primarily concerned with the creation of value. This suggests that the fight against the shadow economy is at its most productive not when illegitimate activities are completely eradicated, but when they are transferred from the unofficial to the official domain. In order for this to occur, one needs to consider the legal environment in which such economic activities are carried out. Is this environment conducive to working and doing business? Incentives to participate in the shadow economy always stem from restrictions placed upon legal economic activities, be they taxes or regulations. The important way to curb the shadow economy, therefore, is to create a favorable legal environment for economic activity, including clear rules and reasonable regulations.

Importantly, the same level of restrictions (tax rates or regulations) that **causes** shadow economic activity may have a varying impact on the shadow economy in different countries depending on their social, cultural, economic and legal circumstances. Even though incentives



to engage in shadow economic activity always stem from restrictions, other **factors** always exist that determine the extent to which high taxes and burdensome regulations influence the shadow economy. These **factors** vary in nature from economic (e.g. the standard of living or a country's economic situation) to social (e.g. public justification of the shadow economy), legal (e.g. laws regulating institutional policies aimed at combatting the shadow economy) and others. The difference between the restriction of economic activity as the primary **cause** of the shadow economy and these other **factors** is that, if economic activity were not restricted, the other factors alone would not give rise to the shadow economy. These factors can only be viewed as creating the circumstances or an environment that either facilitates engagement in the shadow economy or which deters individuals from illicit practices. It is important to understand these factors and the ways in which they influence the shadow economy if we wish to develop effective policy measures to reduce it. These circumstances are termed the **factors** of the shadow economy. This report analyzes the most important **factors** of the shadow economy, including:

- Tax morale and public attitudes towards the shadow economy. Justification of the shadow economy and attitudes towards paying taxes in general may influence participation in the shadow economy.
- Punishment and the likelihood of being detected. People's perceptions of the effectiveness of the institutions responsible for combatting the shadow economy – in particular, their perceptions of the severity of punishment and the likelihood of getting caught – may influence participation in the shadow economy.

- People's income and the affordability of goods and services. The degree to which people can afford essential goods and services, their level of income, the country's economic situation, and the conditions of the labor market, may influence participation in the shadow economy.
- Public attitudes towards the government and its services. The extent to which people sympathize with the government and are satisfied with public services may influence their decision to participate in the shadow economy.

In this report the **causes** of the shadow economy, together with its **factors**, are defined as **drivers** of the shadow economy.

The first part of this report is dedicated to discussing the results of our regression analysis on the drivers of the shadow economy. The second part looks into the measures and policies enacted in various countries in order to combat the shadow economy, and assesses the extent to which they correspond to the drivers identified. This is the second publication that addresses the national surveys. The first publication "Shadow Economy: Understanding Drivers, Reducing Incentives", which provided a descriptive analysis of the results of the population surveys as well as their interpretation in the socio-economic context of the countries, was published in 2018 (Lithuanian Free Market Institute, 2018d).

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# 1. DRIVERS OF THE SHADOW ECONOMY

## 1.1. Brief description of the method of analysis

This report is based on representative population surveys designed by the Lithuanian Free Market Institute and carried out in Lithuania, Latvia, Estonia, Poland, Sweden, and the Czech Republic during March and April 2018 by the market and public research company Spinter Research. The main aims of the surveys were to elicit public perceptions of the shadow economy and the level of participation in illicit activities in each of the countries surveyed. The target audience were residents aged between 18 and 75, with a total sample size of 6,055 across the six countries. The surveys were carried out based on the CAWI (Computer Assisted Web Interview) method using a standardized questionnaire. The survey allowed people's engagement to be identified across these sectors of the shadow economy:

- shadow goods and services, including excise goods;
- the shadow labor market.

The study is based on individual, micro-level data which serve as dependent variables in regressions. In addition, the surveys provide data on the factors of the shadow economy. As discussed above, our methodological approach distinguishes between the **causes** of the shadow economy and the **factors** of the shadow economy. Using regression analysis, we test which **factors** of the shadow economy are the most significant and pronounced: for all countries as a whole, and for each country

individually. The reasoning behind this is as follows: by definition, the shadow economy is caused by taxation and regulation as restrictions on legal economic activities.

The extent to which taxation and regulation influence the emergence of the shadow economy depends, however, on a range of different **factors**. This study therefore aims to identify the most significant factors of the shadow economy, and to investigate which factors influence the emergence of the shadow economy in the markets for goods, services and labor. Using this approach we will investigate the following **factors of the shadow economy**:

1. Justification of the shadow economy;
2. Deterrence (the likelihood of being caught and the severity of punishment);
3. Level of income and economic conditions;
4. People's attitude towards the government and its services.

These factors are based on the research hypotheses and correspond to the possible reasons why individuals react differently from one another to taxes and regulations, in terms of their engagement in the shadow economy.

Individual data on the factors of the shadow economy serve as independent variables. Through the use of regression analysis, we can test the extent to which the factors of the shadow economy (independent variables) explain the engagement of individuals in the shadow economy (dependent variables). That is,

we can identify those factors that are statistically significant; and for each of these statistically significant factors, we can investigate the quantitative relationships between the facts and people's engagement in the shadow economy. This analysis is carried out using a number of dependent variables representing a) different countries; and b) different segments of the shadow economy (goods and services, excise goods, the labor market). A more detailed explanation of the methodology, together with a list of dependent and independent variables, can be found in the methodological appendix at the end of this report.

## 1.2. Causes of the shadow economy

Restrictions on legal economic activities in the form of taxation and regulation are the primary cause of the shadow economy (Lithuanian Free Market Institute, 2015, p. 9). There can be no shadow economy without restriction of legitimate activity. This is primarily due to two reasons. First, the incentive to engage in the shadow economy always arises from some sort of benefit that one receives as a result of performing economic activities within the shadow economy, as opposed to legally. This benefit comes from a reduction in costs because the economic agent does not pay taxes or does not have to bear the costs of regulation. Engaging in economic activities within the shadow economy always poses some additional costs of illegality, that is, the risk of detection and penalty; therefore, this choice

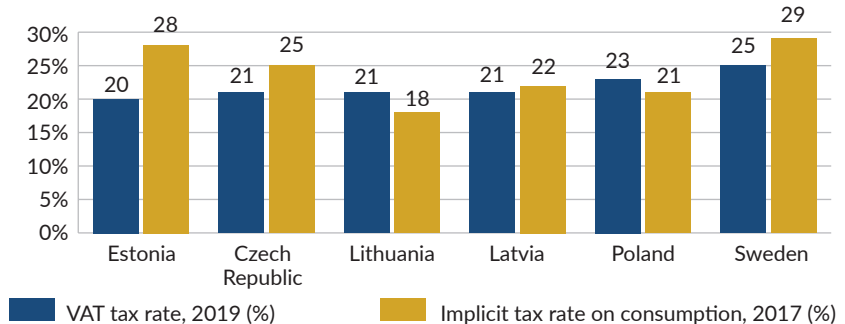


must inevitably be based on the benefits of illegality, or a reduction in the costs arising from taxation and regulation. When all other conditions are constant – the higher the taxes and the more stringent the regulations, the higher the incentive to participate in the shadow economy. The second reason is definitional: without taxes and regulation as restrictions on economic activities, there can be no ‘shadow’ activity, since non-compliance with the applicable laws governing economic activities cannot occur. The restrictions placed on economy activities vary significantly across different sectors and countries.

The taxation of goods and services makes them more expensive and creates differences between the prices of legitimate and illegitimate sales. Such differences in price create incentives to purchase cheaper, illicit goods. In general, the largest tax on goods and services (or consumption) is value-added tax (VAT). The rate of VAT varies between the countries investigated. In 2019, the rate of VAT is the lowest in Estonia, 20%. In the Czech Republic, Lithuania and Latvia, the VAT rate is 21%. The highest rates of VAT are in Poland and Sweden, 23% and 25%, respectively.

Figure 1 compares VAT rates for 2019 with the implicit tax rate (ITR) on consumption in each of the countries investigated, as calculated by the European Commission (2019b) in 2017 (the most recent data available). ITR is defined as revenue from all consumption taxes (VAT, excise taxes on tobacco, alcohol, energy and others) as a percentage of total household expenditure on consumption.

**Fig. 1. VAT rate and implicit tax rate on consumption**



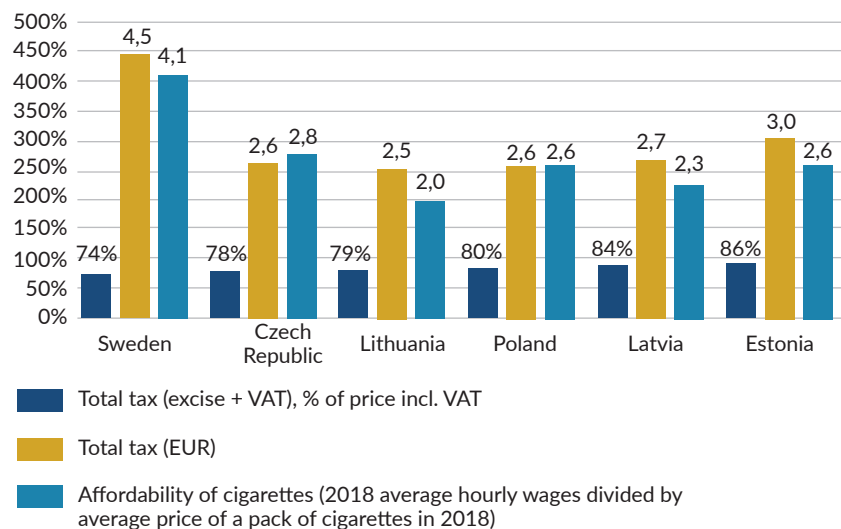
Source: European Commission (2019b)

Taking into consideration all consumption taxes paid by consumers, the tax burden varies quite significantly between the countries under analysis. In 2017 (the most recent year provided by the European Commission), the highest percentages of tax paid for consumption were in Estonia and Sweden, at 28% and 29%, respectively. In the Czech Republic it was slightly lower, 25%. In Latvia and Poland, the ratio stood at 22% and 21%, respectively. At 18%, the lowest ITR was to be found in Lithuania. An ITR significantly below the main VAT rate suggests: a) that many

goods are exempted from tax or taxed at a reduced rate; and/or b) the existence of a shadow economy in the goods market.

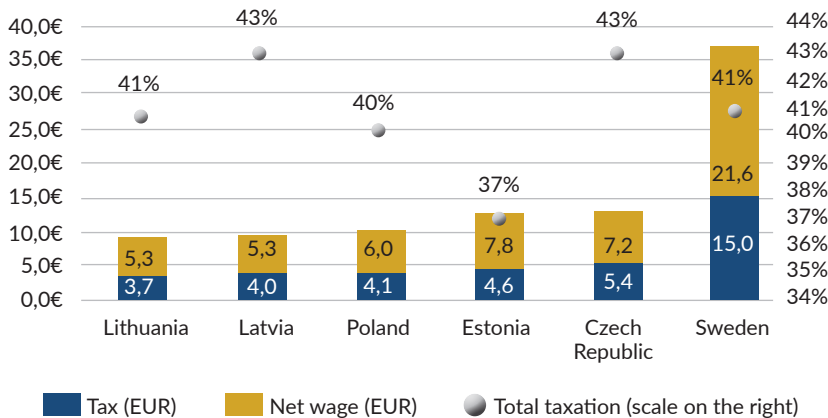
But tax rates alone do not tell the whole story. An interesting link exists between tax rates and the affordability of goods in each of the countries under analysis. In some countries, tax rates are lower in relative terms, but the affordability of goods (i.e. the quantity of goods that can be bought with an average income) is nevertheless low. At the opposite end of the spectrum, countries with relatively high tax rates are

**Fig. 2. Taxes and affordability of cigarettes, 2018**



Sources: European Commission (2019a), Eurostat (2019a)

**Fig. 3. Average hourly labor costs and labor taxation in 2018**



Source: Eurostat (2019a)

not necessarily those in which goods are least affordable.

Figure 2 shows that in the case of cigarettes (just like other excise goods), the tax rate is the highest in Sweden. But cigarettes are still more affordable in Sweden than in any of the other countries investigated. This does not mean that the tax rate is irrelevant to a consumer's decision to seek cheaper goods in the shadow economy. It simply suggests that in order to explain the effect of taxation on the shadow market, the level of income and the affordability of goods must also be taken into account. Higher taxes in high-income countries may stimulate less undeclared activity, because people in those countries can afford to pay higher taxes and higher prices. Conversely, even in countries where the tax rate is lower, these lower taxes may still provide an incentive for illicit purchases, because lower income levels make people in these countries more price-sensitive. As a driver of the shadow economy, taxation must therefore be analyzed in the context of the general level of income in the country.

Similar considerations about the impact of taxes on participation in the shadow economy apply in relation to the labor market. In 2018, the total rate of taxes on labor varied between the countries investigated, ranging from 37% of the average wage in Estonia, to 43% in Latvia and the Czech Republic. Figure 3 shows the average hourly wage in 2018 divided into net (take home) pay, and the proportion paid in tax (according to 2018 rates). Even greater differences between countries can be seen in average hourly wage after all taxes are deducted. In Lithuania and Latvia, this figure was around EUR 5; in Poland, it was equal to approximately EUR 6; in the Czech Republic, it was equal to around EUR 7; in Estonia, to approximately EUR 8; and in Sweden, it stood at around EUR 22.

So even where the tax rate itself is similar between countries, taxes are more burdensome when the net wage after tax is lower. In Sweden, the average wage earner pays more in tax on their labor (in percentage terms as well in nominal terms) than in Latvia or Estonia, but their income after tax

is much higher than in the Baltic countries. The average wage is around EUR 22 per hour after tax in Sweden, and EUR 5-6 per hour in Latvia and Estonia. This means that labor taxation in lower-income countries cannot be considered a lower burden even if the tax rate is somewhat lower. This is because taxation in these countries reduces people's ability to satisfy their more urgent needs in comparison to countries where the level of income is significantly higher.

Similarly, regulation is also a cause of the emergence of shadow economy, since it burdens legal economic activities. Regulation refers to various restrictions on economic activities. The scope and intensity of regulation vary significantly between different sectors and countries. Examples of regulation in consumer goods markets include restrictions on the sale of alcohol and tobacco, regulation governing the contents of products, and the banning of particular products. The Nanny State Index, published by the Epicenter Network (Snowdon, 2019), ranks EU countries according to how restrictive and paternalistic their policies are in relation to the sale of food, tobacco and alcohol products. The 2019 Nanny State Index finds Lithuania and Estonia to be the most restrictive countries among those covered by our analysis (in second and third place, respectively, among the 28 EU member states). Latvia, Sweden and Poland follow in 7th, 8th and 12th place, respectively. The Czech Republic is found to be the least restrictive, in 27th place overall.

The costs and effects of labor regulation are discussed in a number of studies. Employment protections have an impact on the cost of market entry and exit, and upon the costs associated with adjustments in

the workforce – thus affecting corporate decisions to enter or leave markets (Scarpetta, 2011), and contributing to a ‘dualism’ in the labor market (Lithuanian Free Market Institute, 2017). One aspect of this duality in the market, created by excessive regulation, is the emergence of the shadow labor market. The high costs associated with strict labor market regulation divide the labor market into a legal market that is capable of bearing the burden, and an undeclared market in which people and companies choose to avoid costs either because they are too heavy, or because they want to split the benefits of their reduced cost of operations. According to the Employment Flexibility Index 2019 (Lithuanian Free Market Institute, 2018a)<sup>1</sup>, the Czech Republic has the most flexible labor regulation (with a score of 80 out of 100). Regulation is less flexible in Lithuania (70 points) and Latvia (68 points). Estonia (59), Sweden (58) and Poland (58) are found to impose even greater rigidity on employment relationships.

The impact of minimum wage on the shadow economy may be twofold (Lithuanian Free Market Institute, 2018c). On the one hand, a higher minimum wage may shift informal wages into the formal sector, with employers paying a reduced ‘envelope wage’ on top of the increased minimum wage. On the other hand, some businesses may not be able to afford higher mandatory minimum wages,

and may be forced deeper into the shadow economy. They may formally employ workers using part-time contracts and pay additional ‘envelope wages’ to ensure that the total labor costs (official and undeclared) of employing a worker are lower than required under the mandatory minimum wage, but still equal to the competitive market wage. According to Eurostat (2019b), in 2017 the highest minimum wage (as a proportion of average monthly earnings) among the countries analyzed in this study was in Lithuania (48% of minimum wage), followed by Poland (47%). In Latvia and Estonia, the proportion is somewhat lower (44% and 42%, respectively). It is the lowest in the Czech Republic (37%). Sweden does not have a national minimum wage. Other examples of labor regulation that may increase the cost of compliance and lead to instances of shadow market activity are the regulation of working hours (Lithuanian Free Market Institute, 2019), limitations on the usage of fixed-term employment contracts (Lithuanian Free Market Institute, 2018b) and redundancy regulations.

To sum up, taxes and regulations on economic activities are the causes of the emergence of the shadow economy. Shadow economic activity evolves when economic agents find the taxes and regulation imposed on legitimate economic activity to be too burdensome, and choose to conduct such activities – operating a business, working, or buying goods and services – within the shadow economy. In other instances, high taxation and regulation create businesses that would otherwise not exist without them (e.g. the smuggling of excise goods). Taxes and regulations vary significantly

between different sectors of the economy, and between different countries. Even more importantly, the extent to which taxes and regulations create shadow markets depends on other factors within the economy (e.g. the level of income, justification of the shadow economy, the level of deterrence). We now turn to the investigation of these factors within different markets in the economy.

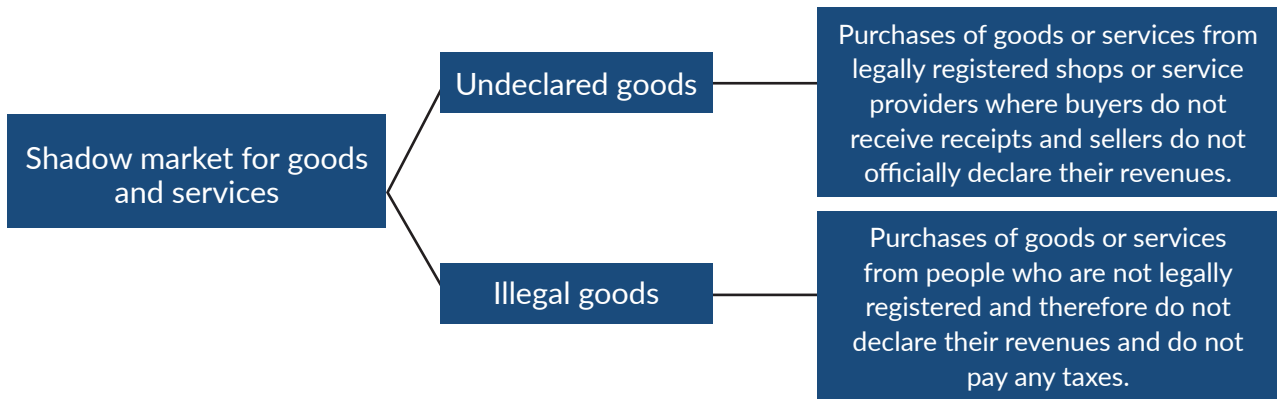
### 1.3. Goods and services

We begin our analysis of the drivers of the shadow economy by looking at the market in undeclared and illegal goods and services. By **undeclared goods**, we mean the situations in which people buy goods or services that may be legally offered for sale, from legally registered shops or service providers, but the buyers do not receive receipts and the sellers do not officially declare their revenues. By **illegal goods**, we mean the situations in which suppliers buy goods or services from people who are not legally registered and therefore do not declare their revenues and do not pay any taxes, e.g. illegal sales of contraband cigarettes.

Dependent indicators of undeclared goods and illegal goods (people who have bought undeclared or illegal goods) were regressed against independent indicators representing the factors of the shadow market. The results of the regressions showing significant factors of shadow goods are summarized in Table 1. The table provides an overall picture of what factors of the undeclared or illegal goods markets are statistically significant.

The results are indicated in different colors as well as in

<sup>1</sup> The Lithuanian Free Market Institute publishes the Employment Flexibility Index for the countries of the European Union and the Organisation for Economic Co-operation and Development. The index is based on the World Bank’s Doing Business data on labor market regulation, and covers a set of indicators on hiring, minimum wage, working hours, redundancy rules, and redundancy costs.



numbers, representing the impact of the driver. The percentage shows, on average, how much the likelihood that the respondent is participant of undeclared or illegal markets increases (if positive) or decreases (if negative) if the particular driver is applicable for them. (E.g. if the respondent thinks that punishment is severe, the likelihood that he or she has bought undeclared goods decreases by 23%.)

Colors in the table indicate the intensity of the impact (see

legend beneath the table for explanation). The greater the extent to which a particular driver *increases* the likelihood of participation in the shadow goods and services market, the darker the purple. Conversely, the greater the extent to which a particular driver *decreases* the likelihood of participation, the darker the green. Gray indicates that there is no statistically significant connection. Factors for each country are indicated vertically (mapped to the hypotheses of the research). The table shows the results of a

regression containing all countries (column 'All') as well as regressions for individual countries.

One of the drivers of the shadow economy is a combination of **justification** and so-called **tax morale**<sup>2</sup>. The likelihood of a person being participant in the shadow goods market

<sup>2</sup> The level of tax morale - the perception of moral obligation to pay taxes and a belief in contributing to society by paying taxes - has been linked by numerous studies to the overall level of involvement in various types of shadow activities. Justification of shadow economy is a similar notion.

**Table 1. Drivers of the shadow goods market**

Hypotheses	Significant independent variables (drivers)	Undeclared: When legally available goods are bought from legally registered shops or service providers, without a receipt and when the sellers do not officially declare their revenues.							Illegal: When goods and services are bought from people who are not legally registered and therefore do not declare their revenues and do not pay any taxes.						
		ALL	LT	LV	EE	PL	CZ	SE	ALL	LT	LV	EE	PL	CZ	SE
People's attitude towards the shadow economy has an impact on participation in the shadow labor and goods markets.	Justification	89%		64%	70%	304%	46%	394%	88%		37%	107%	336%	106%	240%
	Tax morale	-51%			-51%	-65%	-56%		-43%		-47%	-38%	-57%		
Punishment and the likelihood of being detected have an impact on participation in the shadow labor and goods markets.	Perception of punishment	-23%		-40%		-26%			-16%		-32%			-39%	
People's income and the affordability of goods and services have an impact on participation in the shadow labor and goods markets.	Financial situation	-39%						-74%	-39%	-52%			-52%	-61%	-76%
People's attitude towards the government and its services has an impact on participation in the shadow labor and goods markets.	Satisfaction with government														

Color	Range	
Dark Purple	-∞	-100,00%
Medium Purple	-99,99%	-50,00%
Light Purple	-49,99%	-0,01%

Color	Range	
Dark Green	0,01%	49,99%
Medium Green	50,00%	99,99%
Light Green	100,00%	∞

is significantly higher if he or she justifies shadow market activities (by 89% for undeclared purchases, and 88% for illegal purchases). On the other hand, if a person thinks that it is never justifiable to **cheat on paying taxes** if one has the chance, then the likelihood that he or she has purchased undeclared or illegal goods is correspondingly lower, by 51% and 43%, respectively.

**Justification** is the most pronounced as a driver in Poland and Sweden, where the likelihood of participation due to justification increases by more than three times for both undeclared and illegal goods.

**Tax morale** is a significant driver of the shadow goods market in Estonia, Poland, Latvia (only for illegal goods), and the Czech Republic (for undeclared goods). In each of these countries, high tax morale reduces the likelihood of participation by about 50% for undeclared and illegal goods.

The second most impactful driver of the shadow goods market is the **financial situation**<sup>3</sup> of individual participants. People who consider their financial situation to be in the highest (most favorable) category are 39% less likely

3 The survey respondents were asked the following question: Which of the following statements best describes your household's financial situation?  
1 - We do not have enough money even to buy food.  
2 - We have enough money to buy food, but not enough to buy clothes or pay for public utilities (water, electricity, heating, etc.)  
3 - We have enough money to buy food, clothes or public utilities and we can save a little bit, but it is not enough to make bigger purchases (e.g. to buy a TV set or refrigerator).  
4 - We have enough money to buy some costly things (such as a TV set or refrigerator), but we do not have enough money to make very expensive purchases (e.g. to buy a flat or a summer house).  
5 - We have enough money for everything we want.

to be participants in the shadow goods market for both undeclared and illegal goods, when compared to people who consider themselves to be in the lowest (least favorable) category. The driver of income and financial situation is pronounced in Sweden in relation to undeclared goods and in Lithuania, Poland, the Czech Republic and Sweden, in relation to illegal goods. In Sweden, a person who judges his or her financial situation to be 'good' is by 74% less likely to have bought undeclared goods than a person who regards his or her financial situation as 'bad'. The corresponding figures for Latvia, Poland, the Czech Republic and Sweden for the illegal market are 52%, 52%, 61% and 76%, respectively. This finding confirms that people whose income is high can afford not to engage with illegal activities and their likely negative consequences, such as greater uncertainty, reputational risks, etc.

**Punishment** appears to be the third most significant driver of participation in the shadow goods market. A person's perception of punishment as being severe (as opposed to mild) decreases the likelihood that they have bought undeclared or illegal goods (by 23% and 16%, respectively, for all countries). **Punishment** as a driver is significant in Latvia and Poland for undeclared goods, and in Latvia and the Czech Republic for illegal goods.

**In conclusion**, three factors stand out in relation to the shadow goods market. In order of importance, the likelihood of participation in the shadow goods market

depends on: justification of the shadow economy; an individual's financial situation (income); and the individual's perception of punishment. The country-specific prevalence of these factors varies quite significantly across countries.







## 1.4. Excise goods

This chapter focuses on the drivers of the shadow economy and the results of our regression analysis pertaining to goods that are subject to excise taxes: tobacco products (specifically, cigarettes), alcoholic beverages, and fuel. It is important to emphasize that excise goods were also included in the previous analysis as part of the undeclared or illegal market in goods and services. However, in this section, excise goods are analyzed as a separate category. This market is specific and requires separate analysis because: a) illegal purchases of excise goods are more extensive than those of other goods in general; and b) excise goods are highly taxed and regulated, therefore the shadow market in these goods is potentially driven by specific factors of its own. People's participation in the shadow market for excise goods (having friends or relatives who have bought illegal excise goods is used as a proxy indicator<sup>4</sup>) were regressed against the corresponding factors of this market.

4 Having friends or relatives is a proxy indicator in a sense that it is an indirect measure that approximates the personal consumption of illegal excise goods. It is assumed that in the cases of shadow markets of excise goods and labor the question of personal engagement in the shadow economy is too sensitive, therefore the engagement is approximated by an indirect question.

**Table 2. Drivers of the shadow market in excise goods**

Hypotheses	Significant independent variables (drivers)	Illegal cigarettes							Illegal alcohol							Illegal fuel						
		All	LT	LV	EE	PL	CZ	SE	All	LT	LV	EE	PL	CZ	SE	All	LT	LV	EE	PL	CZ	SE
People's attitude towards the shadow economy has an impact on participation in the shadow labor and goods markets.	Justification	68%				226%	60%	238%	68%			104%	149%	100%	175%	55%				163%	77%	265%
	Tax morale	-42%	-47%		-37%		-68%		-44%		-59%			-30%		-39%	-42%		-47%		-57%	
Punishment and the likelihood of being detected have an impact on participation in the shadow labor and goods markets.	Perception of punishment		-21%		-33%		-39%		-22%		-36%			-35%		-24%		-39%			-62%	
People's income and the affordability of goods and services have an impact on participation in the shadow labor and goods markets.	Financial situation		-36%		-31%				-72%	-36%		-57%					-45%			-33%		-73%
People's attitude towards the government and its services has an impact on participation in the shadow labor and goods markets.	Satisfaction with government																					

Color	Range	
	-∞	-100,00%
	-99,99%	-50,00%
	-49,99%	-0,01%
	0,01%	49,99%
	50,00%	99,99%
	100,00%	∞

As in the previous case of the shadow goods market, Table 2 summarizes the results of our regression analysis on excise goods. It provides an overview of the factors that drive the shadow market in excise goods. In the case of excise goods, regressions were based on a question that asked if the respondent had any friends or relatives who had bought illegal cigarettes, alcohol or fuel products. Table 2 shows statistically significant factors for the shadow market in excise

goods – that is, those factors which have an impact on the likelihood (higher or lower) that a respondent has friends or relatives who have bought illegal excise goods. Results are indicated in different colors as well as in numbers, to represent the impact of the factor. The percentage shows the average extent to which a particular factor increases (if positive) or reduces (if negative) the likelihood that the respondent has friends or relatives who have bought illegal excise goods.

The colors used in the table indicate the intensity of this impact (see legend for explanation). The greater the extent to which a particular factor increases the likelihood of an individual's participation in the shadow goods market, the darker the purple. Conversely, the more a particular factor reduces the likelihood of an individual's participation, the darker the green. Gray indicates that there is no statistically significant connection. Individual drivers for each country are



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indicated vertically (mapped to the corresponding hypotheses of the research). The table contains results of regressions for all countries (column 'All') as well as regressions for individual countries.

The combination of **justification and tax morale** is a highly significant driver for all excise goods. People who personally **justify** engaging in the smuggling or illegal production or sale of cigarettes, alcohol or fuel products are more likely to have friends or relatives who buy illegal excise goods. Justification increases the likelihood of a person having friends or relatives who have bought illegal cigarettes and alcohol by 68%, and illegal fuel by 54%. **Justification** is significant in Poland, the Czech Republic and Sweden for cigarettes and fuel, and in Estonia, Poland, the Czech Republic and Sweden for alcohol. In all countries, people who personally justify engaging in the smuggling or illegal production or sale of cigarettes, alcohol or fuel products are more likely to have friends or relatives who buy illegal excise goods. The most pronounced effect of justification is in Poland and Sweden, where it doubles the likelihood of an individual having friends and relatives who consume illegal excise goods.

Conversely, individuals who think that it is never justifiable to **cheat on paying taxes** if one has a chance, are less likely to have friends or relatives who have bought illegal excise goods than those who say that it can always be justified. High tax morale reduces the likelihood of having friends or relatives who have engaged in the illegal excise goods market: by 42% for cigarettes, 44% for alcohol, and

39% for fuel. **Tax morale** was significant as a driver in Lithuania, Estonia and the Czech Republic for cigarettes and fuel, and in Latvia and the Czech Republic for illegal alcohol products. Its impact ranged from 30% to 68% depending on the country and the type of excise goods.

Drivers related to **deterrence** are significant in explaining people's participation in the shadow market for excise goods. If an individual regards the **punishment** for being detected smuggling (contraband) or for engaging in the illegal production or consumption of cigarettes, alcohol products and fuel as severe, they are less likely to have friends and relatives who have bought illegal excise goods. An individual's perception of the punishment as being severe reduces the likelihood of having friends and relatives engaged in the illegal market in cigarettes by 21%, in alcohol by 22%, and in fuel by 24%. Punishment is significant as a driver in Latvia and Sweden for cigarettes; in Latvia and the Czech Republic for cigarettes and alcohol; and in Latvia, the Czech Republic and Sweden for fuel. The impact across countries varies from a reduction of 27%, to a reduction of 60% in the likelihood of having friends or relatives participating.

The third type of driver that is significant in explaining the shadow market in excise goods is an individual's **financial situation and income**. Individuals who evaluate their financial situation as very good (they have enough money for everything they need) are less likely to have friends or relatives who have purchased illegal excise goods, as compared to those individuals who only have money for basic purchases.

The former group are 36% less likely to have friends and relatives who have bought illegal cigarettes or alcohol products; 48% less likely for fuel. As a driver, the financial situation is significant in Latvia and Sweden for cigarettes, in Latvia for alcohol, and in Sweden for fuel.

**In conclusion**, justification, deterrence and an individual's financial situation are all statistically significant factors in the shadow market for excise goods. They influence the extent to which individuals will engage with the shadow market in excise goods. As in the previous case, the significance of individual drivers varies quite significantly between countries.

## 1.5. The labor market

Individuals engaged in the shadow labor market either work without job contracts or have job contracts but receive part of their wage as an undeclared or 'envelope' wage. In testing the factors driving the shadow labor market, regressions were based on a question that asked if respondents had friends or relatives who worked in the shadow labor market (as a proxy indicator).

Table 3 shows the statistically significant factors for the shadow labor market. Results are indicated in colors as well as in numbers, representing the impact of each factor. Percentages indicate the average percentage increase (if positive) or decrease (if negative) in the likelihood of a respondent having friends or relatives who work in the shadow labor market. The colors in the table indicate the

**Table 3. Drivers of the shadow labor market**

Hypotheses	Significant independent variables (drivers)	Shadow labor market						
		All	LT	LV	EE	PL	CZ	SE
People's attitude towards the shadow economy has an impact on participation in the shadow labor and goods markets.	Justification	25%			54%	43%	103%	
	Tax morale	-34%			-43%		-41%	-75%
Punishment and the likelihood of being detected have an impact on participation in the shadow labor and goods markets.	Perception of likelihood of being detected	-21%			-31%	-48%		
	Perception of severity of punishment	-20%					-46%	-64%
People's income and the affordability of goods and services have an impact on participation in the shadow labor and goods markets.	Income	-36%	-23%			-60%		-49%
People's attitude towards the government and its services has an impact on participation in the shadow labor and goods markets.	Satisfaction with government							

Color	Range		Color	Range	
	-∞	-100,00%		0,01%	49,99%
	-99,99%	-50,00%		50,00%	99,99%
	-49,99%	-0,01%		100,00%	∞

intensity of the impact (see legend for explanation). The greater the extent to which a particular factor increases the likelihood of an individual having a friend or relative who has participated in the shadow labor market, the darker the purple. Conversely, the greater the extent to which a particular factor reduces this likelihood, the darker the green. Gray indicates that there is no statistically significant connection. Individual drivers are indicated vertically for each country (mapped to the hypotheses of the project). The table also contains the results for a regression containing all countries (column 'All'), as well as regressions for each individual country.

As is the case for the shadow goods market, **justification** and **tax morale** appear to be the most important factors driving the shadow labor market. People who personally **justify** working without a job contract or receiving part of a wage as an 'envelope

wage' are significantly more likely (by 25% on average) to have friends or relatives who work in the shadow labor market. This effect is the most pronounced in the Czech Republic but is also present in Estonia and Poland.

Similarly, higher **tax morale** reduces the likelihood of participation in the shadow labor market. People who think that it is never justifiable to cheat on paying taxes are less likely to have friends or relatives working in the shadow labor market (on average, by 34%). The driver of **tax morale** is significant in Estonia, the Czech Republic and Sweden.

The second most important factor driving the shadow labor market is **income**. People whose monthly net income is relatively high (that is, more than EUR 1,000 per household member) are, on average, 36% less likely to have friends or relatives engaging in the shadow labor market. As a driver of the shadow economy, **income**

is significant in Lithuania, Poland and Sweden. Having a high income reduces the likelihood of having a friend or relative who has engaged in the shadow labor market by 23% in Lithuania, by 60% in Poland, and by 49% in Sweden.

**Deterrence** is another important factor determining people's engagement with the shadow labor market. The **likelihood** of being detected while working in the shadow labor market, and potential **punishment** if caught, are both statistically significant drivers. Individuals who regard the likelihood of being detected as high are 21% less likely to have friends or relatives working in the shadow labor market than those who regard the likelihood as low. Similarly, people who regard the **punishment** for working in the shadow labor market as severe are 20% less likely to have friends or relatives working in the shadow labor market. The **likelihood of being detected** is a significant driver in



Estonia and Poland, whereas the perceived severity of **punishment** is significant in the Czech Republic and Sweden.

**Our analysis reveals** that the factors that influence the extent of an individual's participation in the shadow labor market are threefold. First, a high level of justification and low tax morale are related to higher participation in the shadow labor market. Second, the lower an individual's income, the greater the likelihood that they have a relative or friend participating in the shadow labor market. Third, deterrence also matters as a factor: a higher likelihood of having friends/family engaged in the shadow economy is associated with low perceived likelihood of being detected and punishment if caught.

### 1.6. Summary of the drivers of the shadow economy

The regression analysis indicates that although the factors driving participation in the shadow economy vary between countries, robust tendencies exist in relation to the factors that influence the prevalence of shadow economic activity. Among the robustly significant drivers are justification of the shadow economy, punishment, and income (or the financial

situation). The likelihood of being detected is only significant in relation to the shadow labor market and is not significant in the case of the shadow goods markets.

A summary of our results is provided in Table 4. It indicates those factors which are statistically significant based on the data from all six countries. Purple indicates that a particular factor is significant; gray, not significant.

**Table 4. Summary of the drivers of the shadow economy**

Factors of the shadow economy	Shadow goods market	Illegal excise goods	Shadow labor market
Justification and tax morale			
Perception of severity of punishment			
Perception of the likelihood of detection			
Income and financial situation			
Attitude towards government and its services			

Note: Purple indicates significant factors and gray indicates insignificant factors.

## 2. EVALUATION OF POLICIES AND COUNTRY PROFILES

The second part of this report is dedicated to analyzing policies and measures that have been implemented, are being implemented, or are planned to be implemented in the countries analyzed, in order to reduce or combat the shadow economy<sup>5</sup>. The period of policies and measures under analysis extends from 2015 through 2019. However, where they are significant, a number of earlier measures have also been included to capture

<sup>5</sup> Importantly, we look only at those policies that are explicitly associated with combatting the shadow economy by the government and its institutions. We do not include policies that may have a direct or indirect impact on the shadow economy, but are not associated with combating the shadow economy by the government.

the general direction of government strategies in fighting the shadow economy. All identified policies and measures are classified according to the drivers of the shadow economy:

1. Changing the burden of **taxation** on legal economic activities;
2. Changing the burden of **regulation** on legal economic activities;
3. Increasing **penalties** for engaging in shadow activities;
4. Improving **detection** of shadow activities;

5. Increasing **tax morale** and lowering **justification** of shadow activities.

Policy groups 1 and 2 reflect the primary causes of the shadow economy, or taxation and regulation. Policy groups 3 to 5 correspond to our previous analysis of the statistically significant factors of the shadow economies. We also group policies according to which segment of the shadow economy they target. As in our previous discussion, the segments are: a) the shadow market for goods and services (including excise goods); b) the shadow market for excise goods (separately); and c) the shadow labor market.

Some policy measures target the shadow economy in general; we will refer to this type of measures as *common policies*. After classifying policies and measures into groups, we use the empirically tested drivers of the shadow economy outlined in the first part of this report (1 to 5 in the list above) as criteria to evaluate the significance of particular policy measures *vis-à-vis* specific drivers of the shadow economy. In other words, policies are mapped against causes and factors. Essentially, we are asking the following question: Does the government, in its policy decisions, focus on those drivers that are empirically shown to drive the shadow economy in general, and specifically in the context of a particular country?

It is important to stress that this research does not evaluate whether policy measures have achieved their intended results, nor if they have been effective in reducing the extent of the shadow economy. In other words, we are not judging the effectiveness of such measures. We are simply observing whether these policies correspond to what our research identifies as significant drivers of the shadow economy. We also identify the general policy directions and types of measures that governments focus on in combatting the shadow economy. The objects of our analysis are those policies that governments themselves link to an expected reduction in the size of the shadow economy. A reduction in the shadow economy does not have to be the actual result.

Because measures and policies to combat the shadow economy differ in terms of their

importance, they are also ranked. This ranking is subjective and is a matter of expert opinion. Rankings of one, two or three stars are allocated according to the following criteria:

\* – The policy or measure is of **minor importance**. It was relevant for a short period of time and/or impacted a relatively small group of people and businesses, and/or its impact on their conduct is considered minor or non-existent.

\*\* – The policy or measure is of **medium importance**. It falls between the rankings of one and three stars. It lasted longer, impacted a broader group of people and businesses, and its impact on their conduct is considered more extensive than those of policies or measures ranked as one star, but it was still not of major importance.

\*\*\* – The policy or measure is of **major importance**. It lasted for an extensive period of time and/or impacted a broad group of people and businesses (or all of them), and/or its impact on their conduct is considered substantial.

## 2.1. Evaluation of policy measures against the shadow economy

First, we present collectively all of the policy measures taken against the shadow economies in all of the countries<sup>6</sup> under evaluation. Country-specific analyses will follow. Figures 4, 5 and 6 show the total number of all policy measures taken to combat the shadow economy in the sectors of: a) goods and

services; b) excise goods; and c) the labor market, classified according to five categories which represent the drivers of the shadow economy. The graphs show both the common policies employed against all shadow markets (the lower part of each column), as well as specific policies dedicated to particular sectors of the shadow economy.

If we look at the number of policy measures planned or implemented to combat the shadow economy across all of the countries under review, we see that the greatest proportion of policies are designated to increase the level of detection. A total of 14 policies directed towards increasing detection rates of the shadow economy were common to all sectors of the shadow economy – that is, they are relevant to the shadow markets in goods, services and labor. An additional 21 measures were aimed at improving the detection of illegal activities in the sectors of shadow goods and services; four for excise goods; and 12 for the shadow labor market. Out of all 126 policies investigated, 51 (40% of the total) are dedicated to detection. So judging by their chosen policy measures, governments deem detection to be the most important aspect of the fight against the shadow economy. According to the results of our regression analysis, detection was not found to be a significant driver of the shadow market in goods and services, or for the shadow market in excise goods. Based on our analysis we can conclude that a significant share of policies dedicated to increasing detection rates in the shadow market of goods and services and excise goods are aimed at a driver that is statistically not significant to

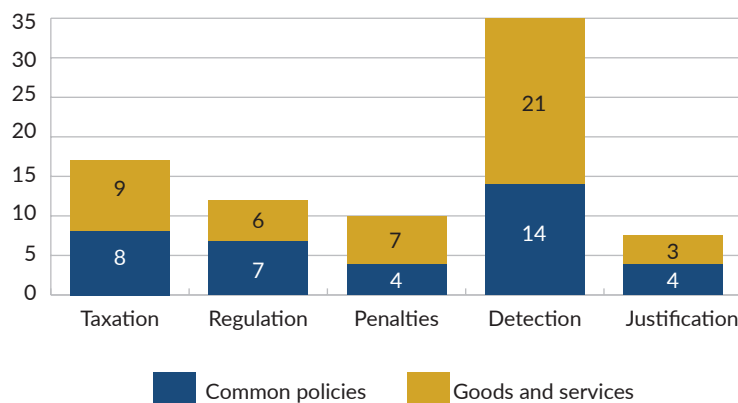
<sup>6</sup> This study looks at Lithuania, Latvia, Estonia, Poland, the Czech Republic and Sweden.

the participation of individuals in these shadow markets. This finding reveals that a large gap exists between policy and actual reasons and incentives of people to engage in the shadow economy. In a more general sense, governments focus on policy measures that seek to increase the cost of engaging in the shadow economy (risk), rather than reducing the costs of legal economic activities (taxation and regulation).

The second two most common categories of measures taken or planned against activities in all segments of the shadow economy are regulation and taxation. Seven regulatory measures affect activity across all sectors of the shadow economy; six are aimed at the shadow markets in goods and services, six at excise goods, and four at the shadow labor market. Regulatory measures constitute 23 out of the 126 policies, or 18% of the total.

Similarly, 22 out of 126 or 17% of policies are related to taxation. Since taxation and regulation are causes of the shadow economy, it is appropriate that a large share of measures is oriented towards these areas. However, in principle, taxation and regulation may contain two different types of policy measures, depending on the way in which they aim to impact the shadow economy. The first type are policies that are designed to enforce taxation more strictly, or which introduce additional (or more stringent) regulation in order to reduce the size of the shadow economy. The second type are policies that are intended to reduce the burden of taxation and regulation. The first type focuses on *increasing the costs of illegality*; the second type, on *decreasing the costs of legality*. Our research

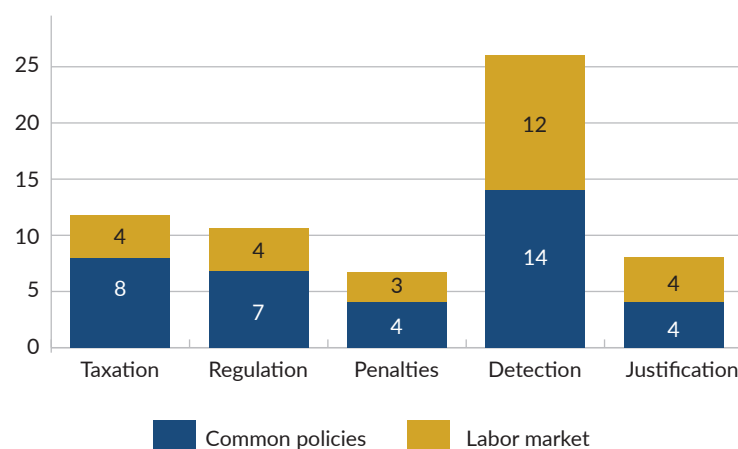
**Fig. 4. Number of measures taken in relation to the shadow goods and services market**



**Fig. 5. Number of measures taken in relation to the illegal market in excise goods**



**Fig. 6. Number of measures taken in relation to the shadow labor market**



shows that most policies in the categories of regulation and taxation (32 out of 45) were

aimed at stricter enforcement of current taxation and regulation (or at introducing additional

regulation). Only 13 policies (29% of the total) aimed to reduce the taxation or regulatory burden on legal economic activities, and by doing so shift people from the illegal to the legal market<sup>7</sup>. This means that the majority of measures taken with regard to taxation and regulation only serve to increase the taxation and regulatory burden, which often makes them ineffective or even counterproductive.

The two categories of policies that contain the fewest measures are penalties and justification. Both of these represent drivers that are statistically significant for all markets of the shadow economy. Eighteen measures, or 14% of the total, are intended to increase the penalties for participation in the shadow economy. Twelve policies (10% of the total) are aimed at education and the reduction of justification of the shadow economy.

**To summarise,** detection, regulation and taxation receive the greatest attention as measures to combat the shadow economy (76% of all measures). Since taxation and regulation are the primary causes of the shadow economy, it is appropriate that measures to combat the shadow economy are aimed at these areas. However, the largest share of policies within the category of taxation and regulation (71%) are those aimed at the enforcement of taxation and at stricter regulation, as opposed to creating more favorable conditions for the legal market. Overall, the least numerous measures are those to increase

7 As discussed previously, this research does not address the question of efficiency: we do not evaluate if measures are successful in reducing the size of the shadow economy. We only classify measures and evaluate the extent to which they reflect significant drivers of the shadow economy.

**Table 5. Number of measures by countries and drivers**

All shadow markets	LT	LV	EE	PL	CZ	SE
Taxation	7	4	2	7	1	1
Regulation	5	11	2	2	2	1
Penalties	6	3	1	5	2	1
Detection	14	16	7	5	5	4
Justification	4	2	1	1	3	1

the penalties for participation or to reduce justification of the shadow economy.

We can now determine the extent to which policy measures are accurately targeted in relation to combatting the shadow economy, by analyzing how well they correspond to the causes of the shadow economy – taxation and regulation – as well as to the statistically significant factors of the shadow economy. In particular, three factors – a) the severity of punishment, b) the likelihood of being detected, and c) justification and tax morale – were identified in the first part of this report as being statistically significant in influencing people's decisions to participate in the shadow economy<sup>8</sup>. Table 5 lists the measures in each country that are directed towards particular drivers of the shadow economy.

We can see that in every country except Poland policy measures aimed at detection are the most numerous, followed by measures relating to taxation and regulation. This indicates that most of the countries pursue similar strategies of combatting the shadow economy. In each country, we can measure the percentage of policy measures which are accurately targeted by calculating the portion of

8 Policy measures aimed at taxation and regulation are automatically deemed significant, since they address the causes of the shadow economy; however, as previously mentioned, we do not evaluate the efficiency of the measures.

measures in each category that address the statistically significant factors for that country<sup>9</sup>. Countries in which the largest proportion of measures align with significant drivers are those in which policies against the shadow economy are targeted most accurately. Figure 7 shows the accuracy of policy measures in each country.

Policy measures are the most accurate in Poland, with 80% of measures falling on the drivers that are significant in the country. Poland is followed by Estonia and the Czech Republic, where the accuracy is 69% and 62%, respectively. In Latvia, around half of policies target significant drivers of the shadow economy. The accuracy level is the lowest in Lithuania, and Sweden where only respectively 39% and 38% of measures relate to significant drivers. Overall, the average accuracy of policies across all countries is 57%, which means that only slightly more than one-half of policies address those drivers that are identified as significant. The main reason why the accuracy of policy measures is low is that the majority of measures focus on detection, which in most cases

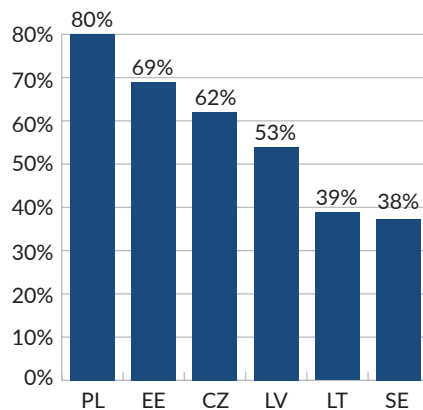
9 We calculate this figure for each market (goods and services, excise goods and labor) separately, because the significance of factors in each market differs. Policies that are common to all markets are marked as significant if the factor is significant in at least one of the markets. Policies that target taxation and regulation are deemed by definition to be significant, since these are the causes of the shadow economy.

was a statistically insignificant factor of the shadow economy (except in Estonia and Poland, within the shadow labor market).

**In conclusion,** our research reveals that governments in the countries under analysis tend to focus on policies aimed at increasing detection, as well as on taxation and regulatory measures (in most cases, a stricter enforcement of taxation and more regulation of economic activities). Out of a total of 126 measures, 51 (40% of all measures) focus on detection, 23 (18%) on regulation, and 22 (17%) on taxation. Other measures focus on penalties and reducing justification.

The measures chosen by a government represent its strategy to combat the shadow economy. As our findings clearly show, in most countries this strategy is skewed towards increasing the costs of participating in the shadow economy, rather than rethinking the costs of legality – chiefly, the burden that arises from taxation and regulation, the main causes

**Fig. 7. Accuracy of policy measures**



of the shadow economy. Only 13 policy measures (10% of the total) were directed towards some kind of lowering of the burden of taxation or regulation. Those responsible for strategies to reduce the shadow economy often ignore its intrinsic causes, viewing it instead as simply an illegal activity that must be detected and punished. This is incompatible with the understanding that the shadow economy generates value, and that the non-destructive way to lower levels of shadow

economic activity is to allow people to transition into the legitimate economy by creating more favorable conditions for them to do so, rather than simply trying to eradicate shadow activities through a more efficient detection and punishment.

Our study suggests that the overall accuracy of policy measures is low. This means that most of the policies adopted to combat the shadow economy focus on drivers which do not influence people's behavior and choices in relation to their participation in the shadow economy. This is another reason why government efforts to fight the shadow economy are frequently ineffective. Our research indicates that the focus on detection, tighter regulation and stricter enforcement of taxation rules is unlikely to be effective, and that a much broader approach is required. Such an approach should incorporate measures that would not only increase the burden on illegal activities, but would also render legal activities more attractive by reducing the applicable costs of taxation and regulation.

## 2.2. Country profiles

### LITHUANIA

Policy measures aimed at combatting the shadow economy in Lithuania focus mainly on detection (14 measures out of 36, or 39% of all measures). Other measures target taxation, regulation, penalties and justification. The accuracy of measures<sup>10</sup>, evaluated according

to the extent to which they target significant drivers of the shadow economy, is quite low, only 39%. The low level of accuracy of these policies is mainly due to the fact that most of them address insignificant factors of the shadow economy.

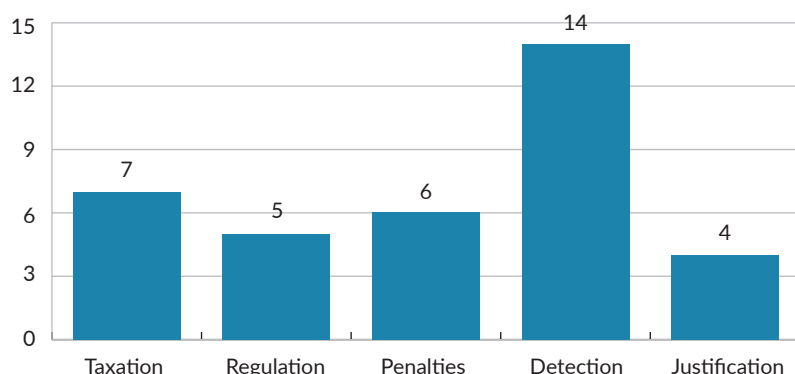
Policies aimed at combatting the shadow economy in goods and services mostly target the drivers of detection and taxation (between them, totaling thirteen out of 17 policies). In order to detect shadow activities, policies mostly target specific sectors

that suffer from a high level of tax evasion (with measures such as targeted projects of the State Revenue Service; mystery shopping in food marketplaces; changes in regulation of the ride-sharing sector; reverse charge mechanisms for VAT, etc.). To address the driver of taxation, major policies have introduced measures such as the opportunity to settle unpaid taxes without receiving a fine or tax deductions for those who choose legitimate services. In addition, measures to counter tax avoidance schemes have

<sup>10</sup> The accuracy of measures is evaluated in the three groups which correspond to the factors of the shadow economy: penalties, detection and justification. Measures related to causes of the shadow economy (taxation and regulation) are not evaluated in terms of accuracy, since causes cannot be insignificant by definition.



**Fig. 8. Policy measures in Lithuania**



been applied to the goods and services markets.

Policies on excise goods mostly refer to penalties (two out of four policies), by lowering the thresholds for an infringement to be regarded as a criminal offense, and by increasing liabilities for marketplace administrators. Continuing improvements to the State Border Guard Service are considered as an important measure to detect smuggling. There are ongoing discussions about licensing of companies that trade in petroleum products.

Policies aimed at combatting the shadow labor market are divided between all drivers of the shadow economy. The consolidation of the employer's and employee's social insurance contributions is the most important policy in the category of justification. This is expected to raise awareness and disincentivize employers from offering unofficial payments. As for penalties, policies aim to sanction both employers and employees. In the category of taxes, a measure has been implemented to introduce a minimum tax wage 'floor',

which increases taxes for people who work part time.

Other important policies that are common across all sectors of the economy include introducing a Smart Tax Administration System (i.MAS), a lessening of the administrative burden and others. These measures are mostly aimed at detection, regulation and justification (seven out of eight measures).

## Goods and services

### Taxation

#### A reverse charge mechanism for VAT

\*\* (permanent, began in 2006)

The aim of this policy is to reduce shadow economy activity in sectors with a high level of tax evasion. The burden of paying VAT is assigned to customers, not to service providers. In this way, customers are more inclined to correctly report transactions and the shadow economy is expected to diminish as a result. In addition, the policy is designed to help avoid 'carousel' schemes. This mechanism has been implemented in the construction sector and is now planned to be expanded to electronic devices as well as to the market in oil

products. However, it is admitted that this mechanism distorts the functioning principles of the VAT system and may even increase fraud in other sectors<sup>11</sup>.

#### Income tax deductions for household expenditure

\*\* (permanent, began in 2019)

The aim of this policy is to reduce shadow economy activity in sectors with a high level of tax evasion, by providing a mechanism for income tax refund. Individuals can deduct from their taxable income payments up to EUR 2,000 for construction, car repair or home childcare when relevant documents proving such payments are provided. This should incentivize people to choose legal services over illegal ones. This policy is applicable only to specific sectors of the economy, but every person who uses these services can apply for a tax deduction.

#### One-off opportunity to pay 'forgotten' taxes without fines (six-month period)

\*\* (first half of 2019)

This provides taxpayers with an opportunity to 'come clean' by declaring undeclared income for the 2014-2018 period without being subject to the fines that would normally apply. This policy was applicable to all taxpayers, but only lasted six months. Between the beginning of January and the end of July 2019, 920 subjects declared EUR 8.2 million in undeclared taxes. Correction of income declarations increased by EUR 41.7 million compared to the same period in 2018. It is difficult to estimate though how much

<sup>11</sup> Official site of the Bank of Lithuania: [https://www.lb.lt/uploads/documents/files/musu-veikla/ekonomikos-analize-prognozes/LEA\\_2018-06\\_LT\\_PRIEDAS3.pdf](https://www.lb.lt/uploads/documents/files/musu-veikla/ekonomikos-analize-prognozes/LEA_2018-06_LT_PRIEDAS3.pdf)

Table 6. Policy measures in Lithuania by segments of shadow economy

	Causes		Factors		
	Taxation	Regulation	Penalties	Detection	Justification
Goods and services	A reverse charge mechanism for VAT ** (2006)	Restrictions on the provision of ride-sharing services and centralized issue of permits * (possibly 2020)	Increase in fines for tax evasion ** (2017)	Short-term targeted checks by the State Tax Inspectorate *** (2011)	Receipt lottery ** (2017)
	Income tax deductions for household expenditure ** (2019)		'White finances' ** (2019)	A liability for NGOs to provide financial statements to the Registry of Legal Persons ** (2015)	
	One-off opportunity to pay 'forgotten' taxes (six-month period) ** (2019)			Mystery shopping in food markets ** (possibly in 2019)	
	Profit taxation adjusted to prevent aggressive tax planning * (2019)			Liability for documentation and reporting on vendors for marketplace administrators * (2018)	
	Excise duties on raw tobacco * (2019)			Centralized Market Information Accounting System ** (ongoing discussions, possibly in 2020).	
				Virtual cash register ** (ongoing discussions, possibly in 2020)	
	Disclosure of ride-sharing transactions * (2018) E-system for vehicle owner registration ** (possibly in 2020)				
Excise goods		Regulation of the issuing of licenses to trade in petroleum products * (ongoing discussions, possibly in 2019)	Lowering the threshold of what constitutes a criminal smuggling offense ** (2019)	Improvements to State Border Guard service *** (2007)	
			Liability for marketplace administrators to report illegal sales of excise goods * (2015)		
Labor	Minimum wage tax "floor" ** (2018)	Extension of social benefits * (2019)	Repayment of official salaries to illegal employees ** (2014)	Construction worker ID card * (possibly 2019-2020)	Consolidation of social insurance contributions *** (2019)
			Employee sanctions for illegal employment ** (2015)	Mystery shopping by Labor Inspectorate * (possibly in 2019)	
Common for all	Preliminary tax returns, tax return automation, Smart Tax Administration System (i.MAS) *** (2016)	Lessening of administrative burden *** (2008)		Increased scrutiny for agents engaging in financial markets ** (2015)	Financial literacy programme ** (2017-2021)
		Restrictions on cash payments ** (ongoing discussions)		An obligation to maintain documentation on individual income and expenditure ** (2015)	Awareness raising campaign ** (ongoing in 2019)
				Dedicated public hotlines at the State Tax inspectorate and at the Labor Inspectorate * (2006)	

of this was a direct result of this one-off opportunity<sup>12</sup>.

### **Profit taxation adjusted to prevent aggressive tax planning**

*\* (permanent, began in 2019)*

New rules on the profit tax were adopted to prevent aggressive tax planning. From 1 January 2019, the tax is imposed on profits moved to low-tax countries in which a company does not carry out any genuine economic activity. Also, in order to discourage companies from using excessive interest payments to minimize taxes, a limit now applies to the amount of net interest expenses that a company can deduct from its taxable income. The tax authorities are also now able to tackle tax avoidance schemes in cases where other anti-avoidance provisions cannot be applied<sup>13</sup>. These reforms are intended to limit opportunities to exploit tax exemptions or exceptions, and thus are expected to reduce tax avoidance and the shadow economy. This policy only targets companies that might be engaged in aggressive tax planning<sup>14</sup>.

### **Excise duties on raw tobacco**

*\* (permanent, to be enacted from November 2019)*

Starting from November 2019 excise duties will be charged on raw tobacco. This measure is intended to curb growing illicit trade in raw tobacco. In 2018 alone the customs office detected

12 [http://www.mzinios.lt/lt/2019-07-02/straipsniai/vmi\\_informuoja/vmi\\_dziaugiasi\\_mokesciu\\_amnestijos\\_rezultatais.html](http://www.mzinios.lt/lt/2019-07-02/straipsniai/vmi_informuoja/vmi_dziaugiasi_mokesciu_amnestijos_rezultatais.html)

13 European Commission press release "New EU rules to eliminate the main loopholes used in corporate tax avoidance come into force on 1 January" [http://europa.eu/rapid/press-release\\_IP-18-6853\\_en.htm](http://europa.eu/rapid/press-release_IP-18-6853_en.htm)

14 European Commission paper COM(2016) 23 final (2016-01-28)

eight times more of illicit raw tobacco than during previous five years taken together.

### **Regulation**

#### **Restrictions on the provision of ride-sharing services and centralized issue of permits**

*\* (ongoing discussions, planned from July 2020)*

Proposals have been submitted to the Parliament to limit ride-sharing provision to natural persons under electronic contracts and to centralize the issue of permits for taxi drivers and ride-sharing.

### **Penalties**

#### **'White finances'**

*\* (permanent, began in 2019)*

The aim of this policy is to reduce tax avoidance by incentivizing legal entities to declare and pay taxes on time. If a taxpayer is considered 'unreliable' (that is, they have been penalized for tax evasion, illegal work, financial fraud or other criminal activity), they are not allowed to participate in public procurements. In addition, unreliable taxpayers face greater difficulties in seeking commercial bank loans. This policy is of average importance, because it impacts a fairly broad range of companies. There are a number of ways in which a taxpayer may be designated unreliable, some of which could occur unintentionally, such as through mistakes in accounting. Moreover, the policy acts as a double penalty: taxpayers who have already been penalized subsequently receive inferior competitive conditions.

#### **Increase in fines for tax evasion**

*\*\* (permanent, began in 2017)*

This policy measure increases the level of fines by up to ten

times for tax evasion that is categorized as administrative offenses (where documentation concerning income, profits and wealth are not provided or provided falsely with the intention to evade taxes). This policy is of average importance. Although this measure is applicable to all business and private entities, it will only affect those who intentionally attempt to evade taxes.

### **Detection**

#### **Short-term targeted checks by the State Tax Inspectorate**

*\*\*\* (permanent, began in 2011)*

The aim of this policy is to reduce shadow economic activity in sectors with a reportedly high level of tax evasion, such as second-hand car sales, dental clinics, online trade, event organizing, farming, etc. Each targeted area is evaluated separately, and specific taxpayers are selected for investigation. During these investigations, the State Tax Inspectorate applies measures to both monitoring and control. These investigations are widely communicated within society, with the intention of increasing awareness of the possibility of detection<sup>15</sup>. This measure is of major importance because it is long-term and is being expanded to new sectors. According to officials, in specific areas embraced by this type of monitoring and control taxpayers paid 29 million EUR more in taxes in 2018 than in 2017, an increase of 49%<sup>16</sup>.

15 Government of Lithuania, 2016. Šeš lin ekonomika. Poky iai per dešimtmetį. 'Shadow economy and changes in 10 years', 2016 <https://www.vdi.lt/PdfUploads/SeselinEkonomika2016.pdf>

16 The State Tax Inspectorate [https://www.vmi.lt/cms/vmi-naujienos/-/asset\\_publisher/SyUQPdSIE49Y/content/vmi-kontroliuoti-mokesciu-moketojai-pernaisumokejo-beveik-dvigubai-daugiau-mokesciu](https://www.vmi.lt/cms/vmi-naujienos/-/asset_publisher/SyUQPdSIE49Y/content/vmi-kontroliuoti-mokesciu-moketojai-pernaisumokejo-beveik-dvigubai-daugiau-mokesciu)



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### **A liability for NGOs to provide financial statements to the Registry of Legal Persons**

*\* (permanent, began in 2015)*

The aim of this policy is to increase transparency among non-profit organizations. Non-profit organizations are now required to provide financial statements to the Registry of Legal Persons, something they were not required to do by law before. This change in accountability allows tax authorities to conduct an extensive analysis of the risks of non-compliance with tax policies by non-profit organizations. Although this policy is applicable to a fairly large sector of the economy, it duplicates other existing measures and creates an additional administrative burden.

### **Mystery shopping in food markets**

*\*\* (begins in 2019)*

The aim of this policy is to reduce the extent of the shadow economy by identifying illegal food processors, as well as investigating online trading, marketplaces and wholesale warehouses. The National Food and Veterinary office can now conduct mystery shopping expeditions with the aim of detecting illegal activities<sup>17</sup>. Food is reportedly the main category of goods bought via illicit purchases in Lithuania (31% in 2018)<sup>18</sup>. It also accounts for more than a third of marketplace turnover (37% of in Q4 2018)<sup>19</sup>.

17 Official site of the State Food and Veterinary Service: <http://vmvt.lt/naujienos/stiprinama-kova-su-seseline-ekonomika>

18 Shadow Economy: Understanding Drivers, Reducing Incentives, Lithuanian Free Market Institute, 2018.

19 Official site of Statistics Lithuania: <https://osp.stat.gov.lt/statistiniu-rodikliu-analize#/>

### **Liability for documentation and reporting on vendors for marketplace administrators**

*\* (from 2018)*

Changes in the Code of Conduct for Agricultural and Food Markets under a decree from the Minister of Agriculture require vendors to present all necessary documents to the administrator of a given marketplace before they can begin trading. The administrator is obliged to inform the State Food and Veterinary Service and the State Tax Inspectorate of any irregularities noticed in the declaration of products. During October and November 2018, coordinated inspections were performed on 334 meat vendors in 84 markets. Of these, 35% were found to have committed offences, such as failure to fill in product accounting journals, unlabeled products, and missing accompanying documents. Applicable to only one segment of the market, this policy is estimated to be of minor importance.

### **Centralized Market Information Accounting System**

*\*\* (ongoing discussions, possibly begins in 2020)*

A Centralized Market Information Accounting System<sup>20</sup> that would require meat vendors to keep records of goods and income is being planned. Experts argue that this will significantly increase the administrative burden on vendors. This measure would especially be unfair to honest and legitimate traders. So far, traders have been required to present their sales figures to the authorities on a monthly basis. After this change is introduced,

20 Official site of Lithuanian Government: <http://lr.lt/lt/naujienos/po-beprecedencio-paskatu-paketo-naujos-skaitmenines-priemones-kovai-su-seseliu>

they will be required to present these figures three times per day. This policy would have average importance given that it would apply only to marketplaces and entail considerable administrative costs.

### **Virtual cash register**

*\*\* (ongoing discussions, possibly begins in 2020)*

The aim of this policy is to reduce the extent of the shadow economy and tax avoidance by cutting the administrative burden. Companies will have the opportunity to swap their physical cash registers for a virtual service adapted for mobile phones or computers. Using this functionality, all transactions and data will be registered online, making operations easier. This policy will apply to all companies and is expected to significantly decrease the administrative burden.

### **Disclosure of ride-sharing transactions**

*\* (permanent, began in 2018)*

Starting from 2018 owners of ride-sharing platforms must disclose their drivers' transactions to the State Tax Inspectorate. It is estimated that in Lithuania ride-sharing companies and individuals evaded more than 8 million EUR in taxes during 2017<sup>21</sup>. This policy is of minor importance because it only affects one industry.

### **E-system for vehicle owner registration**

*\*\* (ongoing discussions, possibly begins in 2020)*

A system for registering vehicle owners has been proposed.

21 Official site of Lithuanian Government: <https://lr.lt/lt/naujienos/realios-kovos-su-seseliu-priemones-biudzeta-papildytu-200-mln-euru>

This system will introduce mandatory declaration of all vehicle purchase transactions<sup>22</sup> (every change of vehicle ownership and the sale of imported vehicles to an intermediary) in the Vehicle Owners Registration System. Vehicle ownership will transfer to the buyer from the moment stated in the agreement and after confirmation of the transaction. This new system will make it mandatory to declare purchase transactions of every person buying or selling a vehicle. While it would target all vehicle purchase transactions, it would entail considerable administrative costs.

### Justification

#### Receipt lottery

\*\* (permanent, began in 2017)

The aim of this policy is to reduce tax evasion, to educate taxpayers and to combat the shadow economy by encouraging customers to ask merchants for receipts. All receipts can then be submitted to a lottery. This policy is of average importance. It applies permanently to almost all goods and service. Budget costs of the measure are moderate (EUR 300 000 plus administrative costs in 2019<sup>23</sup>). The State Tax Inspectorate considers this project as successful thus far. Reportedly, the catering sector alone declared an additional EUR 3.3 million of VAT as a result of a lottery in 2018<sup>24</sup>.

22 Official site of Lithuanian Government: <http://lr.v.lt/lt/naujienos/po-beprecedencio-paskatu-paketo-naujos-skaitmenines-priemones-kovai-su-seseliu>

23 Official site of the State Tax Inspectorate: [https://www.vmi.lt/cms/vmi-naujienos/-/asset\\_publisher/SyuQPdSIE49Y/content/didinamas-vmi-kvitu-zaidimo-prizinis-fondas-%E2%80%93-gyventoju-lauks-10-kartu-daugiau-savaitiniu-prizu](https://www.vmi.lt/cms/vmi-naujienos/-/asset_publisher/SyuQPdSIE49Y/content/didinamas-vmi-kvitu-zaidimo-prizinis-fondas-%E2%80%93-gyventoju-lauks-10-kartu-daugiau-savaitiniu-prizu)

24 Ibid.

## Excise goods

### Regulation

#### Regulation of the issuing of licenses to trade in petroleum products

\* (ongoing discussions, possibly in 2019)

An amendment to the Law on Energy is planned for submission to the Parliament of the Republic of Lithuania, stipulating a centralized procedure for the issue of licenses for trade in petroleum products as a measure to combat undeclared transactions in the oil market. This measure would be of minor importance given that it would not affect unlicensed traders.

### Penalties

#### Lowering the threshold of what constitutes a criminal smuggling offense

\* (permanent, began in 2019)

Starting from 2019 the threshold for classifying offenses as criminal ones has been lowered from the value of smuggled goods exceeding 250 times of the officially defined minimum living standard units to 150 times. Administrative penalties apply to smaller offences relating to smuggling in goods below the threshold for criminal offences. Smuggling is the main way by which illicit excise goods are brought into the country.

#### Liability for marketplace administrators to report illicit sales of excise goods

\* (permanent, began in 2015)

Legal entities who administer a marketplace have a duty to report all illegal transactions involving tobacco or alcohol that are detected within their marketplace. If illegal points

of sale are discovered by law enforcement officers, the owner of a given marketplace is penalized with a fine. This policy is of minor importance. It affects only the owners of marketplaces. It also creates an additional administrative burden and compliance costs for marketplace administrators.

### Detection

#### Improvements to State Border Guard Service

\*\*\* (permanent, began in 2007)

The State Border Guard Service is implementing continued investments in technologies, the establishment of an aviation team, a cynology team, and the strengthening of divisions responsible for EU border control, etc. The policy is of major importance because the bulk of shadow excise goods are smuggled across the country's borders. Between 2015 and 2018, the State Border Guard Service intercepted nearly 6.4 million packs of illegal cigarettes and 19,000 liters of illegal alcohol<sup>25</sup>.

## The labor market

### Taxation

#### Minimum wage tax "floor"

\*\* (permanent, began in 2018)

Employees who work part-time and earn less than the minimum wage must pay the state social insurance contribution calculated on the total monthly minimum wage. This is intended to incentivize employers to pay legal salaries and to ensure higher social guarantees

25 Official site of the State Border Guard Service: <http://pasienis.lt/lit/Lietuvos-pasienyje-sulaikyta-tabako-gaminiu-kontrabanda>

for employees within the private sector by preventing cases in which an employee works full-time, but is formally declared as working part-time, with the rest of the salary paid as an 'envelope' wage. Given that now social insurance contributions must be paid on the total monthly minimum wage, there is no incentive left for employers to officially employ for part time work but pay official and envelope wages. This policy is applicable to 5.4% of all employed people (a total of 73,000 employees)<sup>26</sup>. While this policy is meant to secure the position of low-paid employees, the results are not as expected. Before its enactment and during the first month after the enactment, more than 3,000 employees were fired due to increased labor costs<sup>27</sup>. The total number of employees who have lost their jobs as a result of this measure is expected to grow further in the long term.

## Regulation

### Extension of social benefits

*\* (permanent, began in 2019)*  
In order to disincentivize people who have received social benefits for a year or longer from hiding their employment status when they find work, social benefits now continue to be paid for six to twelve months after the claimant person starts a job. This policy only affects long-term recipients of social benefits.

26 Official site of the State Social Insurance Fund Board: <https://www.sodra.lt/lt/naujienos/grindu-efektas-traukiasimaziausiai-uzdirbanciuju-gretos->; Official site of Statistics Lithuania: <https://osp.stat.gov.lt/statistiniu-rodikliu-analize#/>

27 Official site of the State Social Insurance Fund Board: <https://www.sodra.lt/lt/naujienos/grindu-efektas-traukiasimaziausiai-uzdirbanciuju-gretos>

## Penalties

### Repayment of official salaries to illegal employees

*\*\* (permanent, began in 2015)*  
Employers must pay a legal salary of at least the minimum wage for at least three months in cases where illegal employment is detected. This policy applies to all employers who are found to have illegal employees.

### Employee sanctions for illegal employment

*\*\* (permanent, began in 2015)*  
The policy involves increased sanctions for illegal employees. If a person is found to have been employed illegally, they are denied and must repay any unemployment benefits they have received (unless the employee confesses the offence to a relevant institution).

## Detection

### Construction worker ID card

*\* (ongoing discussion, possibly begins in 2019-2020)*  
It is proposed that all construction workers carry ID cards and present them when entering the workplace so that their working time can be monitored<sup>28</sup>.

### Mystery shopping by the Labor Inspectorate

*\* (ongoing discussions, possibly begins in 2019)*  
Mystery shopping by the Labor Inspectorate is proposed as a way to identify instances of illegal or undeclared employment. It remains unclear how many companies will be visited, and how these companies will be chosen.

28 News from the State Tax Inspectorate: [https://www.vmi.lt/cms/naujienos6/-/asset\\_publisher/RS5WKVJJb8B/content/id/9407175](https://www.vmi.lt/cms/naujienos6/-/asset_publisher/RS5WKVJJb8B/content/id/9407175)

## Justification

### Consolidation of social insurance contributions

*\*\*\* (permanent, began in 2019)*  
Before 2019, an employee's social insurance contribution was divided between the employer (at a rate of 30.98% on the relevant portion of income) and employee (at a rate of 9%). This situation unintentionally provided an incentive for employers to offer a reduced official salary in exchange for unofficial payments to the employee<sup>29</sup>. The social insurance taxes were consolidated on the employee's side, with the view of increasing the transparency of the tax system and employees' awareness about the total costs of labor incurred by their employers. This policy is of major importance. It affects all employees and is expected to increase tax morale and change perspectives among both employers and employees<sup>30</sup>.

## Common policies

### Taxation

#### Preliminary tax returns, tax return automation, Smart Tax Administration System (i.MAS)

*\*\*\* (permanent, began Q3 2017 for individual taxes; Q4 2018 for small business taxes; i.MAS since 2016)*

The State Tax Inspectorate now sends out automatically generated declarations for VAT and taxes on profits. These innovations are aimed to ease the burden of tax

29 Official site of the State Social Insurance Fund Board: <https://www.sodra.lt/lt/situacijos/pasikeitimai-nuo-2019-01-01/pasikeitimai-del-imoku-sujungimo>

30 Official site of the Lithuanian Government: <https://epilietis.lrv.lt/lt/naujienos/kokias-imokas-mokesime-sodrai-2019-metais>

administration and minimize reporting errors for individuals as well as small businesses. This policy is of major importance because it is applicable for almost all business entities. According to the State Tax Inspectorate, improvements in VAT administration have led to an additional EUR 52 million in taxes being collected in 2017<sup>31</sup>. It is important to mention though estimated costs to taxpayers, amounting to EUR 35 million for the modernization of cash registers and software and more than EUR 6 million annual cost of implementation<sup>32</sup>.

## Regulation

### Lessening of the administrative burden

\*\*\* (permanent, began in 2008)

A reduction of the administrative burden is an ongoing government programme. It is estimated that administrative compliance costs have been cut by more than EUR 10 million between 2014 and 2017<sup>33</sup>. This policy is of major importance because it applies to all subjects and is intended to reduce the number of existing regulations rather than creating new ones<sup>34</sup>.

### Restrictions on cash payments

\*\* (discussions still ongoing)

A cap on cash transactions at 3,000 EUR has been proposed as a measure to fight the shadow economy. This policy would have wide

31 Official site of the Ministry of Finance: [https://finmin.lrv.lt/uploads/finmin/documents/files/LT\\_ver/Aktual%C5%ABs\\_valstyb%C4%97s\\_finans%C5%B3\\_duomenys/Ataskaita%202017%20metai.pdf](https://finmin.lrv.lt/uploads/finmin/documents/files/LT_ver/Aktual%C5%ABs_valstyb%C4%97s_finans%C5%B3_duomenys/Ataskaita%202017%20metai.pdf)

32 <https://www.esavadai.lt/dokumentai/4415-imas-galimybiu-studija/>

33 Official site of the Government of Lithuania: <http://eimin.lrv.lt/geresnis-reglamentavimas-lietuvoje>

34 Government of Lithuania, 2016. Šešėlinė ekonomika. Pokyčiai per dešimtmetį. <https://www.vdi.lt/PdfUploads/SeselinEkonomika2016.pdf>

applicability. However, there is no evidence that this measure has been effective in other countries. It may even increase shadow economic activity by incentivizing people to use their unaccounted money illegally or abroad, rather than spending it in the official economy.

## Detection

### Increased scrutiny for agents engaging in financial markets

\*\* (permanent, began in 2015)

Financial institutions are required to report the opening and closing of accounts, as well as other information (such as account balances) to the tax administration authority. This policy is applicable to a large number of people (around half a million) who have accounts with an annual turnover of EUR 15,000 or more, and a year-end balance of more than EUR 5 000. This policy is excessive and strengthens incentives for individuals not to deposit money into a bank account and to keep it in cash, which potentially increases engagement in the shadow economy<sup>35</sup>.

### An obligation to maintain documentation on individual income and expenses

\*\* (permanent, began in 2015)

Under the policy, all property and income that are acquired should be supported by legally valid documentation. In a number of cases, people had tried to justify suspicious transactions using debt notes and thus avoid taxes. In order to stamp out this practice, the policy now requires valid documentation to be

35 Official site of the Government of Lithuania: [https://lrv.lt/uploads/main/meetings/docs/19609\\_24b65eca981d-dcf91203a7ababfc4702.pdf](https://lrv.lt/uploads/main/meetings/docs/19609_24b65eca981d-dcf91203a7ababfc4702.pdf)

provided that will facilitate the identification of the parties involved. Where property or income is confirmed to be disproportionate to a person's actual income, a new policy is now under consideration that will enable confiscation<sup>36</sup>. This policy is relevant to all individuals acquiring property or income. An additional administrative burden is created for everyone who makes such transactions (even between family members).

### Dedicated public hotlines at the State Tax inspectorate to report tax-related offenses, and at the Labor Inspectorate to report illegal employment

\* (permanent, began in 2006)

Public hotlines provided by the State Tax inspectorate and the Labor Inspectorate are intended to provide a tool for citizens to report violations relating to tax avoidance and are expected to improve detection of shadow activities. This is an optional measure and is of minor importance. According to the estimates of the State Tax Inspectorate, EUR 40 million in unpaid taxes has been returned to public coffers since 2006 as a result of the public hotline<sup>37</sup>.

## Justification

### Financial literacy programme

\*\* (2017-2021)

In 2017 the Bank of Lithuania, the Ministry of Finance, the Ministry of Education and the State Social Insurance Fund Board launched a joint public financial literacy programme.

36 Official site of the Parliament of Lithuanian: <https://e-seimas.lrs.lt/portal/legalAct/lt/TAP/86e578a0284911e9a505bd13c24940c9?positionInSearchResult=s=9&searchModelUUID=ab1d29d1-25d1-4caa-b4be-fc56bee37cf5>

37 Official site of the State Tax Inspectorate: <http://www.vmi.lt/cms/stop-seseliui>

As part of this plan, in 2018 the State Tax Inspectorate visited 100 schools.

### Awareness raising campaign

\*\* (ongoing in 2019)

A large scale public awareness raising campaign is being

conducted in cooperation with the European Commission. This campaign is aimed to increase public understanding about the shadow economy, its repercussions and the benefits of legitimate economic activity as well

as to reduce justification of the shadow economy<sup>38</sup>.

38 <https://www.lrt.lt/naujienos/lietuvoje/2/233671/del-geresnio-finansinio-rastingumo-pazadai-investuoti-i-mokytoju-paruosima>

## LATVIA

The policy measures undertaken in Latvia to counter the shadow economy are numerous and focus mainly on regulation and detection (11 and 16 measures, respectively, out of 36, or 75% of all measures). Other measures target public justification of the shadow economy, taxation and penalties. The accuracy with which these measures are targeted (in other words, the extent to which they target significant drivers of the shadow economy) is 53%.

Combatting the shadow economy has been announced as the government's number one priority for more than five years, and a number of framework documents have been developed to achieve this. Among these, the Inter-institutional Work Plan for Reducing the Shadow Economy for 2016–2020 is the key document.

A large proportion of measures focus on stricter regulation of sectors which are affected by an extensive shadow economy. This refers to both the shadow market in goods and services and the shadow labor market. In some cases there is an overlap between regulation and detection: policies implementing stricter regulation are also believed to have the effect of better identifying shadow

economy activities. But not all policies are of restrictive nature. Tax reform – in particular, the reduction of corporate income tax – is also seen as a way to reduce the tax and administrative burdens on legal economic activities, as a way of incentivizing market participants to work, sell and buy goods legally. Four measures have been undertaken to increase penalties for participation in the shadow economy, and five measures are aimed at reducing justification.

### Goods and services

#### Regulation

##### Licensing and regulation of taxis and other carriers

\* (permanent, started in 2018)

This measure consists of changes to the following two regulations: requirements for the receipt of a special permit

(license) of the planning region and the city of the Republic and the procedure for the carriage of passengers by taxi; and regulations for the registration of drivers for the carriage of passengers by taxi and passenger car. The aim of these regulations is to improve the licensing rules for taxis and other carriers. This measure sets out the rules for the carriage of passengers by taxi, including safety requirements. The measure also regulates how payments (including cash payments) must be made, and prescribes the information that must be included on receipts, as well as what and how taxi drivers should report, and in which areas they can operate (depending on the license). The potential impact of these measures is relatively weak, given that the level of shadow economic activity within the taxi industry is very high (up to 80%).

Fig. 9. Policy measures in Latvia

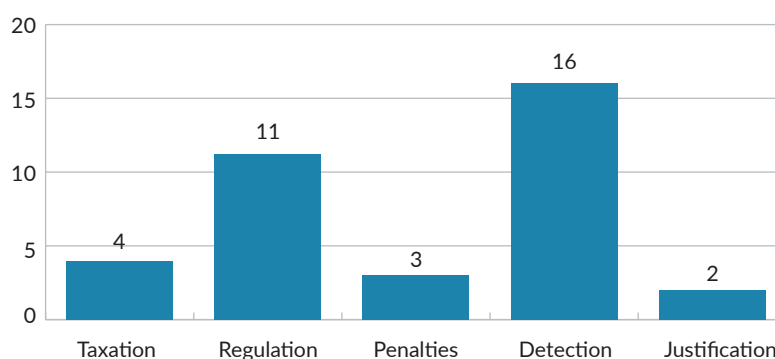




Table 7. Policy measures in Latvia by segments of shadow economy

	Causes		Factors		
	Taxation	Regulation	Penalties	Detection	Justification
Goods and services		Licensing and regulation of taxis and other carriers * (2018)	Liability of electronic communications providers for failure to restrict access to unlicensed websites * (planned in 2019)	Amendments to the Road Transport Law adopted * (2017)	
		Standard construction contracts *** (2018)	Blocking of domains in case of noncompliance with tax legislation** (Permanent, started in 2016)	Cooperation and sharing of information to reduce the risks of tax evasion in healthcare sector ** (planned in 2019).	
		Obligation for credit institutions to restrict payments** (planned in 2019)		System of the prevention of corruption and conflicts of interest in public procurement in healthcare sector** (planned in 2019)	
		Obligation for electronic communications providers to limit access to unlicensed websites * (planned in 2019)		Audit of documents of absence from work due to illness * (planned in 2019)	
				Extension of the powers of authorities to limit access to illegal media content ** (Permanent, began in 2015)	
				System for the prevention of corruption and conflicts of interest * (planned in 2019).	
				Obligation for credit institutions to provide information on payments ** (planned in 2019)	
Excise goods		Stricter regulation of the distribution of excise goods** (Permanent, started in 2018)		Increasing efficiency of the State Revenue Service in combating the illegal supply of petroleum products * (planned in 2019)	
		Restrictions on trading imported fuel ** (Permanent, started in 2018)			
Labor	Reduction of income tax ** (Permanent, started in 2018)	Cash payment restrictions ** (Permanent, started in 2016)	Penalties for non-compliance with the electronic working time system ** (planned in 2019)	Creation of a register of criminal activities** (Permanent, started in 2016)	
	Advance payment of state social security contributions for all carriers by car * (planned to be initiated in 2019).	Restrictions on the employment in the security sector ** (Permanent, started in 2016).		Introduction of an electronic working time accounting system on construction sites *** (Permanent, started in 2016)	
Common for all	Tax reform *** (Permanent, started in 2016)	Stricter registration process of new businesses ** (Permanent, started in 2017)		Registration of financial beneficiaries of companies *** (Permanent, started in 2017)	Improved process of repayment of state fees ** (Permanent, started in 2017)
	Introduction of single tax account *** (Permanent, started in 2017)	Restrictions on cash holdings by public officials *** (planned to be initiated in 2019)		Stricter tax monitoring of natural persons ** (Permanent, started in 2017)	"White list" of companies ** (Permanent, started in 2018)
		Regulation of the security (protection) industry * (planned in 2019)		Facilitating easier access to financial information by State Revenue Service ** (Permanent, started in 2017)	
			Increased public access to information on companies which may be involved in shadow activities *** (Permanent, started in 2017)		

### **Standard construction contracts**

\*\*\* (permanent, started in 2018)

This policy stipulates that a standard construction contract must be used by two state owned companies: the State Joint-Stock Company 'Valsts Nekustamie īpasumi' (Real estate), and JSC 'Augstsprieguma tīkls' (Electricity). While the policy is expected to exert a major influence, no data is yet available on its effects. The enforcement of standard contracts is a measure that has been successfully applied in the construction industry (and beyond) in many countries.

### **Obligation for credit institutions to restrict payments**

\*\* (planned to begin in 2019)

This measure requires credit institutions and other payment service providers to restrict payments to non-licensed interactive gambling and lottery organizers in Latvia.

### **Obligation for electronic communications providers to limit access to unlicensed websites**

\* (planned to begin in 2019)

This measure specifies the manner in which electronic communications providers must execute decisions of the Lotteries and Gambling Inspectorate to restrict access to unlicensed interactive gambling websites in Latvia in order to prohibit participating in unlicensed interactive gambling and lotteries. They also set out a person's liability for participation in unlicensed interactive gambling and lotteries.

## **Penalties**

### **Liability of electronic communications providers for failure to restrict access to unlicensed websites**

\* (planned to begin in 2019)

Directly linked to the above policy, this measure aims to reduce shadow economic activity within the gambling industry. These amendments determine the liability of electronic communications providers for failing to restrict access to an unlicensed gambling or lottery website.

### **Blocking of domains in cases of non-compliance with tax legislation**

\*\* (permanent, began in 2016)

This measure aims to reduce shadow economic activity in the ICT industry. It gives the State Revenue Service the right to block or disable the domain names of persons or organizations who do not comply with the requirements of tax legislation. This measure is important because companies from many sectors often choose to do business via internet platforms, including accepting payments via online platforms (examples include the taxi industry, real estate).

## **Detection**

### **Amendments to the Road Transport Law**

\* (permanent, began in 2017)

This measure aims to reduce shadow economic activity in the taxi industry by improving the legal framework (legislation that governs the industry) for carriage by light taxis.

### **Extension of the powers of authorities to limit access to illegal media content**

\*\* (permanent, began in 2015)

This measure aims to limit access to illegal media content by extending the powers of the National Electronic Media Council to act within the framework of the Information Society Services Act. No data are yet available on the results of this measure.

### **Audit of documents of absence from work due to illness**

\* (planned to begin in 2019)

By 1 April 2019, Latvia's Ministry of Health planned to collect information on "e-disability documents" (i.e. electronic documents relating to leave of absence from work due to sickness). This measure is being undertaken to carry out risk assessment, to prepare and submit proposals to the Ministry of Welfare to mitigate the risks of inadequate social insurance costs. This activity is implemented to provide better control in relation to 'real' vs 'fake' leave of absence from work, which directly impacts the social welfare budget.

### **System for the prevention of corruption and conflicts of interest in public procurement within the health care sector**

\*\* (planned to begin in 2019)

By 30 September 2019, the Ministry of Health, in cooperation with the Bureau for the Prevention and Combating of Corruption is to submit regulatory amendments setting out requirements for the introduction of a system of internal control to prevent corruption and conflicts of interest within private medical and health care institutions participating in

procurements announced by the National Health Service.

#### **Information about health care services received**

*\*\* (planned to begin in 2019)*

This measure includes various activities to ensure the availability of information to patients about the health care services they have paid for and received in return to the taxes that they have paid.

#### **Cooperation and sharing of information to reduce the risk of tax evasion within the health care sector**

*\*\* (planned to begin in 2019)*

The Ministry of Health (Health Inspectorate), in cooperation with the Ministry of Finance (State Revenue Service) and the Bureau for the Prevention and Combating of Corruption are developing an interdepartmental agreement on co-operation in reducing the risk of corruption and tax evasion. This includes the exchange of information in relation to tax evasion risks, as well as agreement on the most appropriate control measures.

#### **Obligation for credit institutions to provide information on payments**

*\*\* (planned to begin in 2019)*

This measure includes an obligation on credit institutions and other payment service providers to provide the State Revenue Service with information on payments made by persons to unlicensed interactive gambling and lottery organizers in Latvia.

#### **System for the prevention of corruption and conflicts of interest in public procurement within the health care sector**

*\*\* (planned to begin in 2019)*

By 30 September 2019,

the Ministry of Health, in cooperation with the Bureau for the Prevention and Combating of Corruption is to submit regulatory amendments setting out requirements for the introduction of a system of internal control to prevent corruption and conflicts of interest within private medical and health care institutions participating in procurements announced by the National Health Service.

#### **Excise goods**

##### **Regulation**

##### **Stricter regulation of the distribution of excise goods**

*\*\* (permanent, started in 2018)*

The aim of stricter regulations is to reduce illegal products as a share of total sales of tobacco and alcohol products. These amendments specify stricter conditions for the issue of special permits (licenses) for the production and sale of tobacco and alcohol products. This measure has the potential to reduce the number of companies illegally trading in tobacco or alcohol products in retail or wholesale. Although this is a potentially important measure, no data are yet available on its results.

##### **Restrictions on the trading of imported fuel**

*\*\* (permanent, began in 2018)*

This policy is aimed at decreasing the share of illegal petroleum products. It is intended to limit opportunities to drop, store or trade imported fuel within the territory of Latvia (e.g. fuel tanks for international road haulage vehicles).

#### **Detection**

##### **Increasing the efficiency of the State Revenue Service in combating the illegal supply of petroleum products**

*\* (planned to begin in 2019)*

This policy aims to reduce the illegal products as a share of total sales of petroleum products. The Ministry of Finance has been tasked with evaluating the effectiveness with which State Revenue Service supervision and control tasks are executed, and its positive effect (greater revenues) on budget revenue. This process began from 1 February 2019 using the Rural Support Service's Electronic Application System for the Monitoring and Control of Petroleum Products.

#### **The labor market**

##### **Taxation**

##### **Reduction of income tax**

*\*\* (permanent, began in 2018)*

This law has the overall aim of increasing the competitiveness of individuals and of Latvia's entrepreneurship ecosystem by lowering the income tax, with the aim of reducing shadow economic activity in Latvia. The overall idea is that Latvia needs to reduce the taxes on labor.

##### **Advance payment of state social security contributions for all carriers by car**

*\* (planned to begin in 2019)*

This policy aims to reduce shadow economic activity in the taxi industry. It requires an advance payment of state social security contribution: a payment of EUR 130 per vehicle per month). This payment is applicable to all carriers engaged in the carriage of passengers by car.



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## Regulation

### Cash payment restrictions

\*\* (permanent, began in 2016)

These amendments specify restrictions on the use of cash by natural persons not engaged in business activities. The amendments specify how the relevant organizations should report suspicious transactions involving cash to the State Revenue, as well as determining the threshold below which natural persons may make cash payments (EUR 7,200). Discussions concerning the limiting of cash payments are underway, and further amendments to the law are expected.

### Restrictions on employment in the security sector

\*\* (permanent, began in 2016)

The aim of these amendments is to reduce the incidence of illegal employment and the risk of tax fraud within the security industry. The amendments set out stricter regulations governing the individuals who may work in the industry (e.g. requirements for the certification of security staff), and how such measures are regulated.

## Penalties

### Penalties for non-compliance with the electronic working time system

\*\* (planned to begin in 2019)

These amendments will determine the penalties to be imposed for non-compliance with 'electronic working time system' accounting requirements within the construction industry. The electronic working time system is being introduced in the construction industry in order to ensure better control over

the actual hours spent by workers on construction sites.

## Detection

### Creation of a register of criminal activities

\*\* (permanent, began in 2016)

The purpose of this law is to establish and maintain a register of criminal activities, and ensure the processing of data regarding a person's bank account with a view to: (i) preventing the use of the Latvian and international financial systems in criminal activities, including money laundering; the financing of terrorism; financing of the production, possession, transportation, distribution or use of weapons of mass destruction; and to ensure international co-operation in this field; (ii) to protect state and public security; (iii) to promote the investigation of criminal offences and the prosecution and trial of criminal cases; (iv) to enable state institutions and officials to receive information necessary for the performance of state administrative tasks laid down by this law; and (v) to ensure the efficient operation of the tax administration system.

### Introduction of an electronic working time accounting system on construction sites

\*\*\* (permanent, started in 2016)

This measure introduced an electronic working time accounting system on construction sites. This system is intended to provide a better mechanism to control the actual hours spent by employees on construction sites. A related measure aims to establish a common database and facilitate the transfer of

data required by the electronic working time accounting system.

### Public information disclosure

\*\*\* (permanent, started in 2017)

The aim of this measure is to foster openness of information and public participation by publicly providing information on: (i) those employers who pay low salaries – i.e. those who are below the average monthly salary for the industry/country, or even below the minimum monthly wage (which creates the risk of a so-called 'envelope wage'); (ii) those natural persons and officials representing a legal person who have been administratively punished for violating wage regulations; (iii) those taxpayers who have not submitted declarations to the tax administration, if the deadline for submission of these declarations has been exceeded by more than 15 days.

## Common policies

### Taxation

#### Tax reform

\*\*\* (permanent, began in 2016)

Latvia's tax reforms have been aimed to increase the country's overall competitiveness and to combat the shadow economy in particular. Reforms activities aimed at shifting the tax burden from labor to consumption; decreasing social inequality; changing the Company Income Tax regime (for example, introducing a zero tax rate for reinvested profits<sup>39</sup>) and improving the administration of tax revenues.

#### Introduction of a single tax account

\*\*\* (permanent, began in 2017)

These amendments provide

<sup>39</sup> More on the tax reform: <https://home.kpmg/xx/en/home/insights/2017/12/tnf-latvia-tax-changes-2018.html>

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for the introduction of a single tax account by the State Revenue Service, beginning in 2021. Reducing bureaucracy, as well as increasing the ease and transparency with which taxes are paid, are recognized as important factors that can help to combat the shadow economy. This policy stipulates that the taxes (and certain regular payments paid by companies and administered by the SRS) will be credited to a single account.

## **Regulation**

### **Regulation of the security (protection) industry**

*\* (planned to begin in 2019)*

Amendments to the Security Operations Law are currently under negotiation. This comes in response to a recent debate indicating that a high level of shadow economic activity exists in the security industry, in particular, high envelope wages and high underreporting of income.

### **Stricter registration process for new businesses**

*\*\* (permanent, began in 2017)*

This policy aims to reduce shadow economic activity by strengthening control over the registration of new businesses. This is achieved by introducing additional checks into the registration process, and reducing the potential risks of fraud. By implementing this activity, it is planned to reduce the number of companies that are established for the purposes of covering illegal or shadow market activity (including VAT schemes, etc.) rather than carrying out genuine entrepreneurial activities.

### **Restrictions on cash holdings by public officials**

*\*\*\* (planned to begin in 2019)*

This policy aims to reduce

shadow economic activity by prohibiting a public official from accumulating in his/ her household cash exceeding the amount of 20 minimum monthly wages. In addition, it introduces a new obligation upon public officials to submit additional declarations in relation to any transactions they carry out that involve amounts greater than 20 minimum monthly wages.

## **Detection**

### **Registration of financial beneficiaries of companies**

*\*\*\* (permanent, began in 2017)*

The aim of this amendment is to initiate registration in the State Company Register of a company's true beneficiaries (i.e. those officials who make a profit from the company's business activities). Understanding "where the money goes" potentially is of importance in the fight against corruption, crime and the financing of terrorism.

### **Stricter tax monitoring of natural persons**

*\*\* (permanent, began in 2017)*

This policy aims to reduce shadow economic activity by obliging credit institutions and payment service providers to submit information once a year to the State Revenue Service on those clients for whom the total amount of debit or credit turnover on demand deposit accounts and payment accounts within one credit institution or payment service provider is EUR 15,000 or more.

### **Increased public access to information on companies that may be involved in shadow activities**

*\*\*\* (permanent, began in 2017)*

This policy aimed to reduce

shadow economic activity by providing the opportunity to obtain information about those officials of companies who are included in the 'high risk' list (i.e. those found guilty in tax evasion, corruption and other activities posing a potential risk to their partners in cooperation).

### **Facilitating easier access by the State Revenue Service to financial information**

*\*\* (permanent, began in 2017)*

This policy was introduced to strengthen the fight against tax evasion: the measure authorizes the State Revenue Service to access information held by financial institutions (e.g. banks) to ensure access to information concerning financial accounts. Prior to this measure, access to such information by the State Revenue Service was very limited.

## **Justification**

### **Improved process of repayment of state fees\*\***

*(permanent, began in 2017)*

This policy aims to reduce shadow economic activity by stipulating that the amounts of overpaid and incorrectly paid state fees shall also be refunded without the taxpayer being required to apply for such a refund. This is one of the activities designed to build the trust and cooperation among taxpayers towards the governing institutions. This is, however, one of the prerequisites for reducing the extent of the shadow economy.

### **"White list" of companies**

*\*\* (permanent, began in 2018)*

The idea behind introducing a 'white list' of companies is to

recognize those taxpayers who pay all applicable taxes. The list is created according to certain criteria such as absence of tax debt, whether the company pays at least the average

salary for the industry in which it operates, etc. Companies included in the list receive certain benefits, including fewer audits, a dedicated consultant at the State

Revenue Service, additional points in public tenders, etc.

*The report on Latvia was prepared in cooperation with dr. Arnis Sauka.*

## ESTONIA

Policy measures against the shadow economy in Estonia mostly focus on detection (seven measures out of a total of 13, or 54% of all measures). Other measures target taxation, regulation, justification of the shadow economy and penalties. The accuracy of the targeting of these measures (that is, the extent to which they target significant drivers of the shadow economy in Estonia) is 69%.

In relation to the shadow market in goods and services, policies in Estonia focus mostly on detection (three out of four policies). No policies were aimed specifically at the market in excise goods – instead, this market was targeted only via common policies. In the case of the shadow labor market, three policies are directed towards a better detection of shadow labor, and two at reducing justification of the shadow economy as well as changes in public procurement process. Common policies applicable to all sectors of the shadow economy include better tax administration, which is expected to lower the administrative burden on taxpayers. Tax payments and customs declaration have become easier to handle due to the introduction of e-services. An interesting tool was introduced in 2017, enabling companies to check out the past tax behavior of

other firms online as a means of assessing their trustworthiness as counterparties or business clients. This counterparty self-check mechanism appears to be the most efficient method introduced to combat the shadow goods market and the illegal market in excise goods. The availability of VAT information for counterparties have produced a more positive effect than expected long-term.

As one of the most important aspects of the shadow economy overall, the shadow labor market is targeted by various policies, focusing on different drivers. Some of these drivers, such as detection and justification and tax morale, have been found to be significant by our regression analysis. In some cases, such as through the mechanism of state procurements, the Estonian state is using its power as a large-scale contractor in the construction sector to shape the way business is done.

Another important way to improve tax behavior is to promote the view of tax and customs officials that taxes are ‘paid’, rather than being ‘collected’. This places an emphasis on making tax/excise duty payments as fast, smooth and effortless as possible. This is achieved by creating easy-to-use online services, pre-filled tax declarations, the automatic sharing of information with companies, and so on. The understanding of Estonia’s tax and customs authorities is that greater cooperation with taxpayers leads to improved tax compliance, and an increase in the view that participating in the shadow economy is simply costly and inconvenient.

### Good and services

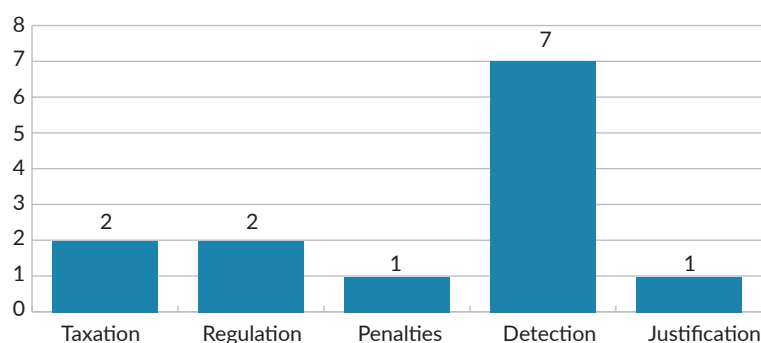
#### Regulation

##### Online customs declarations

\*\* (permanent, began 2017)

This measure involves the creation of a 24/7 online customs

Fig. 10. Policy measures in Estonia



declarations system that makes declarations in paper form obsolete. An online form is also available for mobile devices.

### Detection

#### Agreements with Uber, Taxify, Estateguru, AirBNB

\*\*\* (2017-2018, depending on the company)

This measure ensures that information on customer payments made when using these service platforms (which operate in the ride-sharing and accommodation sectors) can be automatically shared with the tax office. Tax payments are made as smooth and trouble-free as possible. The system also helps to detect tax avoidance. This measure is of great importance because it is a highly efficient policy that makes legal tax behavior very convenient for the taxpayer. Or, to put it another way, it makes avoiding taxes an inefficient, inconvenient and costly activity.

#### Provision of VAT information on counterparties

\*\*\* (permanent 2015)

This measure requires companies to fill out and report counterparty information when the total turnover sum of the invoice (not including VAT) exceeds EUR 1,000 during the relevant tax period. This applies to purchases between firms. The 2015 annual report of the Tax and customs office states that the positive effect of the measure was EUR 94 million in recovery of under-paid tax, which was three times the amount expected. The number of fictitious invoices and of individuals designated as high-risk have also decreased.

#### Cash registers automatically sharing information online

\*\* (policy proposal, currently under discussion)

This proposal involves cash registers sharing information with tax and customs authorities in Estonia. The aim of the

measure is to make tax and excise payments on goods smoother and faster for businesses. The system would also make it more difficult for companies to avoid paying taxes or excise duties.

### The labor market

#### Regulation

#### Improvements to the state procurements process

\*\*\* (Started in 2018)

This measure requires that the main contractor in a state procurement process provides contractual information proving that its workers receive no less than 70% of the average wage for the sector. This requirement is intended to prevent companies from paying the official minimum wage, with the rest of a worker's wage being paid as an 'envelope wage'. This policy is of very high importance because of the large scale of state

Table 8. Policy measures in Estonia by segments of shadow economy

	Causes		Factors		
	Taxation	Regulation	Penalties	Detection	Justification
Goods and services		Online customs declaration ** (2017)		Agreements with Uber, Taxify, Estateguru, AirBNB *** (since 2017, 2018)	
				Cash registers automatically sharing information online ** (under discussion)	
				Provision of VAT information on counterparties ** (2015)	
Labor		Improvements to the state procurements process *** (2018)		Electronic registration of construction workers ** (under discussion)	Counseling of employers ** (mentioned in 2015-2017)
				Automatic information for employees about employment status * (2018)	
				Reducing the incidence of 'envelope' wages * (2018-2021)	
Common for all	Modernization of e-services ** (2017-2020)		Tax liability with tax fraud conviction * (2017)	Tax performance indicator ** (2017)	
	New online tax filling system ** (since 2019)				

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investments in real estate and infrastructure development. It thus can shape the way the construction sector provides its services by demanding proper tax behavior.

## **Detection**

### **Electronic registration of construction workers**

*\*\* (currently under discussion)*

Under this proposal, each construction site would have to maintain a live database of workers on site, making the detection of illegal workers easier. At the moment, construction workers are not electronically registered on construction sites, making monitoring a time-consuming process.

### **Automatic information for employees about employment status**

*\* (permanent, started in 2018)*

This policy ensures workers are automatically informed via email when an employer changes their status in the register of employment. The aim of the measure is to make the employee aware when the employer is trying to pay salary as an 'envelope wage'. (Getting paid in cash does not automatically mean one is getting envelope wage. It would also be cumbersome for an employee to check every time to ensure that all taxes have been properly paid on their salary.)

### **Reducing the incidence of 'envelope' wages**

*\* (policy period 2018-2021)*

Policy goals for the period 2018-2021 include reducing the incidence of 'envelope' wages from 8% to 4%, and to reduce justification for envelope wage by making them unacceptable

to 90% of respondents (the figure is currently 62%). Proposed measures include: i) additional control visits to private construction sites and public events (concerts, etc.); ii) partnering with credit institutions; and iii) cleaning/reorganizing of the business register.

## **Justification**

### **Counseling of employers**

*\*\* (mentioned in 2015, 2016, 2017 tax and customs reports)*

This policy aims to help firms ensure that their workers are correctly registered. Under this measure, firms are educated on proper tax behavior, allowing them to voluntarily correct themselves. The policy is carried out in cooperation with professional associations in various sectors (for example, the hotel and restaurant association or construction sector association). In 2016, tax authorities contacted 910 'suspicious' firms. In response, 459 new legal workers were registered. As a result, the amount of labor taxes collected increased by EUR 2.6 million. Direct control over companies was only initiated on three occasions. In 2017, the policy resulted in the registration of 657 new legal workers and labor taxes increased by EUR 3.3 million. Direct control was initiated only in five cases.

## **Common policies**

### **Taxation**

#### **Modernization of e-services**

*\*\* (policy period 2017-2020)*

The general idea behind these measures is to foster the idea that taxes are 'paid', rather than being

'collected'. Thus, efforts are being made to ensure that making tax payments is as smooth and painless as possible, including pre-filled tax reports, online reporting, etc. These services are rolled out as they are developed and constantly updated.

#### **New online tax filing system**

*\*\* (permanent, started in 2019)*

This policy is part of the greater goal of providing quality e-services for tax payments. The policy aims to make the experience of paying taxes smoother, and to make the service available on mobile devices.

## **Penalties**

### **Tax liability with tax fraud conviction**

*\* (permanent, started in 2017)*

Under this measure, tax liability is established in parallel with a conviction for tax fraud. (A separate court procedure used to be required for the tax office to reclaim taxes after tax fraud conviction.) In its first year of operation, this measure applied to 16 court cases, involving a total tax liability of EUR 15 million.

## **Detection**

### **Tax performance indicator**

*\*\* (permanent, started in 2017)*

This measure provides an online service that enables companies to check the past tax behavior of other firms, in order to provide a tool to assess the trustworthiness of counterparties and business clients.

*The report on Estonia was prepared in cooperation with the Estonian Business School.*



## POLAND

Policy measures to combat the shadow economy in Poland mostly focus on taxation, penalties and detection (7, 5 and 5 measures respectively, out of total of 20 all measures). Two more measures are aimed at addressing regulation, and one is intended to reduce justification of the shadow economy. The accuracy with which the measures are targeted (that is, the extent to which they target significant drivers of the shadow economy in Poland) is comparatively high, 80%.

Since 2015, the government in Poland has taken numerous actions aimed at enhancing tax collection. Although the main aim of these measures has been to combat VAT fraud and tax evasion, countering the shadow economy has also been quoted as a justification for new monitoring mechanisms and increased penalties. It is important to note that VAT frauds are often related to the shadow economy – the goods involved in so-called ‘carousel’ frauds are reported as having been exported, but in reality may be sold in the shadow economy. Improvements in the methods of detection, coupled with wider discretionary powers on the part of public authorities, have a deterrent effect not only on VAT frauds and tax evasion, but also on shadow economic activities in general. The number of changes implemented makes it difficult to evaluate which one has achieved the greatest impact: a general trend towards more repressive regulations has made entrepreneurs more cautious about any actions that could arouse the suspicions of the administration. Although a range of policies have been

implemented, many of them fall into three broad areas: changes to general rules; the tightening up of procedures relating to VAT collection; and the tightening up of regulations governing sensitive goods markets.

### Goods and services

#### Taxation

##### Extension of the reverse charging mechanism in VAT

\* (permanent, started in 2017)

Reverse charging for steel rods was introduced in 2013 and in 2015 extended to some electronic devices and precious metals. In 2017 the mechanism was further extended to construction materials and services, and more electronic devices and precious metals. This mechanism is likely to be withdrawn as split payments become more popular.

##### Modification of the rules of registration of taxpayers as VAT payers

\* (permanent, started in 2017)

The aim of the change was clarification of the regulation defining the circumstances of the deletion of the taxpayer from the register of VAT payers, making it harder to establish “missing traders”

for VAT carousel frauds or issue invoices for goods that have never been sold.

##### Limitation of quarterly VAT settlements

\*\* (permanent, started in 2017)

Starting from 2017 more taxpayers are obliged to settle on monthly basis, allowing tax authorities for faster identification of irregularities.

#### Penalties

Together with tighter monitoring of VAT flows several laws were adopted increasing penalties for tax evasion and tax fraud which can also be applied to some shadow activities.

##### Increase of penalties for tax offences

\*\* (permanent, started in 2017)

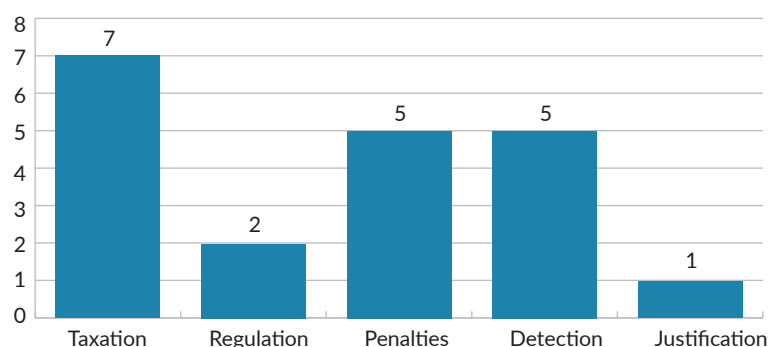
Changes in the penal code increased penalties for tax offenses up to 25 years in prison for falsifying invoices above PLN 10 million, in force since March 2017.

##### Modification of solutions regarding joint and several liability and the guarantee deposit

\*\* (permanent, started in 2017)

In 2013 joint liability was introduced in transactions

Fig. 11. Policy measures in Poland



with selected goods (including fuels, precious metals, steel products). As a result, buyers of those products became jointly liable with the seller for VAT charged on such transactions (some caveats apply here – did the buyer know that seller is not a reliable firm?). The aim of the regulation was to make buying goods from shady businesses that vanish before paying VAT riskier and less profitable even if they offered much lower prices. The joint liability was not applied if a seller was registered as a “safe” one and deposited with the tax office an amount equal to 20% of monthly VAT payments. The regulation was later modified in 2015 and in 2017. The most recent changes broaden the scope of goods subject to several liability and add more conditions for companies that want to pay guarantee deposit and extend them to entities starting economic activity.

#### **Sanctions for unreliable VAT settlement**

\*\* (permanent, started in 2017)

When tax administration concludes a taxpayer reports lower VAT than expected, they will have to pay the missing amount plus 30% of it as a sanction. In case of tax frauds (in particular the use of so called empty invoices for services and goods that were never delivered), the sanction will be 100%, so the tax liability will double.

#### **Detection**

##### **Standard Audit File – SAF**

\*\*\* (permanent, started in 2016)

SAF (*Polish* Jednolity Plik Kontrolny, JPK) introduced in mid-2016 for the largest

companies and later also for small and medium (early 2017) and micro enterprises (early 2018) allows tax administration for automated search for irregularities in books. It was further enhanced in 2017 after banks were obliged to report data on the B2B transactions to tax administration, providing more data to analyze in the search for irregularities (STIR system). In 2019 the Ministry of Finance plans to further increase surveillance and to introduce a central record of invoices and online cash registers.

#### **Split payment**

\*\* (permanent, started in 2018)

Split payment introduced in mid- 2018 gives tax administration full control of VAT flows of companies. The split payment mechanism divides the payment for the goods or services supplied into a net amount, which is paid by the purchaser to the account of the supplier, and an amount of tax, which is credited directly to a separate VAT account. From this separate VAT account, a taxpayer could pay input VAT on the invoices they receive from their suppliers and could also pay their tax liability to the tax office. In addition, taxpayers can receive refunds of excess input VAT to their VAT accounts on an accelerated basis. The split payment is a voluntary mechanism, the purchaser of the goods or services will decide on its application on a case-by-case basis, and the parties to the transaction must be active VAT payers. This model allows tax authorities to monitor and block funds on VAT bank accounts, eliminating the risk of disappearance of taxpayers with VAT disbursed

to them by customers and not paid to tax authorities. In principle, this model shall impede or even prevent occurrence of fraud already at the stage of the transaction. At the same time, it will provide for better transparency of VAT settlements and impede transfer of untaxed funds abroad.

#### **Justification**

##### **Receipt lottery**

\* (permanent, started in 2015)

Since 2015 the government operates a receipt lottery that encourages consumers to register receipts.

##### **Excise goods**

Even further reaching changes have been introduced in the segment of goods that are particularly susceptible to frauds and sensitive for the state budget revenue.

#### **Regulation**

##### **Stricter regulation of fuel importers**

\*\* (permanent, started in 2016)

The so-called fuel package eliminated a number of gaps in VAT, excise and concession provisions regulating trading in liquid fuels. The most important amendments refer to:

- Obligation to pay VAT on fuels in case of intra-EU purchases within 5 days of the day of placing such goods in the tax warehouse or the place of receipt of excise goods, or upon the transfer of such goods on the territory of the country (if the goods are transferred outside the procedure of suspension of excise duty, in accordance with the excise duty law).

- Appointing tax warehouses and registered consignees as VAT taxpayers.
- Introducing penal fiscal liability for the infringement of the terms of supplies and purchases.
- Tightening conditions of obtaining the concession for foreign trading in fuel.

## Detection

### Monitoring of transport of sensitive goods

\*\* (permanent, started in 2017)

This policy introduced a data register of transport of selected “sensitive” goods (in particular liquid fuels, denatured alcohol, raw tobacco and vegetable oils) which is kept in the IT system by the Head of the National Revenue Administration (SENT register). The transfer of data on taxable activities for some goods is connected with the declaration of transport by obliged persons. It will also be automatically connected with the collection of geolocation data sent by GPS locators. The inspection services have access

to data from the system on the road in order to aim inspections at undeclared transports.

## Labor market

### Taxation

#### Lower lump-sum social security contributions for micro businesses

\* (permanent, started in 2018)

The amounts of lump-sum social security contributions have been reduced for the smallest businesses. One of the arguments for this change was that lump-sum contributions constitute the heaviest burden for the self-employed with low revenues and may push them into the shadow economy. The formula used to calculate contributions remains complicated, however, and eligibility for the lower contributions is a function of income (up to a maximum of twice the minimum wage). As a result, this option is only available for service providers for whom labor input constitutes the majority of their costs. In the case of retailers, even those whose

profit margins are low, even a moderate level of income will push them above the threshold.

## Detection

### Requirement to register new employees before the first day of work

\*\* (permanent, started in 2016)

Under this measure, new employees must be registered before they can begin working. Previously they only had to be registered during the first day of work. In the event of an inspection, employers claimed that all unregistered workers were on their first day.

## Common policies

### Taxation

#### General tax avoidance rule - GAAR

\*\* (permanent, started in 2016)

This policy is meant to prevent taxpayers from taking actions which, although lawful, are only or mainly aimed at achieving a tax benefit. The important thing is that a tax benefit (meaning

Table 9. Policy measures in Poland by segments of shadow economy

	Causes		Factors		
	Taxation	Regulation	Penalties	Detection	Justification
Goods and services	Extension of the reverse charging mechanism in VAT * (2017)		Joint and several liability and guarantee deposit ** (2017)	Standard Audit File *** (2016)	Receipt lottery * (2015)
	Modification of the rules of registration of taxpayers as VAT payers * (2017)		Sanctions for unreliable VAT settlement ** (2017)	Split payment ** (2018)	
	Limitation of quarterly VAT settlements ** (2017)		Increase of penalties for tax offences ** (2017)		
Excise goods	Stricter regulation of fuel imports ** (2016)	Stricter regulation of fuel imports ** (2016)	Stricter regulation of fuel imports ** (2016)	Monitoring of transport of sensitive goods ** (2017)	
Labor	Lower lump-sum social security contributions for micro businesses * (2018)			Requirement to register new employees from the first day of work ** (2016)	
Common for all	General tax avoidance rule - GAAR ** (2016)	Limit on cash transactions ** (2017)	Extended seizure ** (2017)	Reorganization of tax administration * (2017)	
	No registration for micro business * (2018)				



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less tax) is understood not only as minimizing tax burdens but also as, for example, deferring a tax obligation. As a result, even if actions are lawful, tax administration can change the way they are taxed if they are considered as artificial.

### **No registration for micro business**

*\* (permanent, started in 2018)*

The smallest businesses in Poland (those with monthly revenues of up to PLN 1200/ EUR 300) can carry out their trade without registration, and without having to pay social security contributions. Although this measure takes some activities out of the shadow economy, it simultaneously creates a threshold of EUR 1200 in monthly revenues, above which the tax and administrative burden rises sharply. As a result, individuals operating

unregistered businesses will be tempted to ensure the legal part of their business remains as small as possible, in order not to exceed the threshold.

### **Regulation**

#### **Limit on cash transactions**

*\*\* (started in 2017)*

In 2017, the maximum limit for cash transactions between businesses was lowered from the EUR 15,000 to roughly EUR 3,500 (15,000 PLN).

### **Penalties**

#### **Extended seizure**

*\*\* (permanent, started in 2017)*

This policy allows prosecutors to take over control of companies if there is suspicion that company assets are a result of crime. Taking into account that prosecutors have a low level of business knowledge

and that it takes years to win a case in court, it creates a risk that companies will be put into management of prosecutors for years before the owner is able to win the case.

### **Detection**

#### **Reorganization of the tax administration**

*\* (permanent, started in 2017)*

Customs services, tax control and tax administration were merged into a single body, the National Revenue Administration. Taking into account the scope of other changes enacted in Poland, it is difficult to single out any specific effects of the new tax administration structure, but it is likely to have increased efficiency.

*The report on Poland was prepared in cooperation with the Civil Development Forum.*

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## **CZECH REPUBLIC**

The biggest single group of policy measures to combat the shadow economy in the Czech Republic have been undertaken in relation to detection (five out of a total of 13 measures, or 38%). In addition to these, three measures have been taken to reduce justification of the shadow economy, and two in each of the categories of regulation and penalties. One measure is in the category of taxation. The accuracy with which measures are targeted in the Czech Republic (that is, the extent to which measures target significant drivers of the shadow economy) is 62%.

## **Goods and services**

### **Taxation**

#### **Lowering of VAT in selected sectors**

*\*\*\* (planned to begin in 2019)*

By adopting an amendment to the VAT Act, the government of the Czech Republic plans to lower the burden of VAT in selected sectors. These include catering, cleaning, minor repairs to bicycles, shoes and clothes, hairdressing and flower gardening. Under the amendment, VAT on these goods and services will be lowered to 10% (from the current rate of 21%). This amendment is intended as a form of compensation for the additional costs imposed by the country's Electronic Evidence

of Sales system, and should help to lower the 'shadow' aspects of entrepreneurship. The government promises an increase in the willingness of entrepreneurs to declare their incomes, and a reduction in illegal purchases of goods and service.

### **Justification**

#### **Introduction of a receipt lottery**

*\* (permanent, began in 2016)*

Under the receipt lottery, receipts from every merchant registered in the Czech Republic's Electronic Evidence of Sales system can be a winning ticket. The aim of the lottery is to encourage customers to insist on obtaining a receipt from merchants. Every receipt issued bears a unique

code that the customer can enter into the lottery using a dedicated application. A draw takes place every month, run by the Ministry of Finance. The first prize in the lottery is CZK 1 million; the second prize is a car; the third prize is CZK 300,000. By insisting on a receipt, the customer ensures that the merchant has to declare the income (according to the terms of the Electronic Evidence of Sales Act), because the merchant's accounting system is linked to the Ministry of Finance and the transaction is immediately recorded and cannot be hidden.

This measure also plays a role in relation to justification and education, due to the fact that few people realize the true size of the shadow goods and services market. Information about the receipt lottery is supported with other information relating to the shadow economy and tax evasion.

### Excise goods

#### Plan for zero tolerance towards the shadow market in alcoholic spirits

\*\*\* (in operation 2015-2018, policies still active)

This plan consisted of 13 activities aimed at increasing control and supervision over the production and sale of alcoholic spirits in order to combat the shadow market in these goods. The measure is a direct reaction to the so-called 'Methanol affair'<sup>40</sup>. Six ministries are involved: the Ministry of the Interior, the Ministry of Agriculture, the Ministry of Health, the Ministry of Justice, the Ministry of Industry and Trade, and the Ministry of Finance. Each has introduced legislative changes to combat the shadow market in alcohol. For example, sanctions for illegal trading in alcohol have been increased from CZK 3,000 (approximately EUR 120) to CZK 10 billion (approximately EUR 393 million).

### Regulation

Regulatory measures introduced as part of the zero tolerance plan are: 1) reducing the maximum possible capacity of consumer packaging of alcohol; 2) introduction of a new control tape designed to label alcohol with significantly

<sup>40</sup> The methanol affair began in September 2012, when a series of methanol poisonings occurred in the Czech Republic. More than 50 people died.

improved protection features; 3) concessions for the sale of spirits which will be automatically eligible under pre-defined conditions; 4) introduction of the so-called 'birth certificate' for spirits (monitoring of the entire production process, including raw material suppliers, etc.); 5) completion of legislative measures on the New Substance Abuse Act and submitting it to the Government.

### Penalties

Penalties imposed under the plan are: 6) introduction of a financial penalty for individuals obliged to label alcohol (during manufacturing) for destruction, loss or theft of the alcoholic control tapes; 7) revision of the Criminal Act in the area of the definition of crimes related to the production and distribution of spirits.

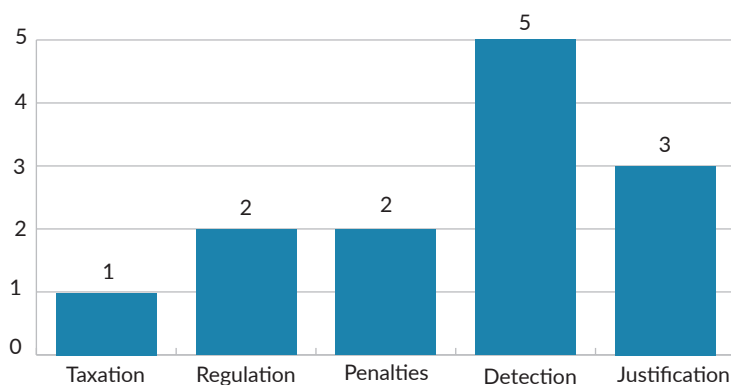
### Detection

Detection measures include: 8) an increase in the number of controls placed on the use of methanol; 9) unification of the state supervisory institutions in the area of food and spirits; 10) introduction of a criminal investigation group dealing specifically with crimes relating to the shadow market in spirits; 11) extraordinary inspections by the Customs Administration, police and other inspection bodies against illegal producers, distributors and sellers of spirits.

### Justification

Education activities include: 12) an information campaign to eliminate dangerous spirits in high-risk locations and among particular groups, explaining which types of spirits are

Fig. 12. Policy measures in the Czech Republic



**Table 10. Policy measures in the Czech Republic by segments of shadow economy**

	Causes		Factors		
	Taxation	Regulation	Penalties	Detection	Justification
Goods and services	Lowering of VAT in selected sectors *** (2019)				Introduction of a receipt lottery *(2016)
Excise goods		Plan for zero tolerance towards the shadow market in alcoholic spirits *** (in operation 2015-2018, policies still active)	Plan for zero tolerance towards the shadow market in alcoholic spirits *** (in operation 2015-2018, policies still active)	Plan for zero tolerance towards the shadow market in alcoholic spirits *** (in operation 2015-2018, policies still active)	Plan for zero tolerance towards the shadow market in alcoholic spirits *** (in operation 2015-2018, policies still active)
Labor					Amendment to the Insolvency Act *** (2019)
Common for all		Electronic Evidence of Sales Act *** (2016)	Electronic Evidence of Sales Act *** (2016)	Electronic Evidence of Sales Act *** (2016)	
				Tax Cobra *** (2014)	
				Income Tax Act Amendment ** (2016)	
				Central Evidence of Bank Accounts * (2018)	

potentially life-threatening; 13) implementation of measures for the protection of children and youth in relation to alcohol use in the areas of legislation, organization and prevention.

### Labor market

#### Justification

#### Amendment to the Insolvency Act

\*\*\* (planned to begin in 2019)  
The aim of this amendment is to dramatically lower the proportion of Czech citizens with very high debts. The current situation regarding insolvency is as follows: if a person has a very high debt, his/her regular repayments are deducted directly from their official wage. People with very high debts may receive only a small part of their wages. These deductions can reduce the actual wage received down to the level of the minimum wage. This leads to a situation

in which an indebted employee may ask for an ‘envelope wage’ so he or she does not have to pay high repayments, and receives more money to live on. This amendment includes two new conditions: i) if the debtor is able to repay at least 60% of the debt within three years, or ii) if the debtor is able to repay at least 30% of the debt within five years, the rest of the debt is written off. This should allow people to repay their liabilities and get back to normal life more quickly. The expected outcome of this change is to reduce the extent of the shadow labor market, because workers can rid themselves of debts faster and are therefore less likely to ask for an ‘envelope’ wage – an outcome that should also have a beneficial effect on economic conditions as a driver of the shadow economy. Better financial conditions for indebted people should also raise their tax morale.

### Common policies

#### Regulation

#### Electronic Evidence of Sales Act

\*\*\* (permanent, started in 2016)

This act, which is considered to be the most important tool in the Czech Republic’s fight against the shadow economy, aims to prevent tax evasions and monitor whether or not taxpayers correctly report their transactions. Each merchant is obliged to obtain and use a special accounting application. Evidence of each transaction is submitted to the Ministry of the Finance using this application. Merchants are also required to issue a receipt to the customers for every payment. Violation of this law can cost the merchant up to CZK 500,000 (approximately EUR 20,000). The Ministry of Finance

claims that this system has brought more than CZK 10 billion (approximately EUR 393 million) into the state coffers since it was launched in 2016.

The implementation of the Act is being carried out in four phases, each relating to a different group of entrepreneurs (sectors):  
Phase 1 – Accommodation and catering services (from December 2016);  
Phase 2 – Retail and wholesale (from March 2017);  
Phase 3 – Other activities such as transport, agriculture (launch date to be decided);  
Phase 4 – selected professions and production services (launch date to be decided).

This act can be considered a regulation on businesses. If an individual wants to start a particular business, they must obtain a special accounting application and other related equipment. This might be considered expensive and inconvenient by some small businesses, who might therefore decide not to start an official business and to remain in the shadow economy.

Penalties for violation of the law can cost a merchant up to CZK 500,000 (approximately EUR 20,000).

The Electronic Evidence of Sales Act also includes detection measures under which government officials are authorized to conduct 'mystery shopping' expeditions to

check if merchants issue receipts to every customer.

## **Detection**

### **Tax Cobra**

\*\*\* *(permanent, started in 2014)*

Tax Cobra is a special project group focusing on the detection of tax avoidance, tax evasion, and also on VAT non-payments and related activities as well as controls on foreigners working in the Czech Republic. The group consists of employees from the Customs Administration, the police and the Ministry of Finance. Within a framework of legal options, Tax Cobra representatives exchange information to aid the resolution of tax evasion cases and smoothly coordinate individual proceedings. The main objective of the team's operation is to ensure proper collection of taxes, the return of illegally obtained funds to the state budget, and the punishment of perpetrators. According to official sources, Cobra has saved more than CZK 10 billion (about 388 million euros).

The Cobra group also combats the shadow goods and labor market by confiscating smuggled and stolen goods, checking on foreigners working in the Czech Republic. Most tax offences are connected with shadow economic activities such as smuggling or illegal trade in goods and services. Tax Cobra is thus considered as one of the most important tools for detecting shadow economic activities.

### **Income Tax Act Amendment**

\*\* *(permanent, started in 2016)*

This instrument helps to track

hidden income when the tax returns do not correspond to an increase in assets or consumption (in cases where the difference is more than CZK 5 million). Suspicions are raised when an increase in taxpayers' assets is much bigger than their declared income. The taxpayer bears the burden of proof, and any unrecognized or hidden revenue will subsequently be taxed. The instrument therefore reduces taxpayers' opportunities not to declare income from work or from undeclared trade in goods or services (or at least it prevents them from buying valuable assets using income derived from illegal activities).

### **Central Evidence of Bank Accounts**

\* *(permanent, started in 2018)*

The Central Evidence of Bank Accounts system is accessible only to authorities (Ministry of Finance, Customs Administration, Security Information Service), and allows information to be immediately obtained on where a company or person has bank accounts, as well as all related information concerning transactions and payments. The Central Evidence of Bank Accounts system should increase the ability of authorities to detect and prosecute tax crimes, thus combatting the shadow market in goods and services, as well as the shadow labor market.

*The report on the Czech Republic was prepared in cooperation with the Center for Economic and Market Analysis.*

## SWEDEN

The policy measures against the shadow economy in Sweden are mostly focused on detection (four measures out of eight, or 50 percent). Four more measures are aimed at taxation, regulation, penalties and reduction of justification. The accuracy of measures according to what extent they target significant drivers of the shadow economy in Sweden is 38%. Most of the measures are aimed at making shadow activities harder and more expensive. One of the tax measures, the RUT deduction, stands out as a way to reduce the shadow sector by decreasing taxation in some occupations where shadow labor had been prevalent.

### Goods and services

During the time period under analysis, no new policies were introduced to counteract shadow purchases of goods and services; however, some policies intended to influence the shadow labor market will affect services as well, not least the RUT tax credit.

### Excise goods

#### Regulation

##### Regulation of alcohol imports

<sup>\*\*41</sup> (currently under discussion)

This policy has not yet been implemented, but has been in preparation by government for a number of years. It will restrict legal imports of alcohol from other countries,

including EU countries. The Swedish government argues that many activities that currently occur in the country's alcohol market are "illegal or highly questionable", and this measure will impose stricter regulation on the circumstances in which private citizens can import alcohol. The policy places a larger regulatory burden on legal imports, by limiting how and when alcohol products can be delivered. The aim of the policy is to protect the Swedish alcohol retail monopoly by reducing competition from foreign markets. The policy is likely to have a medium impact, as restrictions on legal activity can raise demand for shadow transactions.

### Labor market

#### Detection

##### Employee ledgers

<sup>\*\*\*42</sup> (permanent, started in 2007)

Employee ledgers, used to keep track of who has worked and for how many hours, are intended as a mandatory responsibility of employers in certain sectors attracting extensive shadow labor. This measure was first launched for hairdressing and restaurants, and was deemed to have had a large effect in these two sectors<sup>43</sup>. Since then, the system has been expanded several times: in 2013, to washing services; in 2016, to construction (see below); and most recently, in 2018 to transport services, vehicle repairs, food and

tobacco retail, and beauty/care other than hairdressing. The effect of this measure is described in the government proposal as reducing the extent of the shadow labor market and expanding the legal labor market<sup>44</sup>. Since its effects have been described as large and the number of sectors affected is increasing, this policy is of major importance.

##### Reducing the extent of shadow labor in the construction sector

<sup>\*\*45</sup> (permanent, started in 2014)

A government programme for reducing shadow labor in the construction sector has been in effect since 2014, with delays in some areas. This programme consists of several elements, the most important being the introduction of employee ledgers (see also above) in the construction sector (effective since January 2016), unannounced visits by the Tax Agency to detect irregularities, and increased responsibility placed upon the main contractor to ensure all subcontractors follow rules and regulations. This measure is considered to be of medium importance because it is limited to one sector, but it has been significant in combatting shadow labor in construction.

##### Action against unfair competition

<sup>\*\*46</sup> (started in 2018, applicable for 2018-2020)

In its 2018 budget, the Swedish government allocated SEK

41 Ministry of Health and Social Affairs (2014), Privat införsel av alkoholdrycker: Tydligare regler i konsekvens med svensk alkoholpolitik, SOU 2014:58; Ministry of Health and Social Affairs (2016), Reglering av distanshandel med alkoholdrycker, Ds 2016:33.

42 Government of Sweden, proposal 2017/18:82, Personalliggare i fler verksamheter.

43 Ministry of Finance (2009), Närvaroliggare och kontrollbesök – En utvärdering och förslag till utvidgning, Ds 2009:43.

44 Prop. 2017/18:82, p. 21.

45 Ministry of Finance (2014), Minskat svartarbete i byggbranschen, Ds 2014:7, Government proposal 2014/15:6, Minskat svartarbete i byggbranschen.

46 Government of Sweden (2018), Insatser mot osund konkurrens, April 5.



18 million (approximately EUR 2 million) to the Swedish Work Environment Authority to counteract unhealthy competition over a three-year period from 2018 to 2020. The policy aims to detect and deter, among others, violations of legislation governing the work environment, tax legislation, immigration legislation or fraud, mostly through unannounced visits to workplaces. The results of the measure have been noticeable, but not very extensive<sup>47</sup>. The policy is aimed directly at countering shadow labor activities, but is considered of medium importance because of limited resources allocated.

### Justification

#### Support for unions' work against shadow labor

<sup>\*\*48</sup> (started in 2018)

This measure facilitates the work of labor unions and employers organizations to counter shadow labor. The Swedish Work Environment Authority is given a mandate to distribute money

47 Arbetsmiljöverket [Swedish Work Environment Authority], (2017), Nationell insats mot osund konkurrens i arbetslivet gav resultat, May 22, 2017.

48 Government of Sweden (2018), Statsbidrag till arbetsmarknadens parter för att stärka arbetet mot fusk och brottslighet i arbetslivet, June 28.

for education, controls and other types of work to counter shadow labor and rule-breaking, and also to the major parties to the labor market (i.e. unions and employer organizations). This measure is specifically aimed at fighting shadow labor, but due to fairly limited resources (SEK 3 million, roughly EUR 300,000), the policy is of medium importance.

### Common policies

#### Taxation

##### RUT tax credit

<sup>\*\*\*</sup> (permanent, started in 2007)

Originally introduced in 2007, the RUT tax credit (RUT stands for "rengöring, underhåll, tvätt" – Swedish for "cleaning, maintenance, laundry") has been amended and expanded several times, and a further expansion is planned. The RUT policy provides a tax credit for buying services in cleaning, maintenance, laundry and other household services. The aim has always been threefold: to reduce unemployment among marginal groups in the labor market, to increase the number of hours worked among high-income groups, and to transfer services from the shadow labor market to the legal labor market, reducing

the extent of shadow labor. In total, the RUT credit amounts to almost SEK 5 billion (roughly EUR 500 million). A forecast from the National Institute of Economic Research (Konjunkturinstitutet, NIER) found significant probable reductions in shadow labor as a result of the RUT credit<sup>49</sup>. Other evaluations have found larger outcomes than expected, but it must be noted that these have not employed relevant controls<sup>50</sup>. This is one of the main tax reforms in the last two decades, and it is explicitly aimed at combating shadow labor.

#### Penalties

##### Increased taxation for violations of tax laws

<sup>\*\*51</sup> (permanent, planned for 2019)

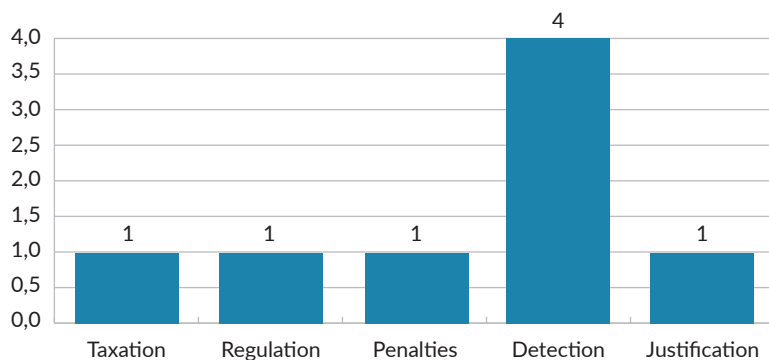
These changes to Sweden's tax procedures concern the imposition of additional taxation in cases of tax avoidance or other violations of tax laws. These measures include: procedural changes that make it easier for an attorney to call for additional taxation; clearer limitations on the control information a company is required to maintain; increased opportunities for the companies who run legal processes against the Tax Authority to receive remuneration for court costs in tax cases; and a new legal definition of third-party audits. As indicated in the government's proposal, these measures aim both to increase tax revenue and to make the expected outcomes more transparent

49 Öberg, Ann (2005), Samhällsekonomiska effekter av skattelättnader för hushållsnära tjänster, NIER special study no. 7.

50 E.g. Almega (2017), Succéreformen RUT fyller 10 år.

51 Ministry of Finance (2013), Förbudet mot dubbla förfaranden och andra rättssäkerhetsfrågor i skatteförfarandet, SOU 2013:63.

Fig. 13. Policy measures in Sweden





**Table 11. Policy measures in Sweden by segments of shadow economy**

	Causes		Factors		
	Taxation	Regulation	Penalties	Detection	Justification
Excise goods		Regulation of alcohol import ** (under discussion)			
Labor				Employee ledgers *** (2007)	Support for unions' work against shadow labor ** (2018)
				Reducing shadow labour in construction sector ** (2014)	
				Action against unfair competition ** (2018-2020)	
Common for all	RUT tax credit *** (2007)		Increased taxation for violations of tax laws ** (planned for 2019)	Strengthening the Tax Agency to counteract tax evasion ** (2016)	

and foreseeable. In these ways, the policy increases the penalties for wrongdoing, but by strengthening transparency and due process, it also aims to increase the legitimacy of the tax system and reduce shadow economic activities. The changes were intended to take effect in 2019, but have been delayed due to changes in government.

### **Detection**

#### **Strengthening the Tax Agency to counteract tax evasion**

\*\*52 (started in 2016)

52 Government of Sweden (2016), Action plan: Counteracting tax evasion, tax avoidance and money laundering.

This action plan comprises several measures, including deterrents in the form of tax surcharges (see Increased taxation for violations of tax laws), employee ledgers, and additional resources for the Swedish Tax Agency department dedicated to countering tax evasion and fraud. One of the measures aimed at countering the shadow economy (as well as other tax evasion) is to strengthen the Tax Agency's resources, so that the Tax Agency can more efficiently use the information obtained through exchange of information, as well as implementing

an automatic exchange of information within the EU, OECD and Nordic countries, and increased tax controls.

*The report on Sweden was prepared in cooperation with Caspian Rehbinder.*

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## APPENDIX: RESEARCH METHODOLOGY

Regression analyses were split into three separate elements: the shadow goods market, the shadow market in excise goods (as a specific element of the shadow goods market), and the shadow labor market. Presentation of the results corresponds to these three elements. The regression analysis tests the following hypotheses:

- The level of taxes has an impact on participation in the shadow labor and goods markets.
- The level of regulation has an impact on participation in the shadow labor and goods markets.
- The attitudes of individuals towards government and public services has an impact on the participation in shadow labor and goods markets.

- Tax morale, and the attitudes of individuals towards the shadow economy, have an impact on participation in the shadow labor and goods markets.
- Punishment and the likelihood of being detected have an impact on participation in the shadow labor and goods market.
- An individual's income and affordability of goods and services have an impact on participation in the shadow labor and goods market.

Independent and dependent variables in the regression analysis are specific to each of the three sectors of the shadow economy investigated. Independent variables reflect the hypotheses. The aim of these variables is to test which drivers of the shadow economy are significant in predicting people's engagement in the shadow

economy, and what the specific impact of each variable is.

Dependent variables vary between the three sectors under analysis, but are always expressed in a binominal fashion, where 0 indicates the absence of engagement in the shadow economy, and 1 indicates engagement in the shadow economy. Therefore, the type of regression used in all three cases is simple logistic regression, with a confidence level of 0.05.

The dependent and independent variables used in the analysis, their connection to the survey (and its questionnaire), and the coding of all dependent and independent variables are provided in the table below. To enable comparison of the coefficients and odds ratios across different independent variables, values of the variables were all converted into ranges between 0 and 1.

Variable	Questions in the questionnaire	Values of variables
<b>Goods market</b>		
<b>Dependent variables</b>		
Undeclared purchases	People sometimes buy completely legal goods or services from legally registered shops or service providers, but they do not receive receipts and the sellers do not officially declare their revenues. Have you bought any goods or services in the last 12 months knowing or suspecting that the revenues are not officially declared?	Bought at least once: 0 - 'No.' 1 - 'Yes, at least once.'
Illegal purchases	People sometimes buy goods or services from people who are not legally registered and therefore do not declare their revenues and do not pay any taxes, e.g. illegal sales of cigarettes, alcohol products, fuel and other goods. Have you bought any goods or services in the last 12 months knowing or suspecting that the seller is illegal?	Bought at least once: 0 - 'No.' 1 - 'Yes, at least once.'

Independent variables		
It is difficult or impossible to find particular goods or services from legal sellers	In your opinion, why do people buy goods or services from illegal sellers or from legal sellers who do not officially declare their revenues?	0 – 'Other reasons.' 1 – 'It is difficult or impossible to find particular goods or services from legal sellers.'
Satisfaction with government services	How satisfied are you with your country's public services (education, healthcare, social security and other public services)?	1 – 'Completely dissatisfied.' . . 10 – 'Very satisfied.'
Justification	Do you personally justify people purchasing a good or service from a legal shop when you know that the seller is not declaring your payment?	0 – 'Rather not justify'; 'Do not justify at all.' 1 – 'Rather justify'; 'Completely justify.'
Tax morale	Do you think that it is justifiable to cheat on paying taxes if one has the chance?	1 – 'It can always be justified.' . . 10 – 'It can never be justified.'
Punishment	In your opinion, how severe would the punishment be if detected purchasing a good or service from an illegal source that is not registered and doesn't pay taxes?	0 – 'Quite mild' or 'Very mild.' 1 – 'Quite severe' or 'Very severe.'
Goods or services are easily available on the illegal market	In your opinion, why do people buy goods or services from illegal sellers or legal sellers who do not officially declare their revenues?	0 – 'Other reasons.' 1 – 'Goods or services are easily available on the illegal market.'
Financial situation	Which of the following statements best describes your household's financial situation?	1 – 'We do not have enough money even to buy food.' 2 – 'We have enough money to buy food, but not enough to buy clothes or pay for public utilities (water, electricity, heating, etc.)' 3 – 'We have enough money to buy food, clothes or public utilities and we can save a little bit, but it is not enough to make bigger purchases (e.g. to buy a TV set or refrigerator).' 4 – 'We have enough money to buy some costly things (such as a TV set or refrigerator), but we do not have enough money to make very expensive purchases (e.g. to buy a flat or a summer house).' 5 – 'We have enough money for everything we want.'
Excise goods market		
Dependent variables		
Illegal cigarettes	What is the share of illegally purchased <u>cigarettes</u> in the total consumption of those goods among your friends and relatives?	Illegally bought cigarettes: 0 – 0% 1 – 1-100%
Illegal alcohol	What is the share of illegally purchased <u>alcohol</u> in the total consumption of those goods among your friends and relatives?	Illegally bought alcohol: 0 – 0% 1 – 1-100%
Illegal fuel	What is the share of illegally purchased <u>fuel</u> in the total consumption of those goods among your friends and relatives?	Illegally bought fuel: 0 – 0% 1 – 1-100%
Independent variables		
Buying goods and services legally is more expensive	In your opinion, why do people buy goods or services from illegal sellers or legal sellers who do not officially declare their revenues?	0 – 'Other reasons.' 1 – 'Buying goods and services legally is more expensive.'
It is difficult or impossible to find particular goods or services from legal sellers	In your opinion, why do people buy goods or services from illegal sellers or legal sellers who do not officially declare their revenues?	0 – 'Other reasons.' 1 – 'It is difficult or impossible to find particular goods or services from legal sellers.'

Satisfaction with government	How satisfied are you with your country's government?	1 - 'Completely dissatisfied.' . . 10 - 'Very satisfied.'
Justification	Do you personally justify people engaging in smuggling, illegal production or sales of cigarettes, alcohol products and fuel?	0 - 'Rather not justify'; 'Do not justify at all.' 1 - 'Rather justify'; 'Completely justify.'
Tax morale	Do you think that it is justifiable to cheat on paying taxes if one has the chance?	1 - 'It can always be justified.' . . 10 - 'It can never be justified.'
Punishment	In your opinion, how severe would the punishment be if detected smuggling (contraband) or illegal production and consumption of cigarettes, alcohol products and fuel?	0 - 'Quite mild' or 'Very mild.' 1 - 'Quite severe' or 'Very severe.'
Goods or services are easily available on the illegal market	In your opinion, why do people buy goods or services from illegal sellers or legal sellers who do not officially declare their revenues?	0 - 'Other reasons.' 1 - 'Goods or services are easily available on the illegal market.'
Financial situation	Which of the following statements best describes your household's financial situation?	1 - 'We do not have enough money even to buy food.' 2 - 'We have enough money to buy food, but not enough to buy clothes or pay for public utilities (water, electricity, heating, etc.)' 3 - 'We have enough money to buy food, clothes or public utilities and we can save a little bit, but it is not enough to make bigger purchases (e.g. to buy a TV set or refrigerator).' 4 - 'We have enough money to buy some costly things (such as a TV set or refrigerator), but we do not have enough money to make very expensive purchases (e.g. to buy a flat or a summer house).' 5 - 'We have enough money for everything we want.'
<b>Labor market</b>		
<b>Dependent variables</b>		
Shadow labor market	Some people participate in the shadow labor market. Some work without job contracts, while others have job contracts but receive from their formal employer a declared wage and an undeclared or an 'envelope' wage. Have your friends or relatives worked under such conditions in the last 12 months?	<b>Have friends or relatives working in shadow</b> 0 - No 1 - Yes
<b>Independent variables</b>		
Taxes	What is your opinion about the level of taxes you have to pay compared to the amount and quality of public services that you receive?	1 - 'Taxes are very low.' . . 10 - 'Taxes are very high.'
People see no point in paying taxes, as government services are bad and insufficient	In your opinion, what are the main reasons why people work illegally without legal job contracts or with legal job contracts when part of their wages are paid as 'envelope wages'?	0 - 'Other reasons.' 1 - 'People see no point in paying taxes, as government services are bad and insufficient.'
Justification	Do you personally justify people working without a legal job contract when all the wage is paid as an 'envelope wage' or with a legal job contract when part of the wage is paid as an 'envelope wage'?	0 - 'Rather not justify'; 'Do not justify at all.' 1 - 'Rather justify'; 'Completely justify.'
Tax morale	Do you think that it is justifiable to cheat on paying taxes if one has a chance?	1 - 'It can always be justified.' . . 10 - 'It can never be justified.'
Likelihood to be detected	In your opinion, what is the likelihood to be detected while working without a legal job contract or getting at least part of the wage as an "envelope wage"	0 - 'Very low' or 'Quite low.' 1 - 'Very high' or 'Quite high.'
Punishment	In your opinion, how severe would the punishment be if detected working without a legal job contract or getting at least part of the wage as an 'envelope wage'?	0 - 'Quite mild' or 'Very mild.' 1 - 'Quite severe' or 'Very severe.'

Employers insist on paying undeclared wages	In your opinion, what are the main reasons why people work illegally without legal job contracts or with legal job contracts when part of their wages are paid as "envelope wages"?	0 - 'Other reasons.' 1 - 'Employers insist on paying undeclared wages.'
Income	What is your monthly net income (including social benefits, pensions, scholarships, money orders, etc.) per one household member?	1 - Less than 300 euros per month 2 - 301 to 500 euros per month 3 - 501 to 700 euros per month 4 - 701 to 1,000 euros per month 5 - more than 1,000 euros