

# 4 LIBERTY.eu

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## UNRAVELING SHADOW ECONOMY





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# What We Do in the Shadows

Since Daniel Defoe and his 1726 *The Political History of the Devil*, we were made to believe that there are two things in our world that we may easily deem certain: death and taxes. Nevertheless, humanity always has its way of adjusting the *status quo* to its own will and thus, although the existence of taxes seems indispensable to the functioning of modern states, resourceful individuals get by by correcting the great tax expectations themselves. And so they move into the shadows.

Who does turn to the dark side of the economy? Unsurprisingly, the entrepreneurs and businessmen who follow the infamous golden rule of Donald Trump to pay “as little taxes as possible”, hence, for example, underreporting their activities. Employees, who are lured by receiving non-taxed “envelope wages”. And finally consumers, who have seeking the best prices and wondrous opportunities for purchase in their blood. But is that all? Or maybe we are merely simplifying slightly more complex processes?

Economic patriotism *parum luceat*, most of our CEE countries struggle to awaken in their citizens the awareness of – what Oscar Wilde might have called – the importance of being earnest. And although it might be a real challenge to fight shadows, it is not impossible. After all, it is not that bad – following the estimations of Friedrich Schneider of Johannes Kepler University, the shadow economy in the European Union is decreasing (from 20.1% in 2009 to the forecasted 18.3% of GDP on average in 2015). Despite all that, let’s be frank: there are still huge amounts of funds that fall into the darkness.

This is why we have decided to try to unravel the country-specific mysteries of shadow economies in the Central and Eastern European states in an attempt to become a guiding light on the matter. Thus we have the pleasure to present you the third issue of the *4liberty.eu Review*. *Scientia vincere tenebras*, let there be light!

Olga Łabendowicz  
Editor-in-Chief of *4liberty.eu Review*  
Coordinator of 4liberty.eu network

# Contents

**ALEXEI PIKULIK / DRIVERS OF THE SHADOW ECONOMY IN CENTRAL AND EASTERN EUROPE / 004**

**TĀLIS PUTNIŅŠ, ARNIS SAUKA / SHADOW ECONOMY INDEX FOR THE BALTIC STATES 2009-2014 / 016**

**MARCIN CHMIELOWSKI / PERSPECTIVES OF AGORISM IN CENTRAL AND EASTERN EUROPE / 044**

**JONÁŠ RAIS / UNDERSTANDING SHADOW ECONOMY IN THE CZECH REPUBLIC / 054**

**YAVOR ALEKSIEV / WHY DECLARE? BULGARIA'S LABOR MARKET AND ITS SHADOW / 070**

**ROBERT MÜÜRSEPP / ALCOHOL EXCISE AND THE SHADOW ECONOMY IN ESTONIA / 082**

**JULIJA SIMIONENKO-KOVACS, VYTAUTAS ŽUKAUSKAS / MICRO VIEW ON THE LITHUANIAN SHADOW ECONOMY / 094**

**ALEKSANDER ŁASZEK, RAFAŁ TRZECIAKOWSKI / VICIOUS CIRCLE OF SMALL SCALE, LOW PRODUCTIVITY AND SHADOW ECONOMY IN POLAND / 124**

**VYTAUTAS ŽUKAUSKAS / STRATEGIES FOR COMBATING THE SHADOW ECONOMY / 140**

# Drivers of the Shadow Economy in Central and Eastern Europe



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ALEXEI  
PIKULIK

More than a quarter century ago, the newly independent post-Soviet states started their march away from their autocratic/socialist past to the something else, yet unknown. These were truly tectonic changes and such processes as market-making, state-making, regime-consolidation and national identity building went hand in hand. The countries had to re-establish the entire sets of institutional domains from small to grandiose that would have their detrimental value over the course of the development to follow the initial years of transition. Thus, political regimes were established in the course of infightings and the compromises between actors operating in the situation of high uncertainty, leading to various forms of extension of political and civic rights. Market-making processes involved the extension of property rights and forms of regulation, that led to differences in reform scenarios and outcomes. The frameworks of the states (in the Weberian sense) were re-established, identities were revoked and all this happened in the wink of an eye.

**T**his was truly the most rapid and the overloaded transition of the last century. The pathways of those new countries were strikingly different. Thus, within the next 15 years, most of the Central and Eastern European countries ended up in relatively stable combinations of political democracies combined with publicly regulated capitalisms and joined the EU. Others — mainly the post-Soviet republics with the exception of the Baltic trio, got stuck in various developmental traps: their transformation was hijacked by particularistic interests and rent-seeking. This led to the establishment of autocratic and hybrid political and economic regimes characterized by the asymmetrical distribution of property rights favoring either state companies or the particular cronies, weak institutions and the overall arrested development. High corruption, cronyism, state capture, coexistence

of the formal and informal rules of the game were natural outcomes of those derailed developments.

Whereas there is an obvious divergence between the 'good' and the 'bad' transformational cases, they share certain commonalities which include certain parameters of the origins and the development of their shadow/illicit economies. Before continuing any further an important remark needs to be made: The shadow economy exists in all cases around the globe and is by no means a regional phenomenon, yet there can be some regional specificity driving the scope and the form of shadow economic practices.

The main objective of the presented article is not to exaggerate with ambitions and study the regional specificity of shadow economies of Central and Eastern Europe. This task would require a comparative study of the object which is extremely hard



THE SHADOW ECONOMY EXISTS IN ALL CASES AROUND THE GLOBE AND IS BY NO MEANS A REGIONAL PHENOMENON, YET THERE CAN BE SOME REGIONAL SPECIFICITY DRIVING THE SCOPE AND THE FORM OF SHADOW ECONOMIC PRACTICES

to operationalize and measure. Instead, the threefold goals of this article are as follows: a) land the discussion of the main conventional drivers of the persistence of the shadow economy on the lands of the Central and Eastern Europe, b) provide the interpretations and causal mechanisms tailoring them to the regional contexts and c) enrich the framework of drivers with several additional ones derived from the regional evidence. In other words, ambition here is in no way a new mid-range theory of shadow economy in Central and Eastern Europe but an expansion of the already existing analytical frameworks with the few additional dimensions which may be of use for further research in this field.

#### **WHAT IS SHADOW ECONOMY?**

The shadow economy (gray economy/informal economy/illicit economy) is the phenomenon which is both hard to define and to measure. According to a conventional definition, the shadow economy consists of all currently unregistered economic activities that would contribute to the officially calculated gross national product, if they were registered<sup>1</sup>. In other words, the shadow economy exists alongside a country's official economy and remains unseen/unreported to the regulator.

The broader definition of shadow economy includes transactions which are both legal and illegal. The examples of the former are: unreported incomes derived out of generally legal activities, transactions of goods that were under-declared, tax evasion, tax avoidance, etc. The examples of the latter (illegal forms of the shadow economy) include trade of goods that were stolen, prostitution, drug dealing and manufacturing, human trafficking, weapons trafficking, etc. For the purpose of further analysis, I will

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<sup>1</sup> Feige, E. L. (1994), 'The underground economy and the currency enigma', *Supplement to Public Finance/Finances Publiques*, 49: 119–36.

follow Schneider and Williams (2013)<sup>2</sup> and adopt a more narrow definition, including all market-based production of only legal goods and services that are deliberately concealed from public authorities for the following reasons: avoiding payment of income, VAT or other taxes; avoiding paying social security contributions; avoiding having to meet certain legal labor market standards, such as minimum wages, maximum working hours; avoiding complying with certain administrative obligations.

Therefore, the illegal activities listed above will be outside the scale of this analysis and we shall also exclude the informal household economy, which consists of all household services and production. This is done because the analysis focuses on the state-society nexus and intends to drive out numerous factors which may account for the scope and size of purely illegal sectors. The phenomenon of informal households economy (relying on crop from dachas) are also kept outside of this framework, given that this could be explained by the scope of the economic crisis during the initial years of transition rather than by a wrongly set regulatory framework.

## WHAT DRIVES THE SHADOW ECONOMY?

Scholars demonstrate less disagreement when it comes to identifying the causes/drivers of the shadow economy. Let us then start with a brief literature review, spell out the most widely used variables accounting for certain instances of the shadow economy and provide a causal link leading causes to effects.

Furthermore, an important remark needs to be made: the drivers of the shadow economy in stable capitalisms

where the institutional building was accomplished and then became stabilized and consolidated may differ from those cases in which all of the institutions are in flux. For example, the shadow economy in Germany in 1994 was not the same as in 1994's Ukraine, the country still lacked a uniform taxation system or even a full list of registered enterprises subject to paying taxes three years after its transition has started. The 1991, Austria's shadow economy would be so different from 1991's Russia's shadow economy where the government allowed undeclared and spontaneous trade in any public places of the cities (it changed the country into a big marketplace) with one main purpose in mind: avoiding hunger and mitigating the consequences of an all-encompassing economic crisis. Thus the difference between the stable cases and those in transition is huge.

The main drivers of the shadow activities could be divided into three main groups. The first group is what could be referred to as the **longue-durée factors**. They include long-term historical legacies and institutions that may affect particular sets of institutions. The examples of those robust long-durée factors may include a tradition of statehood, identity, political culture, etc.

The second group includes **particular institutions and regulations**, in other words, it is about both concrete rules of the game and particular contexts that constrain an actor's behavior providing them with the structure of opportunities. The examples include: the level of economic development, regional specificity, particular economic institutions and forms of regulation and governance: social security contribution/ tax burdens, intensity of regulation, quality of institutions, the rule of law, etc.

<sup>2</sup> Schneider, F., Williams, C., *The Shadow Economy*, IEA, 2013.

The difference between those two groups of variables mainly rests in their longevity: the *longue-durée* factors are more long-lasting and stable, the institutional group represents particular timely institutional arrangements and political-economic regimes.

The third group consists of the **micro-level drivers and actor's perceptions** of factors that relate to shadow economies. As it was mentioned, this is derived from an empirical study conducted by BISS. Although actor centric and structure centric variables (the third one and the former two groups accordingly) are often hard to separate since actors act, and not the structures, we should nevertheless hold this distinction and descend Sartori's ladder of abstraction in our analysis.

Having listed the main three groups, let us begin with some *longue-durée* factors and 'historical legacies' should be our first driver.

### FROM LONGUE-DURÉE HISTORICAL LEGACIES TO A MARKET-UPHOLDING STATE?

During the Soviet era under the conditions of state socialism, market activities were largely illegal, yet some forms of the quasi-market exchanges persisted and regulated citizen's access to goods ('*blat*' networks, etc). In terms of the parameters of the 'social contract', this was the overall situation that could be described as: no representation and no taxation. The government did not rely on citizen's taxes and had no incentives to be inclusive in formulating its policies; the citizens considered the Soviet state as the provider of side-payments and public services that could not be influenced in any way.

Furthermore, the state was considered to be the enemy that needed to be cheated. This inertia was strong throughout the 1990s: the survival of the citizens dependent solely on them whereas the state was in deep ruins, and it often involved gray and semi-gray activities: avoiding paying taxes, smuggling, etc.

In the 2000s this inertia coupled with the severe state regulation and the absence of the rule of law (per se the state owned companies enjoy more rights than the privately owned enterprises) created particular contexts for the developing the gray economy in some countries, such as Belarus. The tax morale argument, which is present in many of the scholar's analytical works/products is rooted here in the *longue-durée* processes which involve certain forms of what could be labelled as a social contract.

The *longue durée* factors and historical legacies had an impact on state-formation that started in the region in the late 1980s/ the beginning of the 1990s. The discussion below serves as a bridge between the first and the second groups of drivers.

As it was outlined in the very beginning of this article, Central and Eastern Europe as a region was undergoing complex transition in which the process of building the official economy went hand in hand with the process of creating the Weberian market-upholding state<sup>3</sup>. In the rationalist-functional explanation, a state could be analyzed through its abilities to maintain several monopolies (fiscal, monopoly to legitimate violence, monopoly for making the rules of the game and enforcing them), and hence only a predictable and rational state capable of allowing the economic ac-

<sup>3</sup> Bruszt, Laslo. 2002. Market Making as State Making: Constitutions and Economic Development in Post-communist Eastern Europe. *Constitutional Political Economy* 13.

tors profit from rational calculative enterprise. In such an environment, the actors can be protected from illicit expropriation of their assets by the other actors and the state itself and this becomes a condition for the creation of the official economy.

Many of the transformational cases fell into developmental traps caused by the state-capture (Hellman, 1998)<sup>4</sup>: in these instances the state was used for the asymmetrical distribution of property rights in favor of those actors holding the largest stakes in various decision-making apparatuses. Overall, it is the underdevelopment of the market-upholding state that is the main reason behind the shadow economy in transitory post-soviet cases.

Likewise, it is consonance with the argument in the literature that factors explaining the shadow economies in Central and Eastern Europe include (among others): the lack of competence of official institutions (legislature, bureaucracy, courts) combined with corruption, which undermines trusts in these institutions; weak enforcement of laws and regulations and an inability or unwillingness to protect property rights; high costs and administrative burdens for entrepreneurs; too much red tape and inefficient bureaucracy, which can make "hiding in the shadows" essential for survival or to establish a business.

### IT'S THE INSTITUTIONS, STUPID?

Thus far, we briefly outlined historical legacies and the absence of the market-upholding state as the main drivers of the shadow economy. Making one step down the ladder of abstraction, let us talk about particular institutional parameters and regulations. Three champion variables in this family of cases are: a) tax and social secu-

rity contribution burdens, b) intensity of regulation, and c) quality of public services and institutions.

The first variable – **tax and social security contribution burdens**, links the actor's evaluation of those burdens with the shadow economic activities. Thus, in their path-breaking article, Allingham and Sandmo (1972)<sup>5</sup> create a cost-benefit analysis model for an individual taxpayer deciding upon the strategy of paying full taxes, or under declaring the income. They argue that the expected costs of non-compliance derive from deterrence measures pursued by the state which determine the probability of detection and also the fines individuals face when they are caught (Schneider and Williams, 2013, p. 33<sup>6</sup>).

Kanniainen et al. (2004)<sup>7</sup> hypothesize that higher taxes unambiguously increase the shadow economy, while the effect of public goods financed by those taxes on the shadow economy depends on the ability to access public goods. Morality is also included in this analysis. The costs for individual non-compliers resulting from moral norms, however, appear to be mainly captured by state punishment, although self-esteem does play a role.

To keep the long story short, the bigger is the difference between the costs of labor employed officially and the after-tax earnings from work, the higher are the incentives to minimize taxation by shadow employment. As Schneider and

<sup>5</sup> Allingham, M. G. and A. Sandmo (1972), 'Income tax evasion: a theoretical analysis', *Journal of Public Economics*, 1(3): 323–38.

<sup>6</sup> Schneider, F., Williams, C., *The Shadow Economy*, IEA, 2013.

<sup>7</sup> Kanniainen, V., J. Pääkönen and F. Schneider (2004), 'Fiscal and ethical determinants of shadow economy: theory and evidence', Discussion paper, Department of Economics, Johannes Kepler University of Linz, Linz, Austria.

<sup>4</sup> Hellman, Joel S. 1998. *The Politics of Partial Reforms in Post-communist Transitions*. World Politics 50.



IN THOSE CASES  
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Williams (2010, p.5)<sup>8</sup> nicely put it: "since this difference depends largely on the social security burden/payments and the overall tax burden, the latter are key features of the existence and the increase of the shadow economy". Furthermore, Johnson, Kaufmann and Zoido-Lobaton (1998a, 1998b)<sup>9</sup>, find strong statistical evidence for the influence of taxation on the shadow economy.

The causal link here is pretty simple: in those cases where the share of taxes to be paid is considered to be overtly high for the taxpayers, they become rationally interested in moving into the gray area.

The second variable is the **intensity of regulation**. Schneider and Williams (2010)<sup>10</sup> speak about labor market regulations (e.g. minimum wages or dismissal protections), trade barriers (e.g. import quotas), and labor market restrictions for foreigners (e.g. restrictions regarding the free movement of foreign workers) that influence the development of the shadow economy. Since regulations increase the transaction costs for economically active actors and lead to substantial growth of labor costs, this creates additional incentives to work in the shadow economy.

Friedman et al. (2000)<sup>11</sup> argue that available measures of regulation are significantly correlated with the share of the unoffi-

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<sup>8</sup> Schneider, F., Williams, C., *The Shadow Economy*, IEA, 2013.

<sup>9</sup> Johnson, Kaufmann, and Zoido-Lobaton (1998), *Regulatory Discretion and the Unofficial Economy*, *American Economic Review*.

<sup>10</sup> Schneider, F., Williams, C., *The Shadow Economy*, IEA, 2013.

<sup>11</sup> Friedman, E., S. Johnson, D. Kaufmann and P. Zoido-Lobaton (2000), 'Dodging the grabbing hand: the determinants of unofficial activity in 69 countries', *Journal of Public Economics*



SINCE REGULATIONS INCREASE THE TRANSACTION COSTS FOR ECONOMICALLY ACTIVE ACTORS AND LEAD TO SUBSTANTIAL GROWTH OF LABOR COSTS, THIS CREATES ADDITIONAL INCENTIVES TO WORK IN THE SHADOW ECONOMY

cial economy and the estimated sign of the relationship between their measures of regulation and the shadow economy is unambiguously positive: more regulation is associated with a larger shadow economy. Others, such as Johnson, Kaufmann, and Zoido-Lobaton (1998)<sup>12</sup>, argue that it is rather the quality of enforcing regulations is a key factor. The overall causal link here is pretty straightforward: actors tend to minimize the transaction costs created by the wrongly set policies and regulations and tend to move into the gray area.

The third variable from the literature related to the institutional parameters is linked to the **quality of public services**. There is a vicious circle herein: public services are financed from taxes – the bigger the share of the shadow economy, the more limited the state’s ability to provide high-quality services. Likewise, the weaker ability of the state to provide decent services, the weaker the incentive of the actors to support it via the official economy. What matters here is both: the quality and the accessibility of those services. As Johnson, Kaufmann, and Zoido-Lobaton (1998)<sup>13</sup> demonstrate, better situations with shadow economies appear in countries with higher tax revenues achieved by lower tax rates, fewer laws and regulations, and less corruption.

So far, we have identified three parameters directly linked to the qualities of particular institutions and state’s policies: those are the tax system, intensity of regulation and quality of public services. Whereas those variables stand to explain the institutional foundations in stable industrial economies, they are rather insufficient in explaining shadow economies in the transformative cases.

Having thus enumerated the most important institutional factors, let us shift our attention to the layer of actors’ perceptions.

### **MICRO-LEVEL DRIVERS: WHAT HAVE WE LEARNT FROM BELARUS?**

According to BISS’ study, one of the drivers of the shadow economy (the main reason to purchase goods or services from illegal providers or legal providers who do not declare their income) is the perception that the legal purchase of the same goods is too costly (54% of people name this as the reason of illegal purchases, this is the most popular answer). The most popular

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.



WORKING IN THE SHADOW ECONOMY IS MORE TYPICAL FOR LESS SOCIALLY PROTECTED GROUPS WITH LOWER INCOME (YOUNG PEOPLE, WOMEN); WORKING WITHOUT A LEGAL EMPLOYMENT CONTRACT WHEN ALL WAGES ARE PAID AS “ENVELOPE WAGES” WERE ALSO MORE OFTEN JUSTIFIED BY RESIDENTS OF RURAL AREAS

category bought during unregistered purchases is clothes (46%). Thus, price decreases and the income increases can lead to a reduction of illegal purchases.

The same goes for illegal work. The main reason why people work illegally without a legal employment contract or receive part of their wage as an “envelope wage” is higher wages from undeclared labor, because taxes on labor are high (65% of people name this as the reason of illegal employment, this is the most popular answer in the study of BISS). We can notice two drivers occurring. The first one is low salary level (in the perception of the respondents). The second one is high taxes rate (in the case of Belarus the most important part is social security burdens, 34% of each employee’s salary is paid by the enterprise to the Population Social Security Fund).

Apart from the perception, there is also a structural difference which is relevant to the shadow economy. Working in the shadow economy is more typical for less socially protected groups with lower income (young people, women); working without a legal employment contract when all wages are paid as “envelope wages” were also more often justified by residents of rural areas. This makes the phenomenon more socially dangerous. As BISS’ study shows, working in the shadow economy is more typical for younger people. One can suppose that the practice of working in the shadow economy will spread together with the maturation of the younger cohort. But it is less common for younger people to buy goods or services illegally, so we can assume that this practice will lessen with their maturation.

The second noticed reason for purchasing goods or services from illegal providers or legal providers who do not declare their income is that people do not know

that providers are illegal or do not declare their income. Women more often mentioned that people do not know that providers are illegal or do not declare their income. The attitudes towards punishment differ in younger age groups. This cannot be explained by the wider experience of the shadow activity. Thus the reason is different education and information sources used.

It is important that more economic active and experienced people (males, people of higher income) inclined to underestimate the likelihood of detection. It is a factor increasing the risk of the shadow economy's growth because these social groups can be opinion leaders.

An important driver of the shadow economy is a rather tolerant attitudes towards these activities. According to the study of BISS, 40% justify or rather justify working illegally, 38% can justify illegal purchasing. Working with a legal employment contract when part of the wage is paid as an "envelope wage" is justified by most of the people (51%).

The last but not the least driver of the shadow economy is the perception of punishment. The likelihood of detection for working without a legal employment contract or getting at least part of the wage as an "envelope wage" is low for half of the people. A similar part of the respondents (53%) think the same about the likelihood of being detected for purchasing a good or service from an illegal source that is not registered and does not pay taxes.

The evaluation of the severity of the punishment for working without a legal employment contract or getting at least part of the wage as an "envelope wage" is very close to evaluation of the likelihood of detection. The share of people

who think that it would be mild (quite mild or very mild) is almost the same - 46%. The evaluation of the severity of punishment for purchasing a good or service from an illegal source that is not registered and doesn't pay taxes is very close to the evaluation of the likelihood of detection as well. The share of people who think it would be mild (quite mild or very mild) is 54%.

Previous experience of the shadow activities could be an important driver that influences the spread of the practice. It is possible because having such experience changes the perception of the punishment and the attitudes towards the shadow activities per se.

In general, people perceive the likelihood of detection of the shadow activity as low. In the case of the shadow labor market, the most important factor influencing the perception of the likelihood of detection is own experience of work in the shadow economy. Most of the people who have such experience perceive the likelihood of detection as low (quite low or very low, 64%), those who have no such experience evaluate the likelihood as low much more rarely (quite low or very low, 50%). Finally, those who have the experience of illegal purchasing more often evaluate the likelihood of detection as low (57%), than others (51%).

The fact that only 13% have bought alcoholic beverages illegally can explain the low tolerance of people toward such a shadow activity as the illegal production or sales of cigarettes, alcohol products and fuel. Other evaluated practices are perceived more tolerant because of wider experience with them. Thus, when people taking part in the shadow activity are inclined to perceive the likelihood of detection lower and to be more tolerant

to the shadow activity. So they have fewer barriers to take part in the shadow activity further.

## CONCLUSIONS

The main purpose of the presented article might seem somewhat unambitious: mapping out the main drivers for the shadow economy as found in the literature, contextualizing them to the perspective of Central and Eastern Europe and providing with a few additional drivers discovered in the consortium study in Belarus. Nevertheless, pinpointing those instances might serve as a great overview and a perfect introduction into the issue of the shadow economy.

Descending Sartoris' ladder of abstraction, we have identified the following drivers: longue-durée structural factors influencing people's attitude towards the state as the institutions and hence their tax morale and their willingness to go into shadow.

Secondly, we mapped out the institutional parameters: tax system, intensity of regulation, quality of public services, stability of the state's policies, qualities of governance bureaucracies and the rule of law. The second variable is solely linked to the creation of a Weberian market-upholding the state which in the context of CEE countries and the post-Soviet republic was often problematic. It could only get consolidated together with a framework of open competitive politics and the establishment of some basic parameters of what Bruszt and Stark (2001) labelled as polyarchies. In the countries where such a state could not emerge, the outcome was a captured state, high levels of corruption and the asymmetrical distribution of property rights in favor of cronies or self-serving of the bureaucrats. Finally, the third group of drivers was linked to actor's preferences and in order to grasp them we cited BISS' study on the shadow economy

in Belarus and moved the reader to the micro level. The main drivers that we identified under this rubric were as follows:

- Economic factors (income and expenditures, economic status);
- Social structure of the shadow economy;
- Awareness and information sources;
- Attitudes towards the shadow activities;
- Attitudes towards punishment;
- Previous experience of the shadow activities.

The analytical grouping of the factors presented here opens the field for further research. On the one hand, it would be of high relevance to compare the shadow economies in the countries which developed under the EU's transnational integration regime by its regulatory framework with those who had no EU gravitational force. On the other, a systemic study of dependence of the shadow economy on the political regime type and specifically, to the structure of representation in a polity could also shed some more light on the phenomenon itself.

*With great appreciation of Sven Steinmo's work of the same title •*



✱

ALEXEI  
PIKULIK

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# Shadow Economy Index for the Baltic States 2009-2014



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TĀLIS  
PUTNIŅŠ



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ARNIS  
SAUKA

The Stockholm School of Economics in Riga (SSE Riga) Shadow Economy Index is estimated annually based on surveys of entrepreneurs in the Baltic states. The Index combines estimates of misreported business income, unregistered or hidden employees, as well as unreported “envelope” wages to estimate the shadow economies as a proportion of GDP.

**D**uring 2014, Estonia and Lithuania continued their long-term trend of gradually reducing the size of their shadow economies. Our estimates suggest that the Estonian and Lithuanian shadow economies contracted by approximately 2.5-2.8 percentage points and now account for 12.5%-13.2% of GDP. The contraction has been across all components of the shadow economies. In contrast, the Latvian shadow economy has remained largely unchanged in aggregate compared to the previous year and is estimated at around 23.5% of GDP. The different dynamics of the shadow economies means that there is now a large difference in their size—the Latvian shadow economy is almost double the size of those in neighboring countries. According to our data, unregistered companies make up around 5%-8% of all enterprises. They are the most widespread in the construction sector.

Although, in aggregate, the size of the shadow economy in Latvia has not changed much in 2014, its composition has changed. “Envelope wages” have declined, but their contraction is offset by a corresponding increase in underreporting of business income, which now makes up around 46% of the total Latvian shadow economy. By far the worst sector is con-

struction, where shadow activity in Latvia is estimated to be as high as 48.9% (it is also the sector with the highest level of shadow activity in Estonia and Lithuania, but with more modest levels of 21% and 19%). The recovery in the construction sector has offset the declining levels of shadow activity in other sectors. This is perhaps partly driven by the influence of the construction sector, Riga was estimated to have the highest level of shadow activity in Latvia in 2014.

When it comes to attitudes, companies continue to be relatively satisfied with the State Revenue Service and relatively dissatisfied with the government’s tax policy and support for entrepreneurs. The level of dissatisfaction with the government in Latvia has been gradually declining since 2010, whereas it has been increasing in Estonia.

For policymakers, our results highlight the need for continued reforms and actions that combat the shadow economy in particular in Latvia. We believe the widening shadow economy gap between Latvia and neighboring countries (after the gap was nearly closed in 2012) partly reflects the reduction in Latvian policymaker efforts to combat shadow activity. Now is the time for Latvian policymakers to implement a second large-scale and serious policy

package targeting the shadow economy as was done from 2010–2013. The reforms could focus on misreporting of business income, as well as the construction sector, as these are the most problematic parts of the shadow economy. Our findings on the determinants of shadow activity suggest a number of approaches to combatting the shadow economy.

### WHAT IS IT ALL ABOUT?

The aim of the SSE Riga Shadow Economy Index for the Baltic countries is to measure the size of the shadow economies in Estonia, Latvia and Lithuania, as well as to explore the main factors that influence participation in the shadow economy. We use the term “shadow economy” to refer to all legal production of goods and services that is deliberately concealed from public authorities<sup>1</sup>. The Index has been published annually since 2010 to provide policy makers with information on making justified policy decisions, as well as to foster a deeper understanding of entrepreneurship processes in the Baltic countries<sup>2</sup>. This report analyses the dynamics of the shadow economy in Estonia, Latvia and Lithuania from 2009–2014. It also provides evidence on the main factors that influence entrepreneurs’ involvement in the shadow economy and provides some policy recommendations.

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<sup>1</sup> This definition corresponds to what the Organisation for Economic Co-operation and Development (OECD) in their comprehensive 2002 handbook “Measuring the Non-observed Economy” as well as the System of National Accounts (SNA 1993) refer to as “underground production”. This is also consistent with definitions employed by other researchers (e.g., the World Bank study of 162 countries by Schneider, Buehn and Montenegro (2010)). We elaborate further on the components of the unobserved economy in Section 2. Schneider, F.; Buehn, A. and Montenegro, C. (2010): New estimates for the shadow economies all over the world, in *International Economic Journal*, 24:4, pp. 443–461.

<sup>2</sup> The annual reports are available at <http://www.sseriga.edu/en/centres/csb/shadow-economy-index-for-baltics/>

The SSE Riga Shadow Economy Index is based on annual surveys of entrepreneurs in the three countries. This approach is based on the notion that those most likely to know how much production/income goes unreported are the entrepreneurs that themselves engage in the misreporting and shadow production. The Index combines estimates of misreported business income, unregistered or hidden employees, as well as unreported “envelope” wages to obtain estimates of the size of the shadow economies as a proportion of GDP. The method used in this report for estimating the size of the shadow economy requires fewer assumptions than most existing methods, in particular compared to methods based on macro indicators. Furthermore, the SSE Riga Shadow Economy Index can be used through time or across sectors and countries and thus is a useful tool for evaluating the effectiveness of policy designed to minimize the shadow economy.

Survey-based approaches face the risk of underestimating the total size of the shadow economy due to non-response and untruthful responses given the sensitive nature of the topic. The SSE Riga Shadow Economy Index minimizes this risk by employing a number of survey and data collection techniques shown in previous studies to be effective in eliciting more truthful responses<sup>3</sup>. These include confidentiality with respect to the identities of respondents, framing the survey as a study of satisfaction with government policy, gradually introducing the most sensitive questions after less sensitive questions, phrasing misreporting questions indirectly and, in the analysis, controlling for factors that correlate with potential untruthful responses such as tolerance towards misreporting.

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<sup>3</sup> For example, Gerxhani (2007), Kazemier and van Eck (1992), and Hanousek and Palda (2004).

## METHODS APPLIED: SURVEY OF ENTREPRENEURS

The SSE Riga Shadow Economy Index is based on an annual survey of company owners/managers in Estonia, Latvia and Lithuania, which are then aggregated in a way that provides an estimate of the size of each shadow economy as a percentage of GDP. The details of the method are reported in Putniņš and Sauka (2014); here, we provide only a brief overview.

The surveys are conducted between February and March of each year and contain questions about shadow activity during the previous two years. We use random stratified sampling to construct samples that are representative of the population of companies in each country. In total, a minimum of 500 phone interviews are conducted in each of the three Baltic countries in each survey round. The survey is conducted in cooperation with SKDS, and funded by SEB through the Center for Sustainable Business at SSE Riga.

The questionnaire form<sup>4</sup> contains four main sections: (i) external influences and satisfaction; (ii) shadow activity; (iii) company and owner characteristics; and (iv) entrepreneurs' attitudes. To increase the response rate and truthfulness of responses, the questionnaire begins with non-sensitive questions about satisfaction with the government and tax policy, before moving to more sensitive questions about shadow activity and deliberate misreporting. This 'gradual' approach is recommended by methodological studies of survey design in the context of tax evasion and the shadow economy (e.g., Gerxhani, 2007; and Kazemier and van Eck, 1992). Further, the survey is framed as a study of satisfaction with government policy, rather than a study of tax evasion and misreporting (similar to

Hanousek and Palda, 2004). We also guarantee respondents 100% confidentiality with respect to their identities.

In the first survey block, 'external influences', respondents are asked to express their satisfaction with the State Revenue Service, tax policy, business legislation and government support for entrepreneurs in the respective country. In the second section of the questionnaire, we assess the amount of shadow activity by asking entrepreneurs to estimate the degree of underreporting of business income (net profits), underreporting of the number of employees, underreporting of salaries paid to employees and the percentage of revenues that companies pay in bribes. We employ the 'indirect' approach for questions about informal business, asking entrepreneurs about 'companies in their industry' rather than 'their company'. This approach is discussed by Gerxhani (2007) as a method of obtaining more truthful answers, and is used by Hanousek and Palda (2004), for example. The third section of the questionnaire asks entrepreneurs about the performance of their companies (percentage change in net sales profit, sales turnover and employment during the previous year), company age, industry and region. The fourth section of the questionnaire elicits entrepreneurs' opinions about why entrepreneurs evade taxes.

## METHODS APPLIED: CALCULATION OF THE INDEX

The Index measures the size of the shadow economy as a percentage of GDP, making use of the income approach to GDP estimation<sup>5</sup>. Computation of the Index pro-

<sup>4</sup> Available from the authors upon request.

<sup>5</sup> Two caveats are worth noting: (i) because we do not measure shadow activity in the state (public) sector, our estimates refer to private sector shadow activity as a percentage of private sector domestic output; and (ii) we do not attempt to measure the "black economy", i.e., the illegal goods and services.

ceeds in three steps: (i) estimate the degree of underreporting of employee remuneration and underreporting of companies' operating income using the survey responses; (ii) estimate each company's shadow production as a weighted average of its underreported employee remuneration and underreported operating income, with the weights reflecting the proportions of employee remuneration and companies' operating income in the composition of GDP; and (iii) calculate a production-weighted average of shadow production across companies.

In the first step, underreporting of company *i*'s operating income, is estimated directly from the corresponding survey question (question 7). The underreporting of employee remuneration, however, consists of two components: (i) underreporting of salaries, or "envelope wages" (question 11); and (ii) unreported employees (question 9). By combining the two components, we obtain company *i*'s total unreported proportion of employee remuneration. For details of this and other calculations, see Putniņš and Sauka (2014).

In the second step, for each company we construct a weighted average of underreported personal and underreported corporate income, producing an estimate of the unreported (shadow) proportion of the company's production (income). The weights reflect the composition of personal and corporate income in the GDP.

In the third step, we take the weighted average of underreported production, across companies in country *c* to arrive at the Shadow Economy Index for that country. The weights are the relative contribution of each company to the country's GDP, which we approximate by the relative amount of wages paid by the company. Similar to the second step, the weighting in this final

average is important to allow the Shadow Economy Index to reflect a proportion of GDP.

## SHADOW ECONOMY INDEX FOR THE BALTIC STATES 2009-2014

This section reports the Shadow Economy Index in the Baltic countries during the past six years. We also separately examine each of the types of shadow activity that make up the Index, as well as bribery/corruption and the prevalence of unregistered enterprises. Table 1 and Figure 1 report the size of the shadow economies as a percentage of GDP in the years 2009-2014. In 2014, the estimated size of the shadow economy decreased in all three Baltic countries and reached 13.2% of GDP in Estonia, 12.5% of GDP in Lithuania and 23.5% of GDP in Latvia. The decrease in 2014, however, is statistically significant only in Lithuania and Estonia (decreases of 2.5 and 2.8 percentage points, respectively), i.e., the size of the Latvian shadow economy remained relatively unchanged from 2013 to 2014. Consequently, the gap between Latvia and the neighboring Baltic states in the size of their shadow economies has further increased. [See Table 1] [See Figure 1].

Figure 2 illustrates the relative size of the components of the shadow economy in each of the three countries. Similarly to the results from 2013, the largest component of the shadow economies in Latvia and Lithuania in 2014 is unreported business income. According to our data, the proportion of the shadow economy made up by unreported business income has increased in Latvia, which is an important signal for policy makers (increase from 42.0% in 2013 to 45.5% in 2014). In Estonia, however, envelope wages continue to be the main component of the shadow economy (49.5% in 2014). Envelope wages are



Table 1: SSE Riga Shadow Economy Index for the Baltic states 2009-2014

	Estonia	Latvia	Lithuania
2009	20.2% (18.7%, 21.7%)	36.6% (34.3%, 38.9%)	17.7% (15.8%, 19.7%)
2010	19.4% (18.0%, 20.8%)	38.1% (35.9%, 40.3%)	18.8% (16.9%, 20.6%)
2011	18.9% (16.8%, 20.9%)	30.2% (27.6%, 32.7%)	17.1% (15.2%, 19.0%)
2012	19.2% (16.6%, 21.9%)	21.1% (18.5%, 23.6%)	18.2% (16.4%, 20.1%)
2013	15.7% (13.5%, 17.9%)	23.8% (20.7%, 26.9%)	15.3% (13.6%, 17.1%)
2014	13.2% (11.3%, 15.1%)	23.5% (20.5%, 26.6%)	12.5% (11.0%, 13.9%)
2014-2013	-2.5% (-4.6%, -0.5%)	-0.3% (-3.4%, 2.8%)	-2.8% (-4.4%, -1.2%)

NOTE: This table reports point estimates and 95% confidence intervals for the size of the shadow economies as a proportion of GDP. The last row reports the change in the relative size of the shadow economy from 2013 to 2014.

Figure 1: SSE Riga Shadow Economy Index for the Baltic states 2009-2014

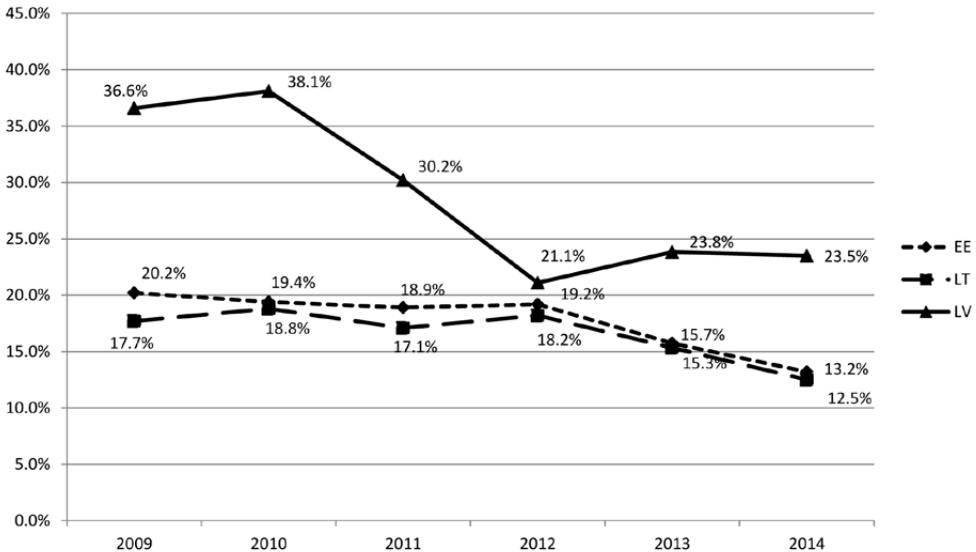
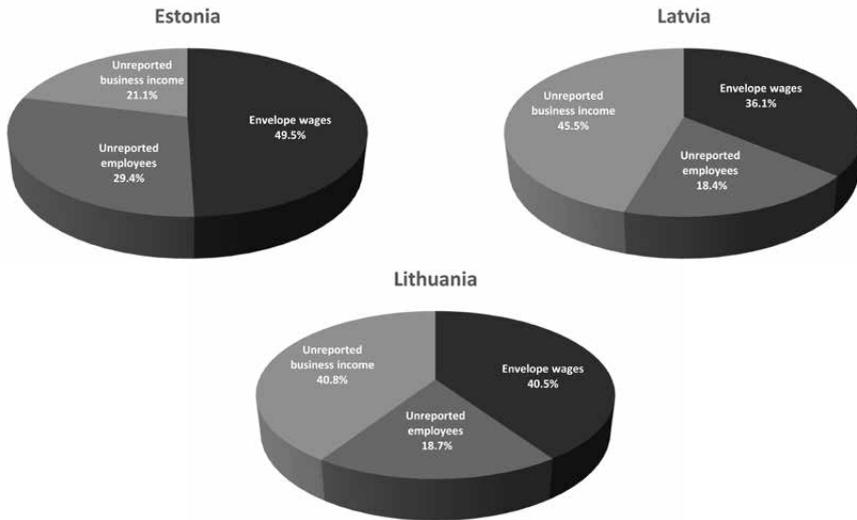


Figure 2: Components of the shadow economies in each of the Baltic countries, 2014



the second largest component of the shadow economy in Latvia and Lithuania (36.1% and 40.5% accordingly). [See Figure 2]

Figures 3 and 4 illustrate the degree of underreporting of business income (profits). Figure 3 shows the dynamics of underreporting profits from 2009 to 2014, whereas Figure 4 shows the distribution of companies that underreport profits within a given range. According to Figure 3, Latvia is the only Baltic state where the underreporting of business income has increased compared to 2013, which is also reflected in the components of the shadow economy in Figure 2. In Estonia, the underreporting of profits in 2014 is estimated as 6.7%, whereas in Lithuania it is 9.4%, and in contrast, in Latvia it is 21.7%. Similar to 2013, approximately 40% of respondents from Estonia state that underreporting 'in the industry' in 2014 is 0%, i.e. that companies report 100% of their actual profits (see Figure 4). In

Latvia and Lithuania, however, 100% of actual profits are reported by 11.5% and 18.4% respondents, respectively. [See Figure 3, 4]

Figures 5 and 6 illustrate the level of underreporting of the number of employees. Figure 5 suggests that underreporting of employees in all three Baltic states has decreased slightly in 2014. Similar to previous years, a relatively low proportion of respondents claim that underreporting of employees in 2014 represents more than 50% of employees (Figure 6). [See Figure 5, 6]

Figure 7 indicates that, on average, envelope wages as a proportion of total wages have also decreased in all Baltic states in 2014. The biggest decrease compared to 2013 is in Latvia (from 25.2% to 20.3%), whereas in Lithuania and Estonia the proportion of envelope wages in 2014 are estimated as 12.2% and 13.6% of the total wages, respectively. Figure 8 shows that in

Figure 3: Underreporting of business income (percentage of actual profits) from 2009-2014

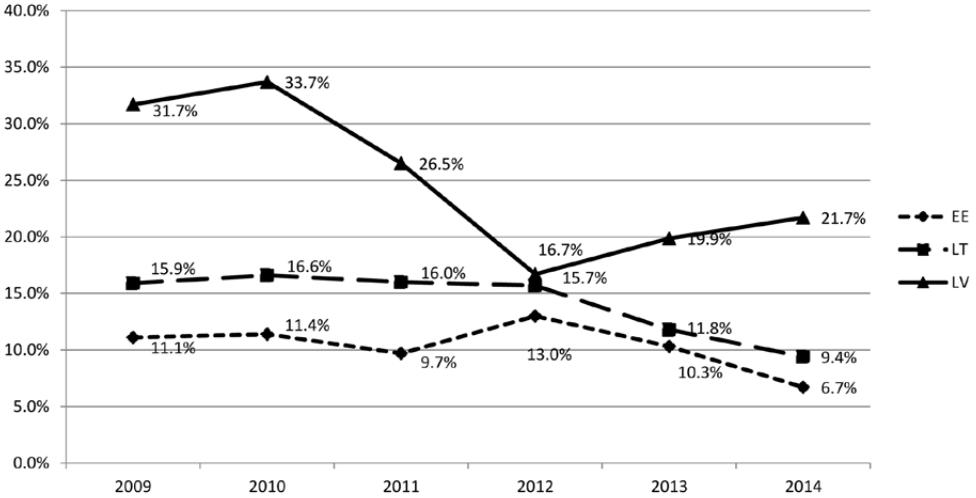


Figure 4: Underreporting of income (percentage of actual profits) in 2014. The vertical axis measures the percentage of each country's respondents underreporting within the range given on the horizontal axis

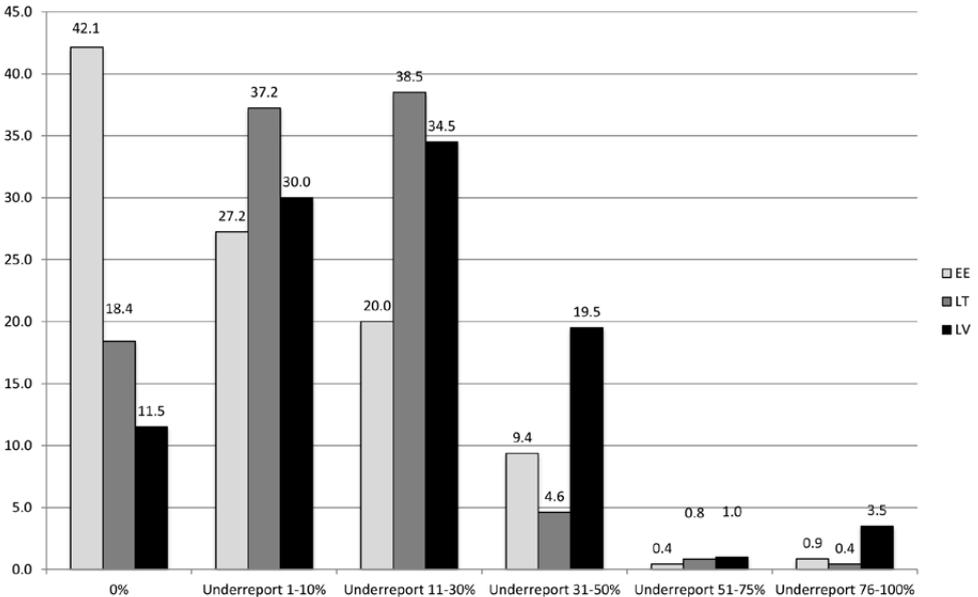


Figure 5: Underreporting of the number of employees (percentage of the actual number of employees) from 2009-2014

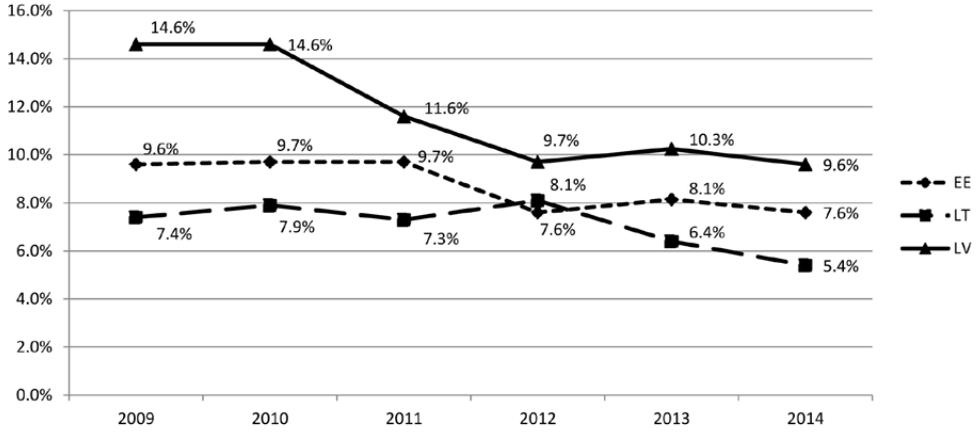


Figure 6: Underreporting of the number of employees in 2014. The vertical axis measures the percentage of each country's respondents underreporting within the range given on the horizontal axis

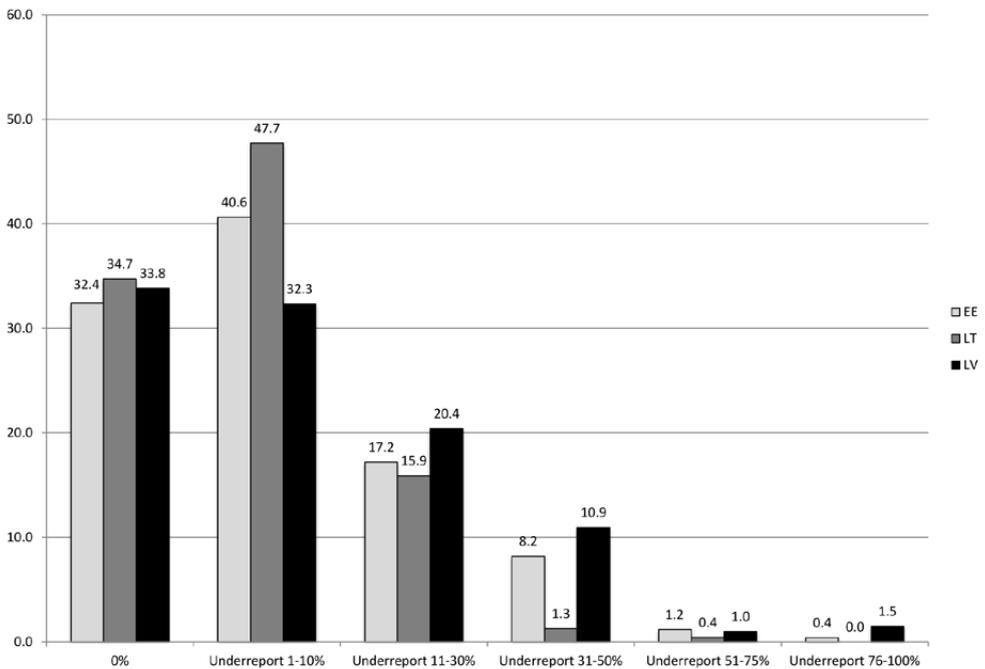


Figure 7: Underreporting of salaries (percentage of actual salaries) from 2009-2014

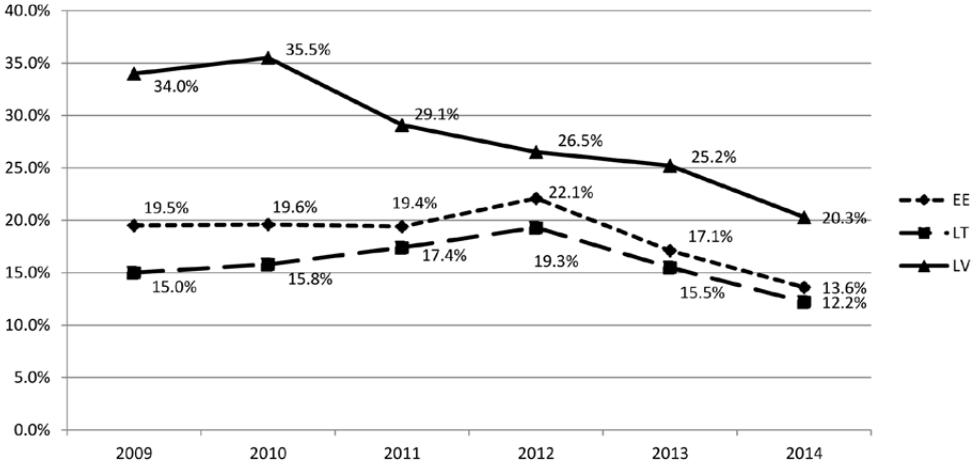


Figure 8: Underreporting of salaries in 2014. The vertical axis measures the percentage of each country's respondents underreporting within the range given on the horizontal axis

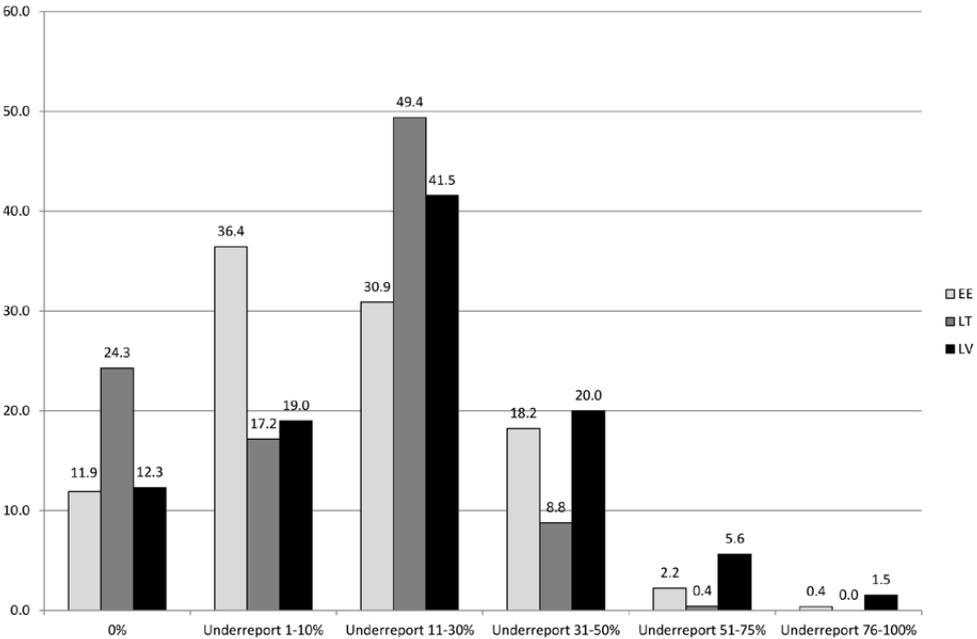


Figure 9: Bribery (percentage of revenue spent on payments 'to get things done') from 2009-2014

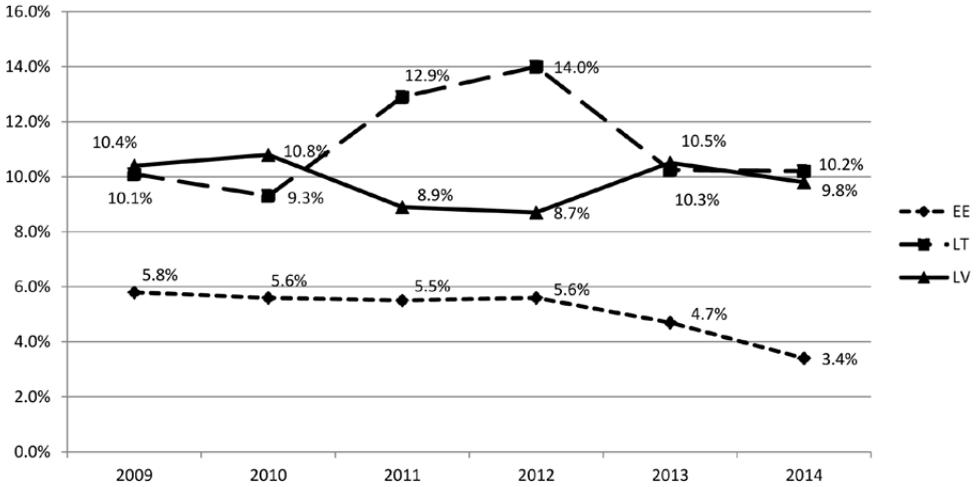
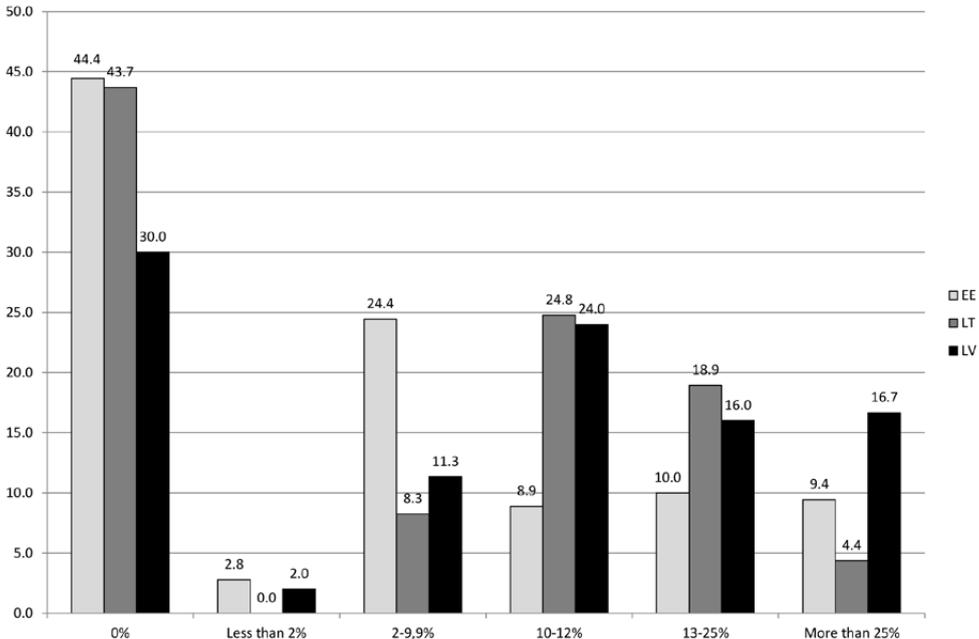


Figure 10: Bribery in 2014 as a percentage of revenue. The vertical axis measures the percentage of each country's respondents making unofficial payments 'to get things done' within the range given on the horizontal axis



2014 most frequently companies from Latvia and Lithuania underreport 11-30% of actual salaries; 1-10% in Estonia. [See Figure 7]

[See figure 8] Similar to 2013, Figure 9 indicates that during 2014, Lithuanian and Latvian companies paid proportionally more in bribes (revenues spent on “getting things done”) than Estonian companies. The level of bribery in Latvia and Lithuania during 2014 is rather similar – around 10%, whereas in Estonia it has decreased to 3.4%. [See figure 9, 10]

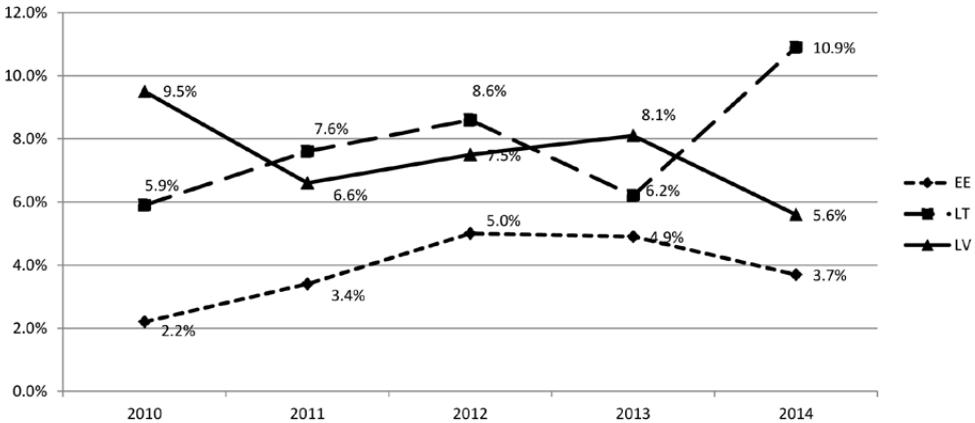
Figures 11 and 12 illustrate the percentage of the contract value that companies typically offer as a bribe to secure a contract with the government. Similar to the gener-

most frequent size of government bribes (proportion of the contract value) in Lithuania is higher than in the other two Baltic states. [See figure 11, 12]

## DETERMINANTS OF SHADOW ACTIVITY

In this section we examine the factors that influence companies’ decisions to participate in the shadow economy. We start by reporting the size of the shadow economy by company characteristics including operating region, sector and company size. Next, we report descriptive statistics of how the size of the shadow economies varies with attitudes and perceptions towards tax evasion. Finally, we use regression analysis to identify the drivers of companies’ in-

Figure 11: Percentage of the contract value paid to the government to secure it, 2010-2014



al level of bribery reported in Figure 9, the level of government bribery has decreased in Estonia. A decrease compared to 2013 is also observed in Latvia. The estimated level of government bribery, however, has substantially increased in Lithuania reaching 10.9% of the contract value in 2014, compared to 6.2% in 2013. Consistent with these findings, Figure 12 illustrates that the

involvement in the shadow economy, while controlling for a range of factors.

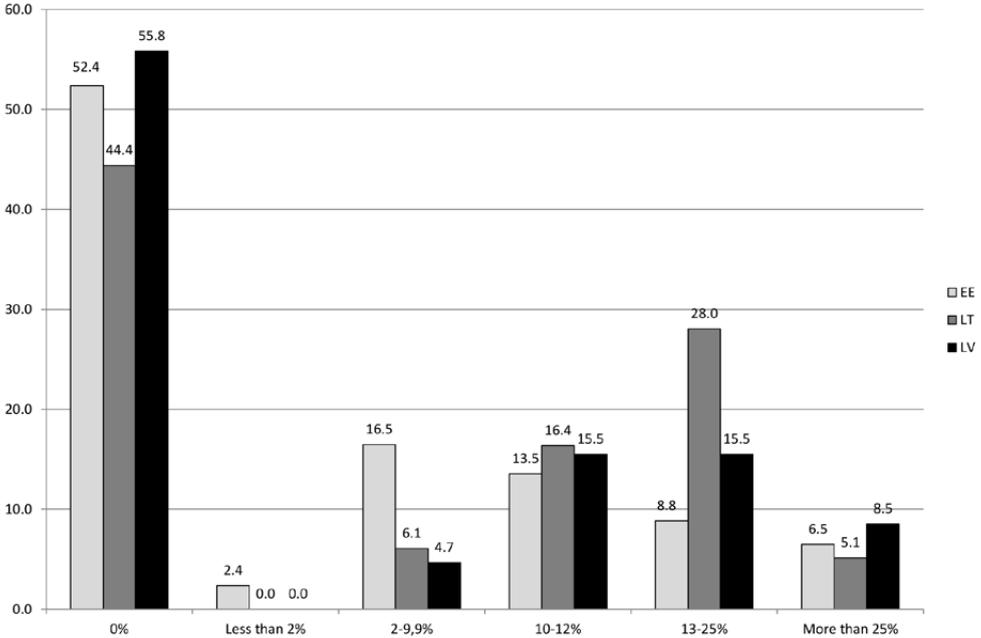
## COMPANY CHARACTERISTICS

Figures 13-15 report the size of the shadow economy by region, in Estonia, Latvia and Lithuania. Figure 13 shows that similar to 2013, the highest levels of shadow activity in Latvia during 2014 are in the Kurzeme



PICNIC POINT

Figure 12: Bribing the government in 2014. The vertical axis measures the percentage of each country's respondents paying bribes within a given range of the contract value to secure contracts with the government



and Riga regions (28.7% and 32.0%, respectively). In Lithuania, the level of shadow activity is rather similar across the regions, whereas patterns of the shadow economy across regions in Estonia are similar to those in 2013. The small number of observations in some of the regions in Estonia, however, create a relatively large margin of error and therefore the Estonian estimates by region should be interpreted with caution. [See figure 13, 14, 15]

Figure 16 summarizes how the size of the shadow economy varies by sector in 2014. The dynamics of the shadow economy in each sector during 2010-2014 are presented in Figures 17-19. Figure 16 suggests that in 2014 in Latvia, by far the highest level of shadow activity is in the construction sector (48.9%), followed by retail. Also, Figure 17 reports an increase in the size

of the shadow economy in Latvia in both the construction and retail sectors compared to previous years. In Lithuania and Estonia, the construction sector also has the highest level of shadow activity (19.0% and 21.0%, respectively, see Figure 16). As shown in Figures 18 and 19, in both Lithuania and Estonia the shadow economy in 2014 has decreased in all sectors compared to 2013, with exception of wholesale in Estonia (Figure 19). [See figure 16, 17, 18, 19, 20]

Figure 20 clearly shows that shadow activity is not a phenomenon that can only be observed in relatively small companies – in all three Baltic states a relatively high level of shadow activity occurs in companies that employ 51-200 employees and 200+ employees. In 2014 (similar to 2013), the level of shadow activity is relatively similar

Figure 13: Size of the shadow economy (% of GDP) by region in Latvia, 2009-2014

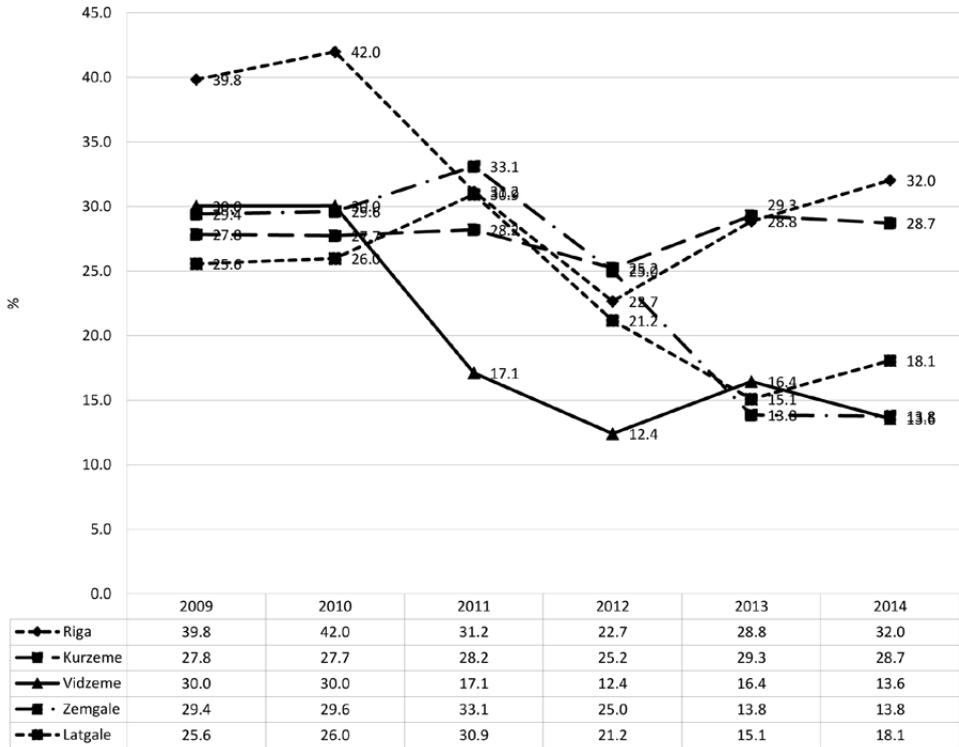
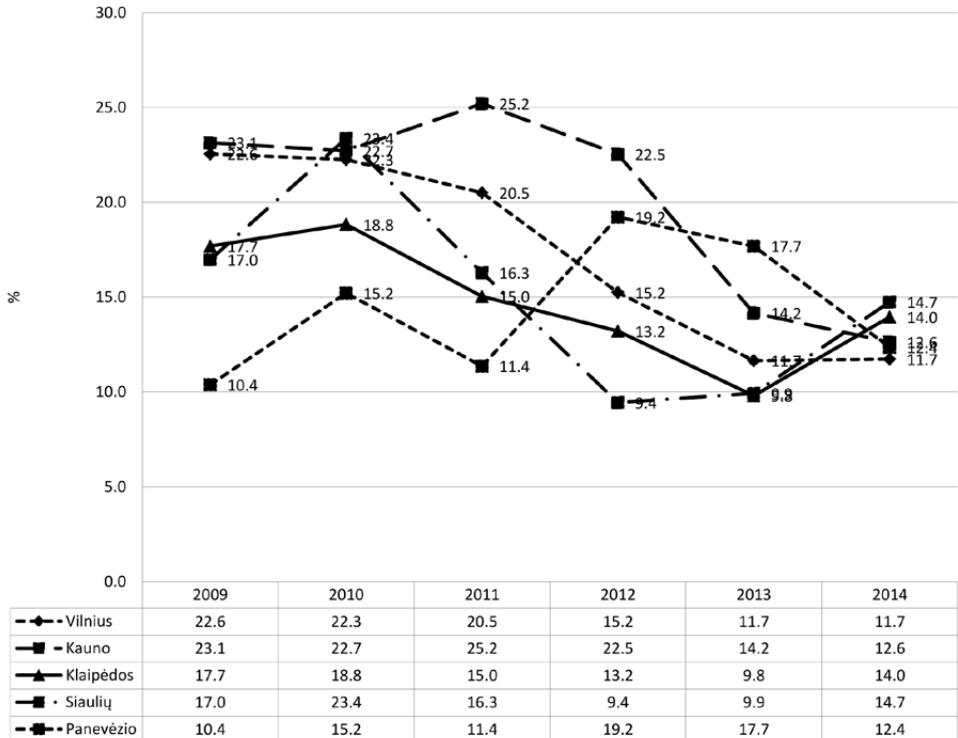


Figure 14: Size of the shadow economy (% of GDP) by region in Lithuania, 2009-2014



across size categories, with a modest tendency for higher levels in smaller companies.

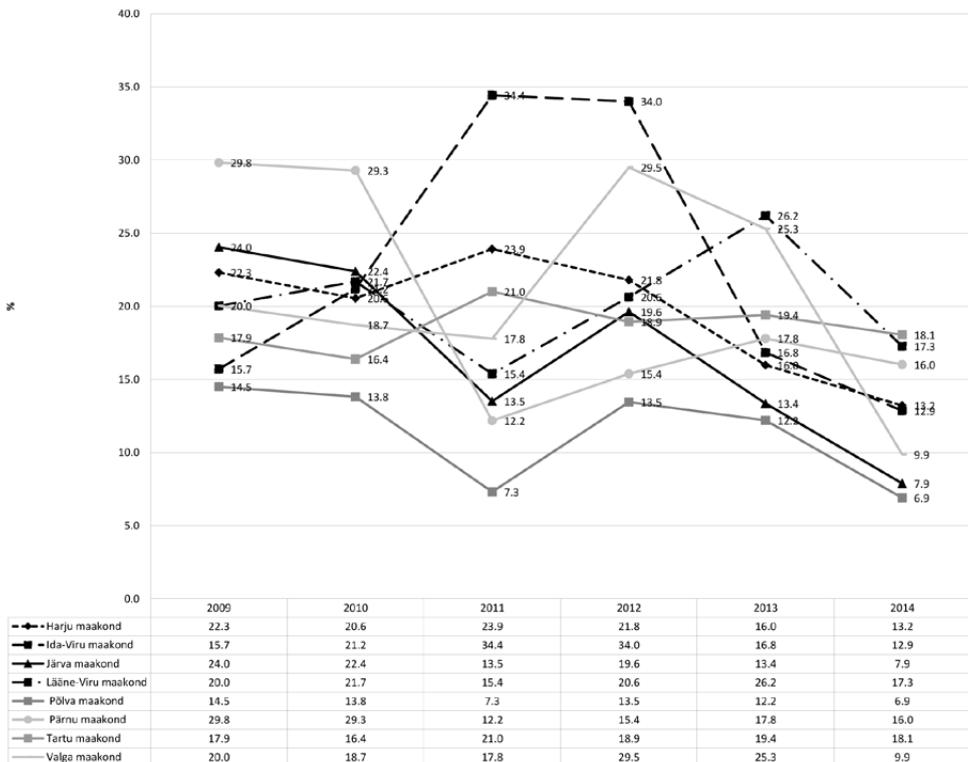
## MULTIVARIATE TESTS OF DETERMINANTS OF SHADOW ACTIVITY

We use regression analysis to identify the statistically significant determinants of companies' involvement in the shadow economy. For the regressions, we use pooled data from the past five survey rounds, which gives a panel that spans the years 2010-2014 and

has a cross-section of approximately 1,500 companies per year. The dependent variable in all regressions is the level of the company's involvement in the shadow economy. The independent variables are various company-level characteristics, attitudes, sector dummy variables, region and year fixed effects.<sup>6</sup>

The regression results are reported in Appendix 1. Model 1 includes most of the measured determinants of shadow activity and dummy variables for Estonian and Lithuanian companies (Latvian companies are the

Figure 15: Size of the shadow economy (% of GDP) by region in Estonia, 2009-2014<sup>6</sup>



<sup>6</sup> Our sample does not contain valid observations for 2009-2012 on Estonian companies in Hiiu maakond, Viljandi maakond, Võru maakond, Jõgeva maakond, Lääne-Viru maakond, Rapla maakond and Saare maakond regions.

Figure 16: Size of the shadow economy (% of GDP) by sector, 2014

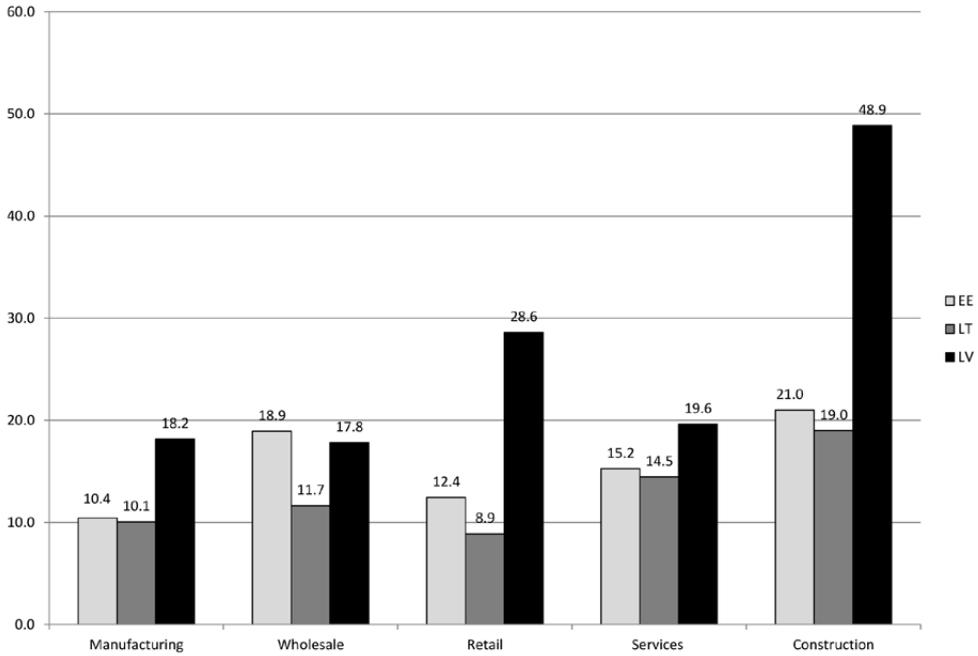


Figure 17: Size of the shadow economy (% of GDP) by sector in Latvia, 2010-2014

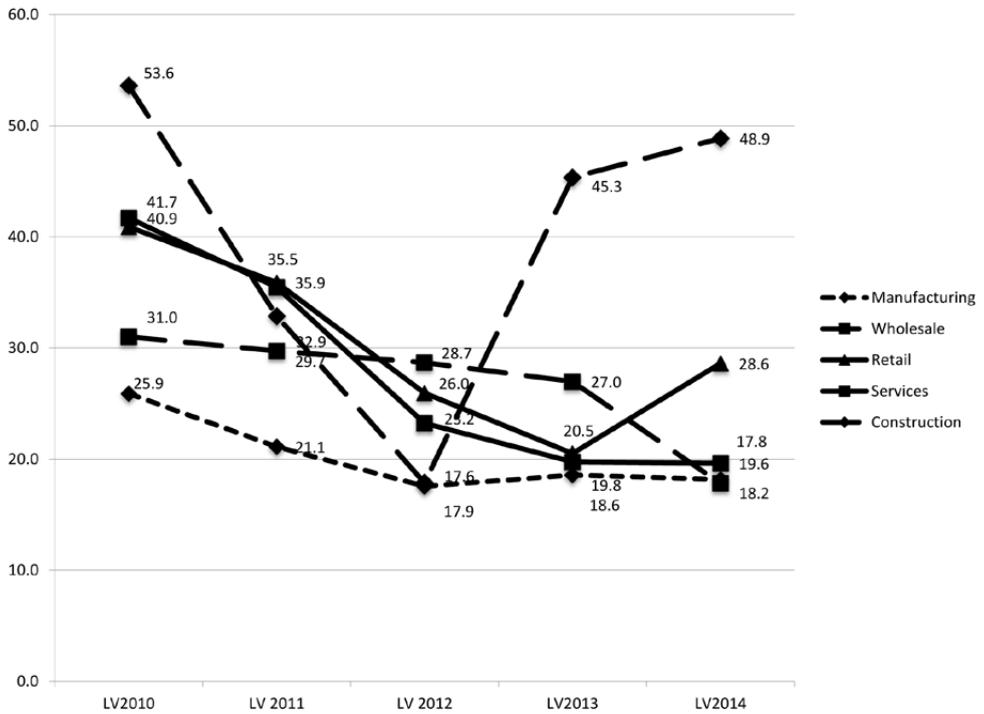


Figure 18: Size of the shadow economy (% of GDP) by sector in Lithuania, 2010-2014

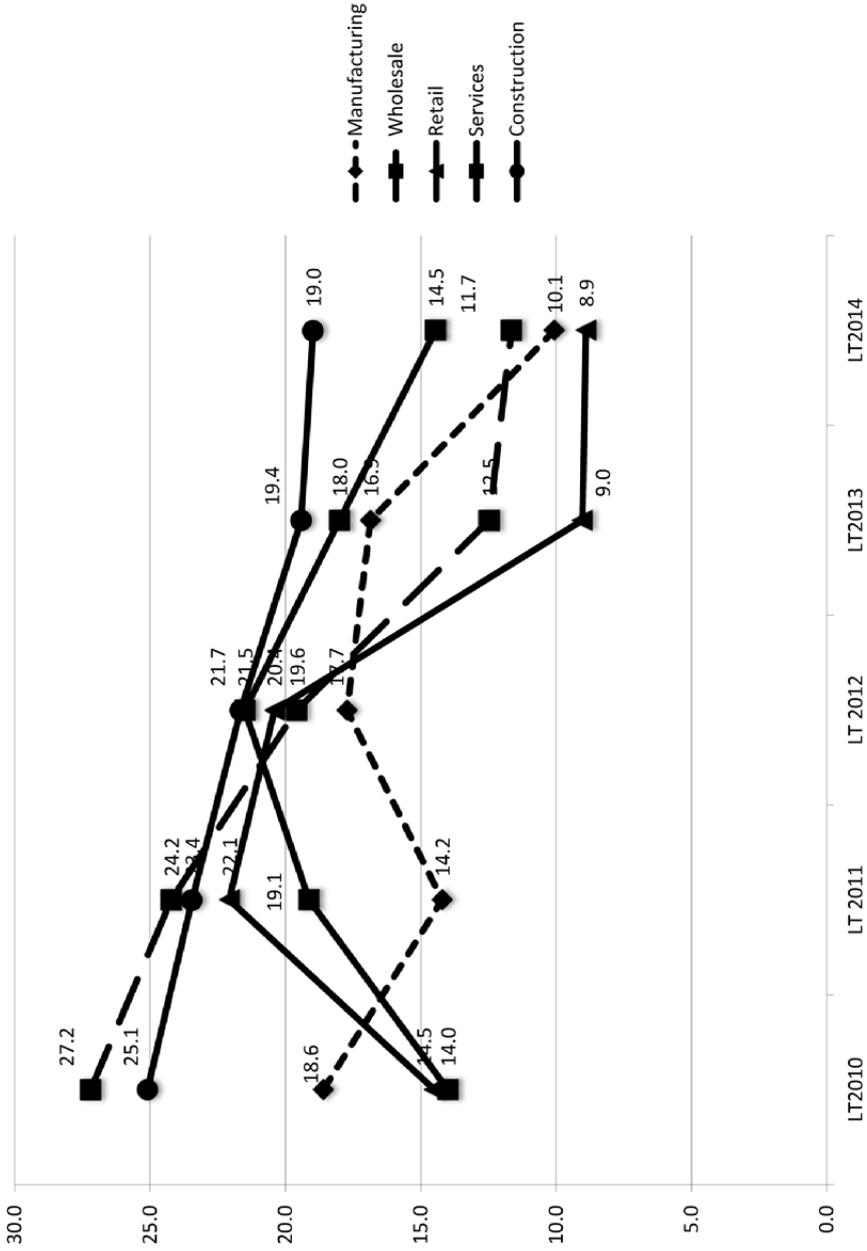


Figure 19: Size of the shadow economy (% of GDP) by sector in Estonia, 2010-2014

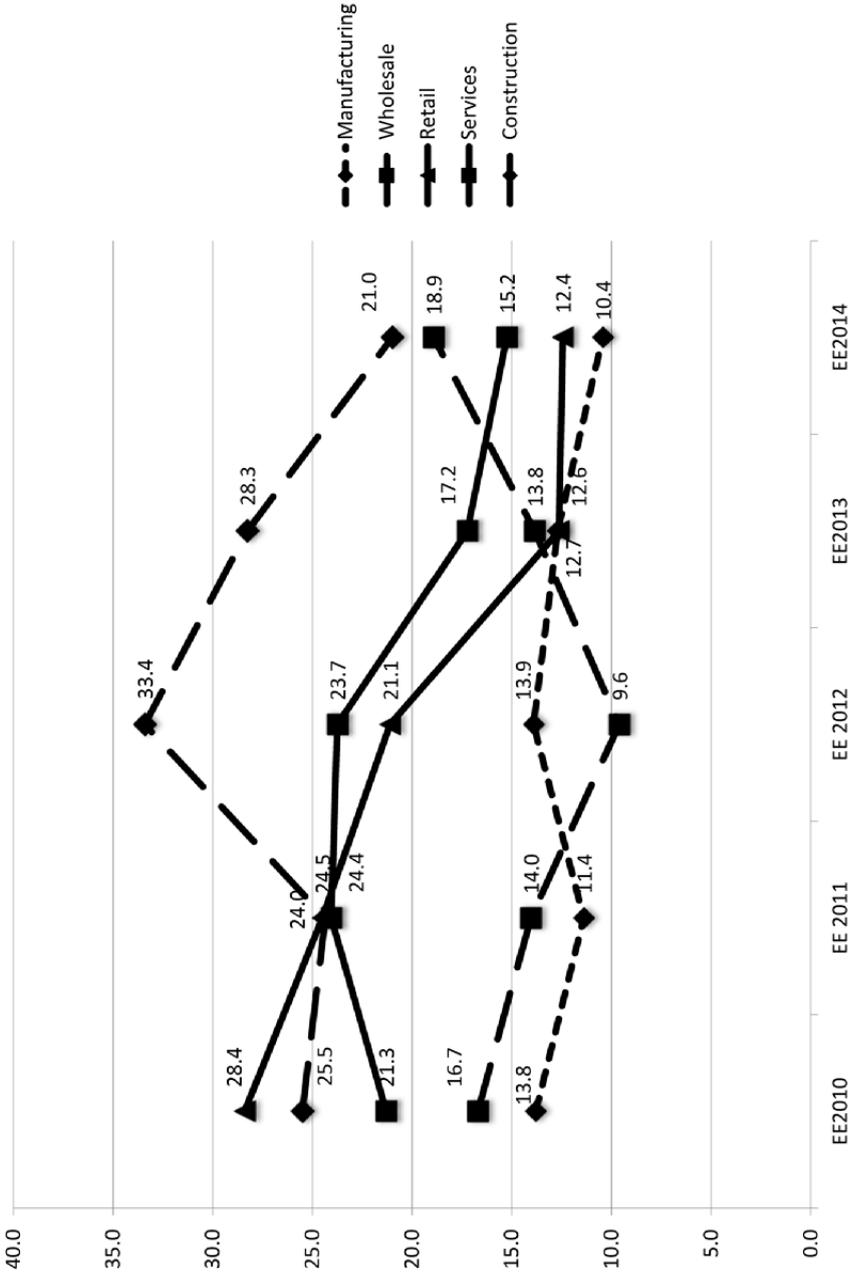
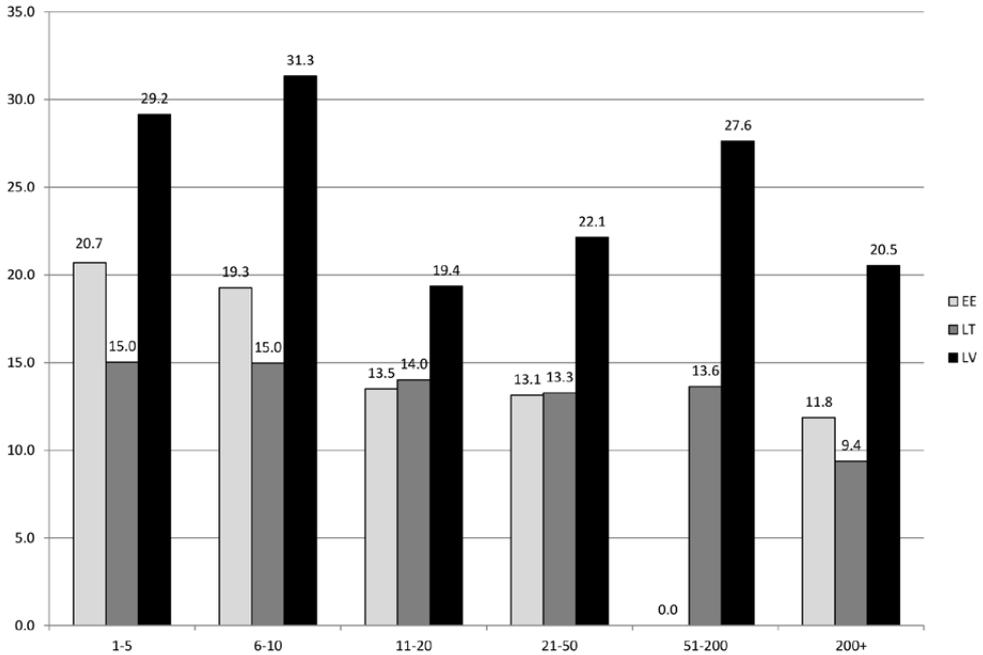


Figure 20: Size of the shadow economy (% of GDP) by company size (number of employees), 2014 <sup>7</sup>

base case). It excludes variables that measure the company's perceived probability of being caught for involvement in the shadow economy (*Detection Probability*) and the company's perceived penalties for being caught (*Penalty For Detection*) in order to make use of data from 2010 (the variables *Detection Probability* and *Penalty For Detection* are only collected from 2011 onwards). Model 2 includes the full set of determinants of shadow activity and thus restricts the sample to 2011-2013. Model 3 replaces the country dummy variables with region dummy variables (with Kurzeme, Latvia, as the omitted category). Model 4 adds year fixed effects. Model 5 replaces *Satisfaction* with a dummy variable for whether the interview is conducted in Russian language. <sup>7</sup>

The country dummy variables suggest that during the sample period, the size of the shadow economy is smaller in Estonia and

Lithuania relative to Latvia after controlling for a range of explanatory factors, and the differences are statistically significant. Tolerance towards tax evasion is positively associated with the company's stated level of income/wage underreporting, i.e., entrepreneurs that view tax evasion as a tolerated behavior tend to engage in more informal activity. The measures of tolerance also serve the important role of controlling for possible understating of the extent of shadow activity (untruthful responses) due to the sensitivity of the topic <sup>8</sup>.

<sup>8</sup> For example, consider two companies that underreport income/wages by 40% each, but the first operates in an environment in which tax evasion is considered highly unethical and is not tolerated, whereas the second operates in an environment in which tax evasion is relatively tolerated. The first company might state that its estimate of underreporting is around 20% (a downward biased response due to the more unethical perception of tax evasion) whereas the second company might answer honestly that underreporting is around 40%. This example illustrates that failure to control for

<sup>7</sup> Our sample does not contain any valid observations on Estonian companies with 51-200 employees.



The regression coefficients indicate that the effect of perceived detection probabilities and penalties on the tendency for companies to engage in deliberate misreporting is consistent with the predictions of rational choice models, i.e., the higher the perceived probability of detection and the larger the penalties, the lower the amount of tax evasion and misreporting. The effect of detection probability in particular stands out as being a particularly strong deterrent of shadow activity. This evidence suggests a possible policy tool for reducing the size of the shadow economies, namely increasing the probability of detection of misreporting. This could be done via an increased number of tax audits, whistle-blower schemes that provide incentives to report information to authorities about non-compliant companies, and investment in tax evasion detection technology.

The regression results also indicate that a company's satisfaction with the tax system and the government is negatively associated with the company's involvement in the shadow economy, i.e. dissatisfied companies engage in more shadow activity, satisfied companies engage in less. This result is consistent with the descriptive statistics and with previous research on tax evasion, and offers an explanation of why the size of the shadow economy is larger in Latvia than in Estonia and Lithuania; namely that Latvian companies engage in more shadow activity because they are more dissatisfied with the tax system and the government. Analyzing each of the four measures of satisfaction separately we find that shadow activity is most strongly related to dissatisfaction with business legislation and the State Revenue Service, followed by the government's tax policy and support for entrepreneurs.

A natural question to ask is why Latvian companies are more dissatisfied. One explanation is that the business environment (actions of the

government and SRS) is less favorable to companies in Latvia. It may also be that the ethnic composition of the country plays a role, as minority groups may feel less engaged in society and involved in the country-level decision making. To test this hypothesis, specifically with respect to the Russian-speaking population in each of the countries, in Model 5 we replaced the *Satisfaction* variable with a dummy variable for whether the interview is conducted in Russian language. Consistent with the hypothesis, Model 5 indicates that the companies of Russian-speaking respondents tend to be involved in a slightly higher (3.6 percentage points) level of shadow activity, controlling for other factors. This effect is moderately statistically significant. Given that Latvia has a proportionally larger Russian-speaking population than Estonia and Lithuania, this result suggests that the mix of ethnicities may contribute to the difference in the size of the shadow economies in the Baltic countries.<sup>9</sup>

Another strong (and statistically significant) determinant of involvement in the shadow economy is company size, with smaller companies engaging in more shadow activity than larger companies, although the descriptive statistics suggest the relation may be non-monotonic. The statistically significant coefficient on company age suggests that younger companies engage in more shadow activity than older companies. A possible explanation for these two relations is that small, young companies use tax evasion as a means of being competitive against larger and more established competitors. The sector dummy variables suggest that companies in the construction sector and services tend to engage in more shadow activity than companies in other sectors such as retail. The association between shadow activity and the average

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the sensitivity of tax evasion (proxied here by tolerance) can lead to biased comparisons.

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<sup>9</sup> Our sample does not contain any valid observations on Estonian companies with 51-200 employees.



wage paid by a company or a company's change in profits (or employees or turnover) is not significant across all specifications.

## DISCUSSION AND CONCLUSIONS

The SSE Riga Shadow Economy Index is estimated annually based on surveys of entrepreneurs in the Baltic states using a number of surveying and data collection techniques shown in previous studies to be effective in eliciting relatively truthful responses. The Index combines estimates of misreported business income, unregistered or hidden employees, as well as unreported "envelope" wages to obtain estimates of the shadow economies as a proportion of GDP. This report is the fifth in the series and focusses on the shadow economy estimates for the year 2014, as well as trends during the years 2009-2014.

Our first key finding is about trends in the Baltic shadow economies. During 2014, Estonia and Lithuania have continued their long-term trend of gradually reducing the size of their shadow economies. Our estimates suggest that the Estonian and Lithuanian shadow economies contracted by approximately 2.5-2.8 percentage points and now account for 12.5%-13.2% of GDP. The contraction has been across all components of the shadow economies. In contrast, the Latvian shadow economy has remained largely unchanged in aggregate compared to the previous year and is estimated at around 23.5% of GDP. The different dynamics of the shadow economies means that there is now a large difference in their size – the Latvian shadow economy is almost double the size of those in neighboring states.

Although in aggregate the size of the shadow economy in Latvia has not changed much in 2014, its composition has changed. Envelope wages have declined, but their contraction is offset by a corresponding increase in corporate tax evasion – companies in Latvia misreport a larger proportion of their business

income in 2014 compared to the previous two years. Unreported business income has overtaken envelope wages and now makes up around 46% of the total Latvian shadow economy. By far the worst sector is construction, where shadow activity in Latvia is estimated to be as high as 48.9% (it is also the sector with the highest level of shadow activity in Estonia and Lithuania, but with more modest levels of 21% and 19%). As the Latvian economy continues to recover from the crisis, real estate prices have risen from their post-crisis lows and the construction sector is regaining activity after having almost ground to a halt. The recovery in the construction sector with its high level of shadow activity has offset the declining levels of shadow activity in other sectors. Perhaps in part driven by the influence of the construction sector, Riga is estimated to have the highest level of shadow activity in Latvia in 2014.

When it comes to attitudes, companies continue to be relatively satisfied with the State Revenue Service and relatively dissatisfied with the government's tax policy and support for entrepreneurs. Latvian companies tend to be slightly less satisfied than Estonian and Lithuanian companies overall, but this tendency is changing: the level of dissatisfaction with the government in Latvia has been gradually declining since 2010, whereas it has been increasing in Estonia.

Also new in this year's report are our estimates of the prevalence of unregistered companies. According to our data, unregistered companies make up around 5%-8% of all enterprises. They are most widespread in the construction sector.

This year's study accompanies some of our previous findings regarding what makes Baltic entrepreneurs more likely to operate in the shadow sector and adds some new ones. Companies that are dissatisfied with the tax system or the government tend to engage in more shadow activity; satisfied companies

engage in less. This result is consistent with previous research on tax evasion, and has implications for policy measures to reduce the size of the shadow economy. We also find that smaller, younger companies engage in proportionally more shadow activity than larger, older companies, consistent with the anecdotal evidence that tax evasion is used by companies to gain a competitive edge, and that having an edge is important in competing in an established market. Finally, the level of tax evasion and deliberate misreporting among Baltic companies is responsive to the perceived probabilities of being caught and to the expected penalties for being caught. In particular, companies that perceive the probability of being caught as being higher tend to engage in less shadow activity.

Our results have several noteworthy implications. For policymakers, our results highlight the need for continued reforms and actions that combat the shadow economy in particular in Latvia. We believe the widening shadow economy gap between Latvia and neighboring countries (after the gap was nearly closed in 2012) partly reflects the slow-down in Latvian policymaker efforts in combating shadow activity. The data from 2011 and 2012 supports the notion that large scale and serious efforts to combat the shadow economy can make a difference and reduce the size of the shadow economy. In exchange for financial assistance during the crisis, the Latvian government undertook over 60 different policy actions to combat the informal economy between 2010-2013, with most of the reforms front-loaded, i.e., taking effect in 2010 and 2011. Our estimates of the size of the Latvian shadow economy in previous years are consistent with the notion that the deliberate policy efforts aimed at reducing shadow sector activity were indeed successful; Latvia experienced a large decline in the size of its shadow economy from a peak of 38% of GDP in 2010 to a low of 21% in 2012. However, following the completion of this

substantial package of policy actions, Latvian policymaker efforts targeting the shadow economy have substantially subsided. The reduced regulatory/policy effort is likely to have contributed to the ending of the consecutive contractions in the size of the Latvian shadow economy and serves as a strong signal that reducing the shadow economy requires continued effort from policymakers and enforcement agencies such as the State Revenue Service. Now is the time for Latvian policymakers to implement a second large-scale and serious policy package targeting the shadow economy as was done from 2010-2013. The reforms could focus on misreporting of business income, as well as the construction sector, as these are the most problematic parts of the shadow economy.

Our results on the determinants of shadow activity in the Baltic countries suggest a number of approaches for policymakers to reduce the size of the Baltic shadow economies. Firstly, reducing dissatisfaction with the tax system is likely to decrease the size of the shadow economies. Addressing this issue could involve actions such as making tax policy more stable (less frequent changes in procedures and tax rates), making taxes more "fair" from the perspective of businesses and employees, and increasing the transparency with which taxes are spent. Secondly, increasing the probability of detection is expected to reduce shadow activity. This could be achieved via an increased number of tax audits, whistle-blower schemes that provide incentives to report information to authorities about non-compliant companies, and investment in tax evasion detection technology. Thirdly, we find that the mix of ethnicities also has an impact on the level of the shadow economy, possibly as a result of minorities feeling less engaged in society and country-level decision making. Therefore, addressing social cohesion and integration of minorities may also lead to a reduction in the shadow economy.

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## APPENDIX 1: REGRESSION RESULTS

This table reports coefficients from regressions of companies' unreported proportion of production (dependent variable; see Section 2 for details of calculation) on various determinants of shadow activity, using the pooled sample of Estonian, Latvian, and Lithuanian companies, from 2010-2014. *D\_EE*, and *D\_LT* are dummy variables for Estonian and Lithuanian companies, respectively (Latvian companies are the omitted category). *Tolerance Tax Evasion* is the company's response to Question 5, with higher scores indicating more tolerance. *Satisfaction* is the first principal component of the company's responses to Questions 1-4, with higher scores indicating higher satisfaction with the country's tax system and government. *Detection Probability* and *Penalty For Detection* measure the company's perception of the probability of being caught for shadow activity and the severity of penalties conditional on being caught (calculated as the first principal component of responses to Questions 17(i)-17(iv), and the response to Question 18, respectively). *ln(company Age)* and *ln(Employees)* are the natural logarithms of the company's age in years and its number of employees. *Average Wage* is the average monthly salary in EUR paid by the company. *Change In Profit* is the company's percentage change in net sales profit relative to the previous year. *D\_Wholesale* to *D\_OtherSector* are sector dummy variables with manufacturing as the omitted category. *D\_RU* is a dummy variable that takes the value one if the respondent elected to answer the questionnaire in Russian language. \*\*\*, \*\* and \* indicate statistical significance at the 1%, 5% and 10% levels. T-statistics are reported in parentheses.

Table 2: Determinants of companies' involvement in shadow activity

	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	36.955*** (15.53)	41.197*** (12.83)	39.625*** (10.50)	36.378*** (9.53)	34.585*** (9.10)
D_EE	-6.395*** (-6.31)	-6.467*** (-5.04)			
D_LT	-9.430*** (-8.89)	-5.688*** (-4.00)			
Tolerance Tax Evasion	1.570*** (4.90)	1.208*** (3.18)	1.202*** (3.14)	1.129*** (2.94)	1.388*** (3.71)
Satisfaction	-1.591*** (-4.32)	-1.815*** (-4.03)	-1.772*** (-3.81)	-1.818*** (-3.96)	
Detection Probability		-2.196*** (-4.29)	-2.155*** (-4.18)	-2.057*** (-4.01)	-2.230*** (-4.40)
Penalty For Detection		-1.130** (-2.49)	-1.114** (-2.48)	-0.995** (-2.23)	-0.777* (-1.74)
Ln (company Age)	-3.891*** (-4.96)	-4.582*** (-5.07)	-4.430*** (-4.80)	-4.016*** (-4.37)	-3.852*** (-4.20)
Ln (Employees)	-0.818*** (-2.71)	-1.096*** (-3.23)	-1.109*** (-3.22)	-1.454*** (-4.20)	-1.384*** (-4.12)
Average Wage	-0.001* (-1.96)	-0.001** (-2.29)	-0.002** (-2.54)	-0.001** (-2.35)	-0.002*** (-2.72)
Change In Profit	0.011*** (2.99)	0.017** (2.10)	0.017** (2.06)	0.014* (1.66)	0.016** (1.98)
D Wholesale	0.385 (0.32)	0.338 (0.25)	0.078 (0.06)	-0.636 (-0.46)	-0.553 (-0.41)
D Retail	1.025 (0.83)	1.507 (1.05)	1.447 (1.00)	1.147 (0.80)	1.582 (1.12)
D Services	1.717 (1.64)	2.097* (1.75)	1.844 (1.51)	1.807 (1.50)	1.938 (1.63)
D Construction	4.596*** (3.49)	5.416*** (3.64)	5.624*** (3.75)	5.552*** (3.73)	5.774*** (3.90)
D Other Sector	-0.764 (-0.47)	1.321 (0.65)	1.323 (0.64)	0.830 (0.40)	0.870 (0.43)
D_RU					3.595* (1.68)
Region fixed effects	No	No	Yes	Yes	Yes
Year fixed effects	No	No	No	Yes	Yes
Data	2010-2014	2011-2014	2011-2014	2011-2014	2011-2014
R-squared	10.5%	13.0%	13.9%	15.3%	14.8%

# Perspectives of Agorism in Central and Eastern Europe



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MARCIN  
CHMIELOWSKI

Libertarian theorists often emphasize its stateless dimension, which sometimes is highly related to the idea of market anarchy. Among them, we can find agorists. What makes them interesting from the point of view of the shadow economy? It is the fact that they believe it to be a tool necessary to stir libertarian paradigm shift. It might seem that Central and Eastern Europe is a good place to apply this particular strategy. However, it is not exactly what is happening there and it is very interesting to analyze the reasons why.

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#### **AGORISM, MEANING WHAT?**

In a nutshell, agorism is a branch of libertarianism that was created by Samuel Edward Konkin III. Agorists reject the state not only as inefficient, but most of all, immoral, which makes them libertarian anarchists.

Despite today's connotations of the word "anarchy", they are not proponents of the collectivization or redistribution of re-

sources. On the contrary, they are radicals for free market and advocates of private property. They are suspicious, but not hostile, towards capitalism. The reason for this aversion is the fact that capitalism creates hierarchy and agorists are known for their egalitarianism.

They are not willing to take part in politics. Recognizing the very act of voting as legitimization of the state, they consistently boycott every election. Indeed, these are clearly Spoonerian tactics of non-voting, which they reinforce with dislike and even contempt for those libertarians who are attempting to lessen the state's oppression of the individual by the means of politics – lobbying, involvement in political parties, running for offices.

Their positive platform is to build up an *agora*, the market of goods and services provided without the control of the state. Agora, the network of agorists who carry out transactions, is to become not only the alternative for the state, but also the tool by means of which the state will be destroyed.

The concept is simple: bearing in mind the fact that the state – either directly or indirectly – taxes each transaction, we need

to keep as many transactions as possible out of the state's reach, starving the leviathan. This is the reason for division of the markets of exchange. Working on the gray and black markets, providing products and services that from the state's point of view are illegal, but acceptable according to the rule *volenti non fit iniuria* and also trading fully legal products, but doing so under the table in order to avoid the taxes – to agorists, all these actions are seen as beneficial.

The white market – carrying out transactions in accordance with the law – is not welcomed by agorists. They should be limited to the absolute minimum as each of them is a way of empowering the state. The red market, where the non-aggression principle is violated and individuals are coerced into transactions is, according to the agorist principles, immoral and forbidden. Indeed, it is considered immoral not only by agorists, but by libertarians – none of them would advocate for conscription, slave-trade or contract killing.

The theory of agorism is two-dimensional. On the one hand, it carries a great burden of historiosophical baggage and presents ever-lasting class conflict in which the extorted (entrepreneurs and workers) are fighting against the extortionists – all those who live off tax-payers' money.

Agorism also concerns macro processes, including social change, the clash of ideas combined with the class conflict, the shift of the statist paradigm and the end of the history. This is why agorism is usually criticized for being too simplistic and dreamy, and for escaping towards a future that is unknown and, as such, cannot be predicted.

However, there is also another side of agorism, the tangible one. The one where awareness of how the state functions, enables people to become entrepreneurs and start working now on their own benefit, by means of market exchange purchasing as much freedom as possible. Agorism is also about building community and relationships with other agorists – something that libertarian critics often forget. It is not solely based on lonely monads that in order to meet their own, egoistic needs, connect with others and create market relationships with them. Obviously, this is how it works, but there is a beneficial side to it – creating bonds between one another and the catalectic transformation of an enemy into a friend, in the process of which caduceus is the magic wand.

The focus on practice and combining it with theory is what agorism proposes instead of an ivory tower of pure theory or banging one's head against a brick wall that is characteristic of practitioners who are not able to base their actions on even several books. Another quality of agorism is its inclusive nature and concern for the poor, disadvantaged members of society, who are not able to make money mostly because of the actions undertaken by the state that make them dependent on its help. Agorism also teaches us to have an entrepreneurial attitude towards libertarianism, which is an extremely important issue, because nothing can hinder the promotion of free competition as effectively as its advocacy by those who are losing it.

Counter-economics is the practical pillar of agorism. Counter-economic action is exchanging the risk of breaking the law for profit. Selling smuggled cigarettes, running a casino in a place where it is illegal, tax evasion, taking resources from state-run workplaces – all these actions are examples of counter-economics.

According to Konkin and other agorists, this kind of entrepreneurship is the most appropriate realization of the libertarian theory. Of course, agorists also accept the educational value of actions aiming at the promotion of the concept: lectures, publications, convincing those still unconvinced. The attitude of agorists in this field is also very entrepreneurial as they treat their ideology as goods, calling for an effective seller, who can find potential customers on the market.

The target group consists mostly of entrepreneurs already functioning on the gray and black markets who, as Konkin points out, are very easily converted into agorists – they just need a chance to learn more about the theory, which empowers their practice. This is what Konkin was often criticized for. In their polemic, Rothbard noted that just as ducks do not need any instructor to teach them how to swim, the counter-economic entrepreneurs who are actually working in shadow economy sphere, do not need any theory to empower their actions since their very existence proves it is not necessary for them. It seems that pointing this out, Rothbard was right.

Indeed, it is not hard to notice that most of the counter-economists are not even aware that they are counter-economists. One of the tactic goals of agorism was to convince counter-economists to libertarianism and the other way round: teaching the libertarian theorist to put their concepts into practice. According to Konkin and his supporters, only these two elements can result in true agorism. A person trading on the black market is not an agorist. He is a counter-economist, a black market entrepreneur. A libertarian who instead of developing the market shadow economy, only writes about agorism, is not an agorist. Actions are far more important than motivations.

An important issue that should be considered while discussing agorism is the ethics of market operations. According to Konkin, it is possible to create a set of actions that are welcome and those that are not, even when they are carried out in the shadow economy. The starting point to this debate was undoubtedly Murray Rothbard's rational ethics, however it did need some adjustments to the transactions handled outside the government's control.

What is interesting, Konkin's remarks on the ethics of the gray and black markets are similar to those unwritten rules that arise spontaneously as criminal's "codes." One should not inform the government about the actions of others and nor should they collaborate with the state. It is expected that one will warn others about the government officials and resolve problems among the parties involved, without the use of violence. Konkin also claimed that the consumer choice would exist on the illegal market as well, and the quality of goods and services provided would have to improve in accordance with consumer demands.

## **SHADOW ECONOMY AND COUNTER-ECONOMY**

What does the counter-economy mean for agorists? It is a tool needed to transform the current conditions into those that they think appropriate. It could facilitate the shift from the situation in which the regulator is the government into one in which the only regulator is the market based on voluntary transactions and contracts.

However, the term "counter-economy" does mean something for non-agorists, too. The counter-economy is nothing else than the shadow economy itself. One can clearly see the difference of points of views on the shadow economy: for agorists, it is the space in which transactions are carried



THE RELATIONSHIP BETWEEN AGORISM AND THE SHADOW ECONOMY IS TWOFOLD: IT IS A TOOL NECESSARY TO STIR THE SOCIO-POLITICAL SHIFT, BUT ALSO A NATURAL MARKET ENVIRONMENT (FOR AGORISTS)

out as an opposition to the state; for less ideologically motivated analysts, they are carried out not necessarily as an opposition to the state, but certainly not under its control. The field of the counter-economy, meaning the shadow economy, is not only a tool for agorists, but also the pool of resources to be used. It is in this field, where the true entrepreneurship, not tainted by the collaboration with the state, exists. It is there, where the real entrepreneurs, sometimes seen as heroes, carry out their business simultaneously avoiding being caught by law enforcement.

The relationship between agorism and the shadow economy is twofold: It is a tool necessary to stir the socio-political shift, but also a natural market environment (for agorists). It needs to be point-

ed out that this specific term, *counter-economy*, used by agorists, makes the picture more blurry than making it clearer. Indeed, the term is not well-known among non-agorists or those who do not deal with the history of libertarianism. The popular definition of counter-economy, which describes the term as all currently unregistered economic activities that could contribute to the officially calculated gross national product if the activities were recorded, "all currently unregistered economic activities that could contribute to the officially calculated gross national product if the activities were recorded"<sup>1</sup> can also be applied to the counter-economy.

It suffices to say that agorism simply adds a specific line of reasoning concerning the government-citizen relation, where the government is always the oppressor and transactions conducted in the shadow economy are always right. Agorism is, therefore, an attempt, sometimes a backbreaking one, to glorify every transaction carried out with in accordance with and respect paid to the interests and free will of all parts involved, as long as it takes place in the shadow economy.

Today, agorism lives on, there are still people who knew Konkin personally (he died in 2001) and collaborated with him. However, practicing agorism is not really popular in the West. Obviously, it is hard to estimate its scale, but it is certain that agorism is only a small part of the greater whole, which is the shadow economy. And in return this is an insignificant fraction of the whole of economics, both in the US and Western Europe.

<sup>1</sup> See: Friedrich Schneider & Colin C. Williams, *The Shadow Economy*, London 2013.

It is true that there are agorist publications, even a guide providing advice on how to manage an agorist enterprise. Tarrin P. Lupo's book *How to Make a Living Outside the System. Practical Guide to Starting a Black Market Business* begins with an attack towards contemporary, aggressive governments with the power to control their citizens. In order to retain freedom, Lupo proposes his own strategy: instead of hiding from the state (which, however, he still believes to be effective and, sometimes, in specific fields, even necessary), he suggests explicit actions and making agorism an act of civil disobedience. His understanding of agorism means, therefore: firstly, ignoring the state, and only then fighting it. Lupo believes that the tactics of harming the state through media and undermining its authority through non-violent actions (which are however, deemed illegal by the law) can be effective and it is truly a chance to retrieve some portion of our liberty. But still in comparison to other movements within libertarianism, agorism is certainly not a majority shareholder.

Konkin referred to the situation of our part of Europe several times. In his polemic with Rothbard, he provided an example of Polish workers, who were a perfect model of counter-economists for him. He also mentioned "Solidarity", comparing it to the American Libertarian Party. He did not have an approving attitude towards the party, as can be seen in his original word formation: "The Polish situation, of course, fits the agorist paradigm perfectly, right down to the counter-economic workers being co-opted by the patriarch-like Solidarity union."<sup>2</sup>

He also wrote about the Soviet Union, for him an example of counter-economics in action and its beneficial impact on the situation. Without entrepreneurial individuals, willing to transfer risk into profit, the standard of life there would have been even lower than it was: "In the Soviet Union, a bastion of arch-statism and a nearly totally collapsed "official" economy, a giant black market provides the Russians, Armenian, Ukrainian and others with everything from food to television repair to official papers and favors from the ruling class."<sup>3</sup>

These statements were written from the perspective different than today's. We are all perfectly aware of the fact that there have been many geopolitical, as well as economic changes since the 1980s in our region.

### **WILL ANYBODY GET INTO AGORISM?**

Central and Eastern Europe should be a great soil for agorist to grow. There are more shadow economy workers here than in the Western Europe. According to the research carried out by Friedrich Schneider from the Johannes Kepler University<sup>4</sup>, the average size of shadow economy in the European Union is 18%.

The most prominent examples of countries with a high rate of shadow economy in the EU are those located in our part of the continent: Bulgaria (30,6%), Romania (28%), Croatia (27,7%), Poland (23,3%) and Hungary (21,9%). Just below the EU average are: Czech Republic (15,1%) and Slovakia (14,1%). We can observe even higher rate of shadow economy in the countries

<sup>2</sup> See: <http://www.anthonyflood.com/konkinre-plytorothbard.htm>

<sup>3</sup> See: Samuel Edward Konkin, *New Libertarian Manifesto*, 1983, p. 20

<sup>4</sup> See: <http://www.econ.jku.at/members/Schneider/files/publications/2015/ShadEcEurope31.pdf>



CENTRAL AND EASTERN EUROPE ARE JUST AVERAGE, MIDDLE-CLASS COUNTRIES, AS FRESH AND CURIOUS OF VARIOUS FREEDOM-ORIENTED SOLUTIONS AS A COUNTRY CAN BE, STILL A BIT UNSPECIFIED AND HAVING A HISTORICAL BACKGROUND PROVING THAT THE NEED TO FIGHT THE OPPRESSIVE STATE IS SOMETHING NATURAL, SOMETHING OBVIOUS

outside of the EU, like Ukraine with about 50%<sup>5</sup>, and Moldavia with similar, but a bit lower, rate.

The state, at least in Poland, is seen as oppressive creation that needs to be deceived even when those expressing this point of view are not agorists themselves. In other words, an average citizen of Central and Eastern Europe considers the state more in the categories of unavoidable conflict between oneself and the government officials than as a social contract in which one gives up part of their freedom in exchange for protection.

It seems that our region perfectly fits the window of opportunity for agorist thought. It is also important that the liberty movement is quite strong here. All this provides the soil that is friendly to the application and growth of the agorist concepts. Simultaneously, these countries are not third world countries, where there are undoubtedly problems of greater importance than the question of how to promote freedom. In those places the first thing that one has to worry about is one's life and what little property one has. Central and Eastern Europe are just average, middle-class countries, as fresh and curious of various freedom-oriented solutions as a country can be, still a bit unspecified and having a historical background proving that the need to fight the oppressive state is something natural, something obvious. Nevertheless, agorism is not really popular here.

The easiest way to check the popularity of terms is to use the Google search engine. The word *agoryzm* (Polish) yields 3,130 results. *agorismus* (Czech) – 849 results. It is a bit better with Slovakian – *agorizmus* gives 1,120 records. Russian *агоризм* – 1,820

<sup>5</sup> See: Angela Bochi, Vasyl Povoroznyk, *Shadow economy in Ukraine: causes and solutions*, 2014.

records. It has to be noted that this word is included in Wikipedia only in these four languages. Compared to English, which has 156,000 records it is a striking difference, even considering the fact of how global a language it is. What is the reason for this situation? Why does agorism hardly exist in this part of the world even though the shadow market is doing quite well?

This can be caused partly by little or no liberal background in this region. It has never been popular, but it can be more widespread in the future due to the efforts taken by contemporary liberals. The fact that there are no established liberal traditions certainly influences the lack of popularity of agorism, even though it is quite anarchist. However, it is individual and not collectivist anarchism.

Another reason can be a remarkable competition within a quite small, libertarian movement in Central and Eastern Europe, compared to that of the United States. It seems that there are more attractive forms of expressing the maximization of freedom postulate other than agorism. One unusual example could be Poland, where there is a striking difference between the involved activists who are more right-wing paleolibertarians and the more progressive libertarians. The existing Polish libertarian networks are usually more influenced by right-wing libertarianism. This can be seen in their belief that some form of hierarchy, even a spontaneous one, e.g. Hoppe's natural elite,<sup>6</sup> is needed and will be needed even after the ideological victory of libertarians and the socio-political paradigm shift in accordance with their concepts. There are some progressive libertarians, represented mostly by the

developing Libertarian Association (Stowarzyszenie Libertariańskie), but they are in the minority.

However, it is the third factor that makes agorism marginal in a place where it seemingly has great conditions to develop, that is decisive. It is the fact that the growth of the gray market during real socialism was, from the perspective of being a chance for widespread agorism, only illusory. It was a necessity here, not a deception of state in the name of ideology or even the willingness to make more profit. In the former Communist Block, transactions carried out on the gray market were not motivated by the willingness to gain *more* profit, but to gain *any* profit. A great number of Central and Eastern Europe counter-economists were counter-economists simply because they had no other option and their pursuit of gaining profit was limited to the profit that would make them survive, not make them rich.

These three factors, the ideological aspect of Central and Eastern European libertarians, who are not willing to promote considerably left-wing agorism, the weakness of liberal traditions, even with the natural distrust of the average citizen towards the state, and an illusory social base are, the reasons why agorism is not particularly popular in Central and Eastern Europe. Even taking the implicit nature of agorism into consideration, where at least in its canonic form, the transactions have to be carried out in hiding, it is hard to say that agorism is attractive to many libertarians.

Konkin's mistake was that he emphasized the black market, which is the exchange of goods and products forbidden by the state law, too strongly. The distribution of arms, drugs, smuggling – these are typical black market activities. It does not mean that every action deemed illegal by the state

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<sup>6</sup> See: Hans – Hermann Hoppe, Natural elites, intellectuals and the state, <https://mises.org/library/natural-elites-intellectuals-and-state>



## THE SHADOW ECONOMY OF CENTRAL AND EASTERN EUROPE IS NOT MOTIVATED IDEOLOGICALLY, BUT PRACTICALLY

law is a black market action. Konkin sees a market as a sum of transactions carried out voluntarily, which means that some actions, rightly forbidden by the state, e.g. slave-trade or murder, are not voluntary. Konkin condemns those actions, calling them the red market.

He does not, however, condemn, but even glorifies black market transactions. This results in a misrepresentation of practical implementation of agorist ideas. Not everyone is willing to take a much greater risk related to black market activities, when the gray market activities (trade of legal, but not taxed, goods and services e.g. selling vegetables without settling it with tax service) seem less profitable, but a much safer option. What is more, the distribution of some goods, e.g. drugs, even though it does not violate the non-aggression principle (both parties of the contract trade voluntarily, no coercion is involved in the transaction), can be, and certainly is, considered unethical by many people.

The clash of agorism with the reality of Central and Eastern Europe gives us rather pessimistic perspectives. The problem is not only the fact that there are few activists

who would want to advocate for agorism in this specific region, but also the question: is it worth advocating there? And, most importantly, is there anyone for whom agorism would be appealing?

The shadow economy workers in this part of the world are doing just fine without any specific theoretical foundation, which would be more useful to “converts” turning to libertarianism in the US, where the idea of agorism was constructed. The shadow economy of Central and Eastern Europe is not motivated ideologically, but practically. The promotion of liberty can be done in many other ways. Even the most consistent libertarians can try to reform the institutions of the government rather than call for absolute disregard thereof.

All this contributes to the fact that agorism in Poland, Czech Republic or Slovakia can be only a kind of curiosity or, in the best possible case, a niche. Konkin claimed that ideas can be considered as goods to be exchanged on the market. From this perspective, it has to be noted that the shadow economy workers in this region will simply not buy it, because there is nobody to sell it to them. The origins of the gray market are mostly economical and down-to-earth, rather than ideological and pompous. This is what makes agorism lose in the competition. Nobody sees the gray market as a tool for fighting the state, but as a sad necessity and a hope for a better financial tomorrow. ●



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# Understanding Shadow Economy in the Czech Republic



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JONÁŠ  
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According to the World Bank (2015), 36% of Czech companies face competition in the form of informal or unregistered entities. These are subject to lower tax burdens and can avoid costly regulations. In a survey of European Commission (2014), almost one fifth of the Czech respondents answered that they purchased goods and services produced with undeclared labor in the previous 12 months and one third of the respondents knows someone who works fully or at least partially undeclared. Therefore, it is not surprising that the topic of the shadow economy has been gaining traction both among the Czech media and the general public for the past few years.

**U**nderstanding the shadow economy is crucial from the fiscal perspective since one of the main motivations why companies and individuals move into the shadows is to decrease their tax burden (Schneider 2012). A widespread shadow economy can significantly affect government revenues. Furthermore, due its hidden nature, the shadow economy is difficult to characterize and almost impossible to measure accurately. Therefore, it is difficult to estimate how much potential revenue the treasury loses annually, especially, since many of the activities in the shadow economy involve cash transactions or other methods used to ensure anonymity and decrease the possibility of detection.

The term "shadow economy" encompasses many activities across different industry sectors. However, most of these activities usually involve some kind of undeclared labor. Thus, an accurate characterization of undeclared labor is crucial for understanding the nature of shadow economy in any country.

The following paragraphs recap recent advances in an understanding of these issues. First, the most sophisticated estimates available of the shadow economy in the Czech Republic are compared, highlighting both the size in general and its distribution across economic activities. Second, the article describes the main drivers, dominant forms and the extent of undeclared labor in the context of the Czech labor market.

### **SIZE OF SHADOW ECONOMY IN THE CZECH REPUBLIC**

Measuring the extent of the shadow economy is an extremely difficult task. While many different methods exist, none of them is perfect and they all are plagued with a number of weaknesses. Perhaps the two most commonly recognized methods are the model-based MIMIC method promoted by Professor Schneider and the combined method used to measure the overall non-observed economy by the statistical offices of EU and OECD member states.

While the advantage of the first method is its international comparability (the estimates are available for a wide range of

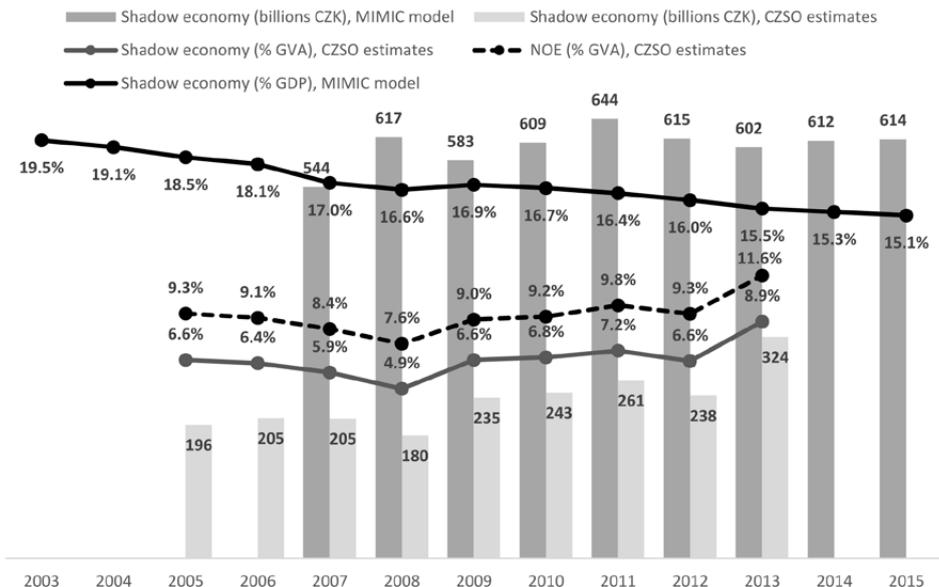
countries which enables direct comparisons), it is highly sensitive to the choice of indicators and the accuracy of the initial estimates used to derive the size of shadow economy as a percentage of GDP. It is usually considered to be the upper-bound estimate of the shadow economy.

On the other hand, the combined approach incorporates various different methods that are used to measure the specific aspects of the shadow economy and are summed up to give the overall estimate. Therefore, while the specific aspects are probably measured more accurately, not all the hidden activities may be included and, thus, the estimate may be lower-bound. Furthermore, these estimates are not always publicly available (or perfectly harmonized)

and may be difficult to use for international comparisons. Given these issues, it is usually a good practice to compare estimates of different methods to get a clearer picture of the state of the shadow economy. [See Figure 1]

According to the model-based MIMIC method, the shadow economy in the Czech Republic is forecasted to be approximately 15.1% of GDP in 2015 (Schneider and A.T. Kearney 2015). While this estimate places the Czech Republic below the EU28 average (2014 estimate of 18.6% of GDP), the size is not negligible. Using the combined method, the Czech Statistical Office (CZSO) estimated the extent of the shadow economy in the Czech Republic to be 8.9% of GVA in

Figure 1: Development of shadow economy in the Czech Republic



Note: Estimation by the MIMIC method and the combined method of the CZSO. The estimation by the combined method of CZSO divides the non-observed economy (NOE) into N1-N7 categories (these categories are set in line with the N1-N7 Eurostat tabular approach to exhaustiveness). NOE according to CZSO includes categories N1 (production of deliberately unregistered producers), N2 (production of unregistered illegal producers), N3 (producers without the obligation to register), N5 (registered producers that are not surveyed), N6 (producers deliberately misreporting their revenues and expenditures) and N7 (other statistical deficiencies). The definition of shadow economy according to the MIMIC method is approximately consistent with the categories N1 (unregistered producers) and N6 (producer misreporting) of the overall non-observed economy (NOE). GDP is equal to GVA plus net product taxes.

Source: Schneider, Raczkowski, and Mróz (2015), Schneider and A.T. Kearney (2015), CZSO





## THE SHADOW ECONOMY IN THE CZECH REPUBLIC IS MOSTLY PRESENT IN THE SECTORS OF NON-FINANCIAL INSTITUTIONS AND HOUSEHOLDS

2013<sup>1</sup> It can be expected, that the true size of shadow economy probably lies somewhere between these two estimates. Not only do the two estimates differ, but also their development over time shows differences.

While both estimates were decreasing until the onset of the financial crises and then reversed the trend, in the case of the MIMIC estimates, the reversion was only short-lived. On the other hand, according to CZSO, the shadow economy has been more or less continuously growing since the onset of the crisis. These differences further highlight the impossibility of accurate measurement of the extent of activities that the agents in the shadow are purposefully trying to hide. Nevertheless, the development suggested by the CZSO is more likely to

be accurate since the method is specifically designed to reflect the conditions in the Czech economy.

The previously discussed estimates show the extent of the shadow economy in general. Nevertheless, not all institutional sectors and economic activities are conducive to the development of the shadow economy. Therefore, the distribution of the shadow economy is not uniform. The shadow economy in the Czech Republic is mostly present in the sectors of non-financial institutions and households. On the other hand, it seems to be rather subdued in the sectors of government institutions and non-profit organizations serving households (Gyomai and van de Ven 2014).

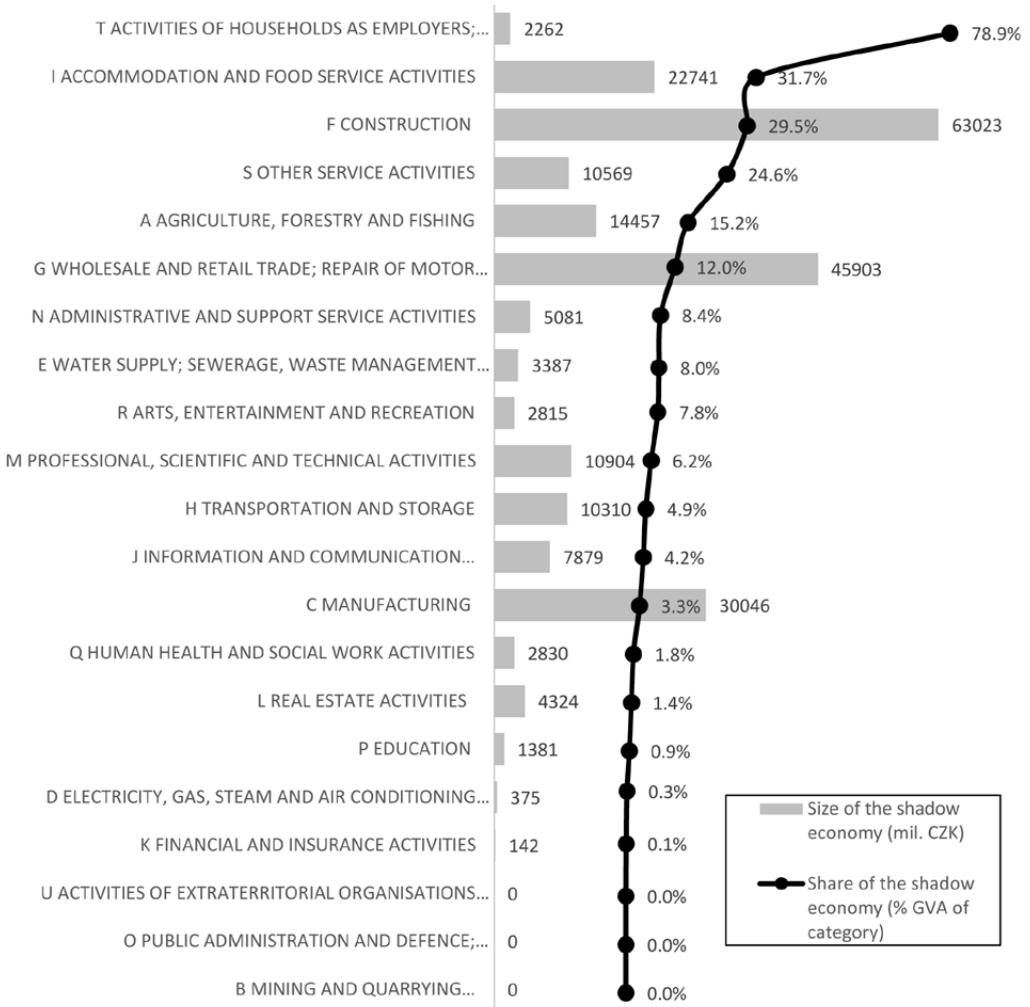
Considering the distribution among economic activities, the shadow economy is mostly widespread in those that enable large amounts of small cash transactions and allow to profits to be underreported effectively. Furthermore, economic activities that allow the use of undeclared labor with low probability of detection also tend to be riddled with the shadow economy (Schneider, A. T. Kearney, and Visa 2013). Figure 2 provides the most recent estimates of the distribution of the shadow economy between economic activities using the combined CZSO method. Overall, the distribution is similar to other European countries (Gyomai and van de Ven 2014; Schneider, A. T. Kearney, and Visa 2013). [See Figure 2]

### UNDERSTANDING UNDECLARED LABOR IN THE CZECH REPUBLIC

The term “undeclared labor” encompasses all activities lawful in their nature that are remunerated by wage (sometimes *remuneration in kind* is also considered) but are not declared to the public authorities. Given this wide definition, most of the activities in the shadow economy include

<sup>1</sup> The difference between GDP and GVA lies in the net product taxes. GDP is calculated as GVA *plus* net product taxes. The estimated size of the shadow economy using the combined method includes N1 (unregistered producers) and N6 (producer misreporting) categories of the overall non-observed economy (NOE)

Figure 2: Distribution of the shadow economy according to economic activities (NACE), 2012.



Note: Estimation by the CZSO combined method. The shadow economy equals the sum of N1 (unregistered producers) and N6 (producer misreporting) categories of NOE.

Source: CZSO

undeclared labor (Schneider 2013; Williams, Baric, and Renooy 2013). Usually, three types of undeclared labor are distinguished (Williams, Baric, and Renooy 2013):

- Undeclared labor performed within a formal or informal enterprise. This waged employment can be either wholly undeclared or partially undeclared, where the employees receive a portion of their wages off the books, the so-called “envelope wages”;



## STRICT LABOR REGULATION MAKES HIRING AND DISMISSAL OF EMPLOYEES MORE COSTLY

- Own-account undeclared labor for an enterprise or another client such as a company or another client, (for example household), conducted similarly as self-employment. This category includes false self-employment, in the Czech language the so-called “švarc system”;
- Undeclared own-account labor performed within a close social circle where the goods and services are directly delivered to consumers who are their neighbors, kin, friends or acquaintances. These can be all kinds of paid odd jobs performed within a close social circle.

The most commonly identified causes for undeclared labor and the shadow economy in general are high taxation and regulations. Specifically, strict labor regulations, high taxation and high social security contributions make it more costly for companies to higher employees and operate in official markets (Schneider 2013).

Fialová and Schneider (2014) note that strict labor regulation makes hiring and dismissal of employees more costly. Specifically, *employment protection* creates barriers for the dismissal of employees (such as the necessity to provide sufficient lawful reasons for dismissal or the obligation to pay high severance benefits). Given the increased dismissal costs, firms are less able to adjust to changing market conditions and, in turn, may change their hiring behavior. Firms may be less willing to hire regular full-time employees and are pushed towards short-term contracts, hiring labor informally and looking for loopholes in the regulations and tax schemes to decrease these costs. Therefore, it is not only the dismissal but also the hiring of employees that is limited. Generally, these regulations make the labor market less flexible and limit employment opportunities in the official economy. Furthermore, these increased costs may be shifted onto employees in the form of lower wages. And the employees may be more willing to move partially or fully into the shadow economy.

Moreover, Fialová and Schneider (2014) argue that it is the strictness of enforcement rather than the extent of regulations that is crucial. According to the OECD, the Czech Republic ranks tenth among the European members of the OECD and fourth among CEE countries (after Germany, Latvia and Slovenia) by strictness of regulations applicable for full-time employees. Further-



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more, the Czech Republic is placed third (after Lithuania and Belgium) among European countries in terms of dismissal costs of employees with short work experience due to organizational reasons. On the other hand, in comparison with the EU average, it is relatively less expensive to dismiss experienced employees (Deloitte 2015). Deloitte (2015) notes that while it is very difficult to dismiss an employee without a credible lawful reason, once the reason for dismissal exists, it is relatively inexpensive. Therefore, the relatively low costs of dismissal are compensated with low flexibility.

The extent of undeclared labor is also affected by the set-up of the *minimum wage* and that of *social security benefits in unemployment*. While the demand for labor is mostly affected by the strictness of the previously discussed labor regulations, the supply is also affected by the incorrect set-up of minimum wage and social secu-

urity benefits in unemployment. If these are not set jointly and correctly, people may be motivated to remain officially unemployed and receive unemployment benefits while at the same time working in the shadow economy. According to the estimates of the employees of the Labor Office of the Czech Republic, as much as one third of the unemployed work in the shadows (Sirovátka and Šimíková 2013).

Low salaries in the regular businesses (17%), lack of control by authorities (14%) and lack of regular jobs on the labor market (13%) are the most commonly stated motivations of the Czech respondents for working undeclared according to the Eurobarometer survey in 2013. These are in line with the main motivations in other European countries. Considering the relatively high tax burden of employment in the Czech Republic (tenth highest in the EU for the low-income workers), it is somewhat surprising that taxes and/or social security contributions being too high are considered the most important by only 6% of respondents. Nevertheless, it could be argued that these are already reflected in the low salaries and that respondents place a greater importance on the consequence rather than considering the potential underlying cause.

In the Czech Republic, similarly to Hungary, Lithuania, Poland, Slovakia and the countries of Southern Europe, the dominant part of undeclared labor is performed by self-employed own-account workers (Koettl and Weber 2014; Hazans 2011; Packard, Koettl, and Montenegro 2012). Specifically, one of the most commonly identified forms of undeclared work in the Czech legislative system is *the false self-employment* (in the Czech language the so-called "švarc system"). It exploits the difference in tax treatment of own-account self-employed workers and



## IN THE CZECH REPUBLIC, SIMILARLY TO HUNGARY, LITHUANIA, POLAND, SLOVAKIA AND THE COUNTRIES OF SOUTHERN EUROPE, THE DOMINANT PART OF UNDECLARED LABOR IS PERFORMED BY SELF-EMPLOYED OWN-ACCOUNT WORKERS

regular employees, where the use of regular employment contracts is burdened with higher overall taxes (especially social security contributions).

Furthermore, unlike the self-employed workers, employees are entitled to all kinds of costly benefits (paid vacations, severance payments, etc.). The misclassification of employees as self-employed allows employers to reduce these costs. Therefore, the self-employed workers do the same job as employees, they are subordinate to their employer and work during office hours at the workplace and use

the employer's facilities, but are self-employed in the eyes of the tax authorities. On the one hand, lower costs make the job market potentially more flexible. On the other hand, the state's tax revenues may be potentially significantly reduced and a number of benefits are unavailable to the falsely self-employed.

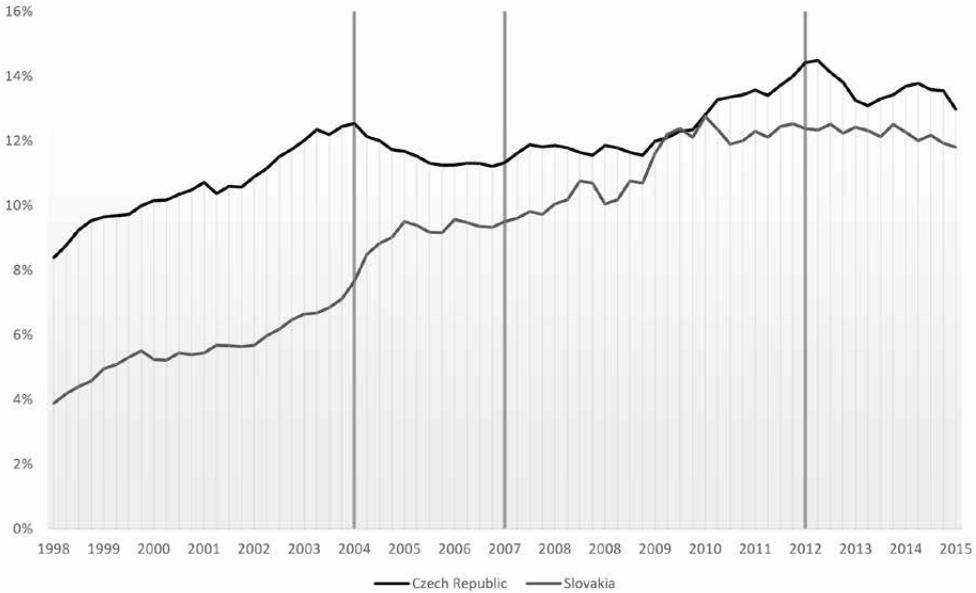
The "švarc system" was introduced in the Czech legislation in 1992 and its legislative treatment was altered many times since, altering between more and less strict treatments. In short, in 2004, a change in the legislation perceived to be stricter was introduced, which was again partially eased in 2007. In 2012, the fines for discovered employers and employees participating in the "švarc system" increased considerably with penalty of a maximum of CZK 10 million (and minimum of CZK 250k) for the "employer" and CZK 100,000 for the "employee" (Rychetský 2014; Šubrt and Trezziová 2015; Průša et al. 2009; Jouza 2005).

Even though the "švarc system" is probably only a minor part of the overall share of the self-employed and the legislation being only one of many causes of undeclared work, it is interesting to see that the development in the share of self-employed workers follows the changes in the legislation rather closely, decreasing in the periods of strict and increasing in the periods of more lenient treatment (Hála 2007; OECD 2008).

As for the labor market sectors, the "švarc system" is most common in construction (Sirovátka and Šimíková 2013; Hála 2007). However, it is also widespread among retail staff, hairdressers, waiters, pharmaceuticals sales representatives and real estate agents (Hála 2007). Hála (2007) estimates that as much as one third of self-employed may be part of the "švarc system".



Figure 3: Share of own-account self-employed in employment (%).



Source: Eurostat (2015)

Furthermore, in a 2012 survey of self-employed own-account workers, 10% of respondents identified the "švarc system" as their labor source (Vlach et al. 2013). Nevertheless, recent discoveries of the State Labor Inspection Office indicate that these figures may be overestimated. In the overall number of cases of uncovered illegal employment, they found the share of "švarc system" was only 10% in 2012, 6.2% in 2013 and 4.7% in 2014. It should be noted that the "švarc system" is notoriously difficult to uncover which may have contributed to these low figures. According to the Customs Administration of the Czech Republic, the "švarc system" is a common form of undeclared work among non-residents from Ukraine and Vietnam.[See Figure 3]

### HOW BIG IS THE UNDECLARED LABOR MARKET?

Similarly to the shadow economy in general, measuring the extent of undeclared labor is a hard nut to crack. Currently,

three different sources, that can provide a clearer picture about the extent of undeclared labor in the Czech Republic, are available. The first are Eurobarometer surveys 284 and 402 of the European Commission (2014; 2007). The second are the estimates from the job-balance model of the Czech Statistical Office. The third are the statistics of the uncovered illegal employment from the State Labor Inspection Office of the Czech Republic.

According to the Eurobarometer surveys, the Czech Republic was placed seventh in 2013, based on the extent of demand for products and services produced with the use of undeclared labor. Specifically, 19% of respondents in the Czech Republic answered that they paid in the last 12 months for goods or services that they suspected to be produced with undeclared labor. That is a 4 percentage point increase from a similar survey in

2007<sup>2</sup> and way above the 2013 EU27 average of 11%. The three countries with the highest demand were Greece (30%), the Netherlands (29%) and Latvia (28%). Among the CEE countries, the Czech Republic placed third, after Latvia (28%) and Slovenia (22%). The countries with the lowest demand were Poland (5%) and Germany (7%).

It should be noted that these figures are most likely understated since it can be expected that not all respondents are willing to admit to participating in unlawful behavior. This bias is probably much stronger when answering whether the respondent worked undeclared rather than whether he or she purchased goods or services produced with undeclared labor since the former is usually less accepted by society and more likely to be punished. Such view applies especially in the Czech Republic.

Looking at the distribution of the demand among economic activities, the answers are quite consistent with the distribution of the shadow economy in general discussed previously. The two most commonly purchased products and services both in the Czech Republic and in the EU27 (average) were household repairs and renovations, and car repairs. In fact, the demand for car repairs was highest in the Czech Republic and Slovakia of all the EU27 countries (39% in comparison with the EU27 average of 22%).

Furthermore, the demand for household repairs and renovations was the second highest in the Czech Republic (45%) after only Slovakia (53%), while the EU27 average was 29%. The other two notable differences between the Czech Republic and the EU27 average were administra-

tive or IT assistance (13% in CZ and 3% in EU27) and home cleaning (only 6% in CZ but 15% in EU27). It should also be noted that the Czech Republic is among countries where people buy products and services produced with undeclared labor mostly from a close circle of their friends, colleagues or acquaintances (56%, surpassed only by 60% in Austria and 59% in Slovenia), relatives (13%) and neighbors (10%).

On the other hand, only 15% buys from companies or businesses (way below the EU27 average of 24%). Among the most commonly stated reasons for purchasing such products and services were lower price (68%), faster service (37%), better quality (25%) and a favor amongst friends, relatives or colleagues (24%).

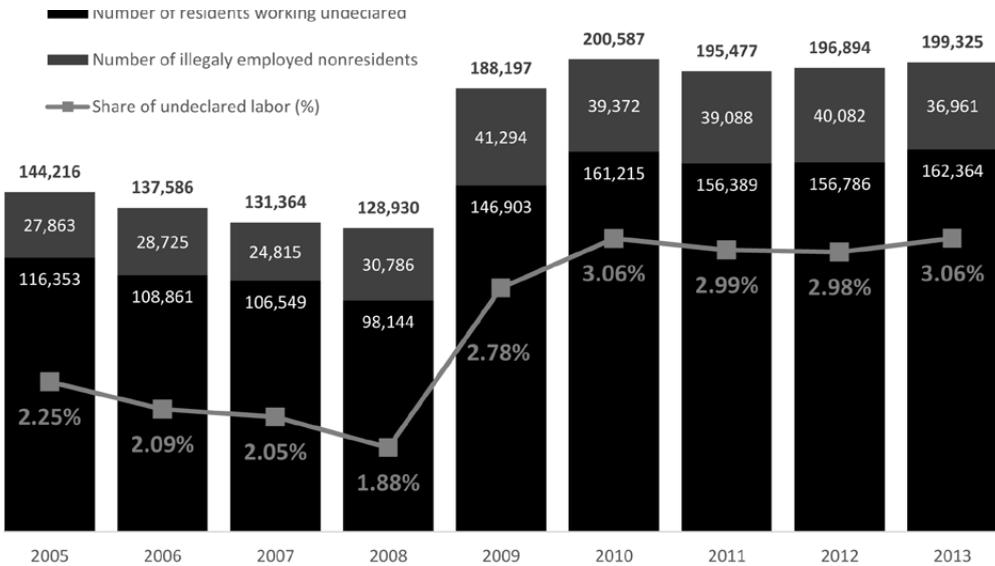
Consistent with the overview presented above, the share of Czech respondents who admitted to having worked undeclared in the previous 12 months was considerably smaller, only 4% (equal to the EU27 average in 2013 and 3 percentage points decrease from 2007). Furthermore, 33% of respondents in the Czech Republic admitted to know people who work undeclared. This is slightly above the EU27 average (33%) and lower than in some other CEE countries: Slovenia (48%), Latvia (46%), Slovakia (36%), Lithuania (35%) and Estonia (33%).

According to the job-balance model of the Czech Statistical Office, 162,324 (approximately 3% of labor force) of residents and 36,961 non-residents worked undeclared in 2013. Figure 4 shows the development of the estimates over time. Most of these people (according to the 2012 estimates) worked in wholesale and retail trade and repair of motor vehicles and motorcycles (47,885, calculated as full-time workers),

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<sup>2</sup> It should be noted that the survey in 2007 included not only a labor paid for by money but also in kind.

Figure 4: Number of undeclared workers in the Czech Republic



Note: Estimates of undeclared labor according to the job-balance model of the CZSO. The share of undeclared labor is defined as the number of people working undeclared divided by the overall size of labor force.

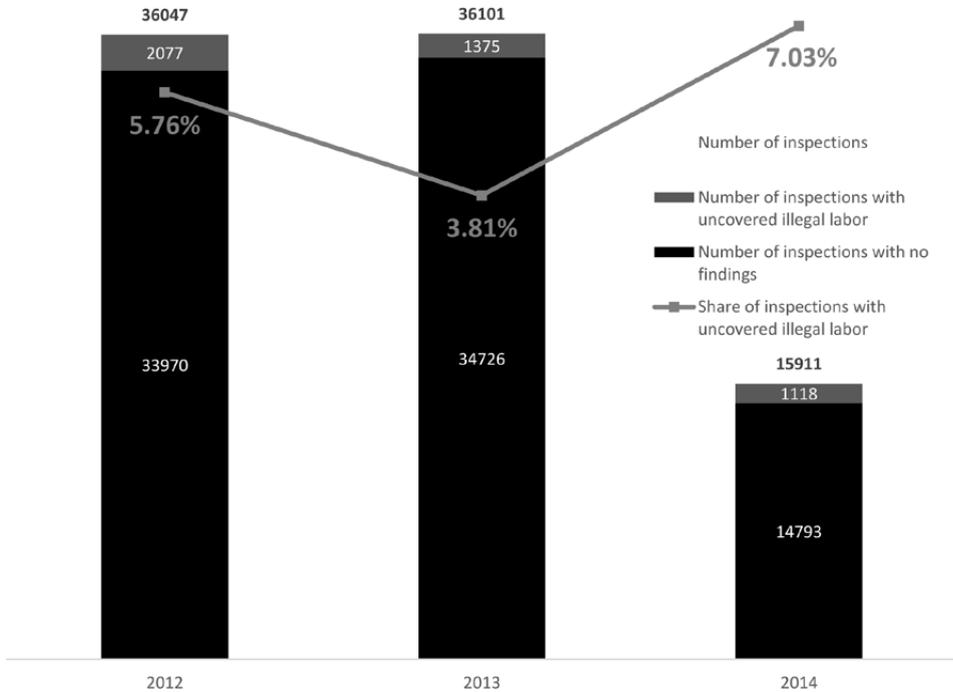
Source: CZSO

construction (42,891), accommodation and food service activities (30,577) and manufacturing (22,861). The distribution is consistent with the Eurobarometer survey results and the distribution of the shadow economy in general. [See Figure 4]

Finally, the state of the undeclared labor can be illustrated using the statistics of the discovered cases of illegal employment. As these inspections are not random, the figures cannot be used to estimate the extent of undeclared labor. Nevertheless, they are relatively consistent with the other estimates presented in this article and provide some hard evidence of undeclared labor and the effectiveness of the inspection authorities.

The year 2012 marked a stronger emphasis on combatting undeclared labor in the Czech Republic. Not only were the fines considerably increased, the inspection activities were consolidated under the umbrella of the State Labor Inspection Office (SLIO). As can be seen in the following figure, there were 15,911 inspections conducted by the SLIO in 2014. Some form of illegal employment was discovered in 7% of these inspections (in the successful inspections 2,072 illegal employees were discovered). This is an increase by 3.22 percentage points from the previous year with less than half the number of inspections suggesting an increase in efficiency of the Inspection Office.

Figure 5: Inspections of illegal employment of residents and non-residents



Source: State Labor Inspection Office of the Czech Republic

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CASH  
TRANSACTIONS ARE  
OFTEN CONSIDERED  
TO BE THE GREASE  
IN THE WHEELS  
OF THE SHADOW  
ECONOMY

In 2014, 293 fines were finalized with the overall amount of CZK 51.5 million. There was 302 fines in 2013 with the overall amount of CZK 81.9 million and 870 fines in 2012 with the amount of CZK 174.02 million.<sup>3</sup> Considering the demographic composition, majority of the illegal employees were residents of the Czech Republic (60% in 2014, 44% in 2013 and 60% in 2012). Among the non-residents, a majority came from countries outside of European Union (31% in

<sup>3</sup> It should be noted, that only a fraction of fines was finalized at the time of the annual release of these figures. The amount of fines issued but not finalized was 1939 in 2012, 757 in 2013 and 348 in 2014. Furthermore, the size of fines was affected by their later change towards a more lenient setting.

2014, 47% in 2013 and 32% in 2012), particularly from Ukraine and Vietnam. [See Figure 5]

## CONCLUSIONS

The shadow economy is a worldwide phenomenon. It can be found in every country in the world. Why? Simply because regulations can be found even in the most liberalized countries – especially tax related obligations, which motivate economic subjects to move their activities into the shadows. This creates a vicious circle where the existence of the shadow economy creates a demand for further regulations in order to eradicate it. However, evidence shows that new regulations create perverse motivations to hide, decrease, avoid, not declare and not pay.

While the extent of the shadow economy in the Czech Republic is lower in comparison with the European Union, its size is not negligible. The shadow economy is mostly concentrated in construction, wholesale and retail trade, and the repair of motor vehicles, manufacturing as well as in the sector of accommodation and food service activities. People often earn money on the side by doing house and car repairs, mostly demanded in the close circle of their friends, colleagues, acquaintances and relatives. Often, the economic activities that are riddled by the shadow economy the most can be characterized by a large number of small cash transactions that allow for a systematic understatement of economic performance to public authorities. Cash transactions are thus often considered to be the grease in the wheels of the shadow economy.

The large shadow economy and undeclared labor have some undeniable negative consequences not only on the state revenues, but also on the state expenses (social contributions in unemployment paid out to people employed in the shadow

economy). Furthermore, people who work undeclared are often denied some services commonly available to those employed officially, either benefits to which they would be entitled to due to a regular employment contract or services that require a proven source of income (loans, etc.).

On the other hand, it cannot be denied that some consequences of the shadow economy can be considered beneficial. The shadow economy increases the disposable income of entrepreneurs since it decreases administrative costs and costs related to labor market, increasing flexibility. Therefore, employment may be available even to people who would have no opportunities otherwise, for example in times of an economic crisis.

While designing policies in order to curb the extent of the shadow economy, more effective approaches need to be focused on the underlining causes rather than its consequences.

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# Why Declare? Bulgaria's Labor Market and Its Shadow



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YAVOR  
ALEKSIEV

Despite recent modest improvements, Bulgaria continues to be the EU member state with the largest share of its shadow economy. While state and local corruption, the lack of proper control and bad legislation are arguably the main driving forces behind this, there is much to be said about the meddling of Bulgarian governments in the labor market and their reluctance to reform the social security system.

**E**ver since the introduction of the proportional income tax (also known as “flat tax”) of 10% of taxable income, Bulgarian governments have fallen short of introducing additional effective measures to counter the shadow economy and most of all – to earn the trust and compliance of taxpayers. Bulgarian labor markets remain anachronistic and inflexible, which makes many employers and employees equally reluctant to declare their labor relations in order to avoid long administrative procedures and additional costs.

The presented paper gives an overview of the main factors that tempt Bulgarian workers into undeclared work and tax avoidance. It also presents some of the proposed measures put forward by the Institute for Market Economics (IME) and its partners, as well as the government’s indirect response to them in its recently proposed strategy for fighting the shadow economy.

## THE SHADOW ECONOMY IN BULGARIA

Throughout the last decade, there have been many studies that have tried to provide a more or less comprehensive overview of the size and characteristics of the

shadow economy in Bulgaria. Estimations range from about 20% to over 35%<sup>1</sup> of GDP in different years. Although shares vary in relation to the scope of different studies and their methodology, they all provide enough data and arguments to draw the following conclusion: the shadow economy in Bulgaria is estimated to have been about 35% of GDP in the years prior to EU accession (2003-2006). In the period that followed its size shrank to about 30% of GDP<sup>2</sup>, regardless of the slight increase during the last economic crisis. Despite this, Bulgaria remains the country with the largest estimated shadow economy in the EU. [See Figure 1]

### I GO SHADOW BECAUSE...

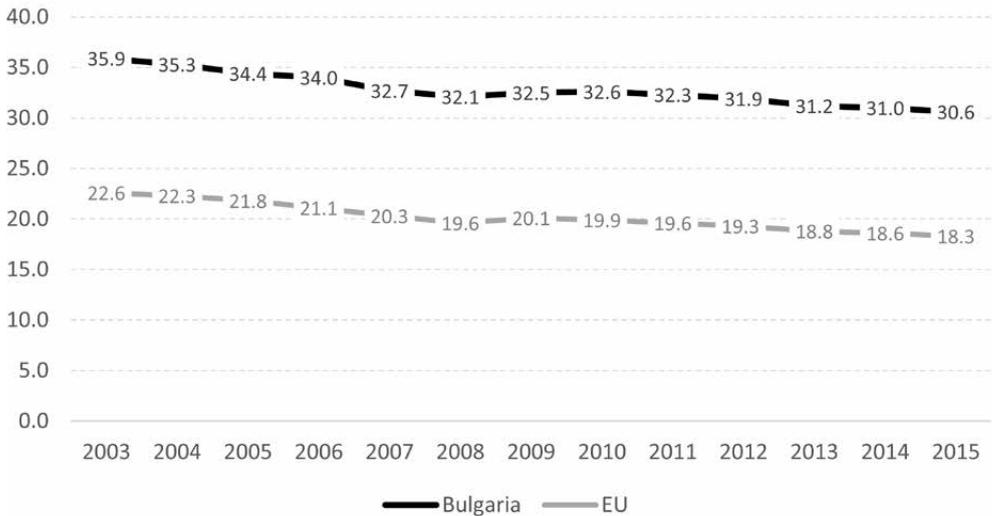
Although there have been some efforts on behalf of governments to raise public awareness and intolerance to the shadow economy, there is little evidence that they have been successful. As far as undeclared

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<sup>1</sup> Schneider, F. argues that the shadow economy in Bulgaria amounted to 31.2% of GDP in 2013. According to him, it was around 35.9% in 2003 (Schneider, Friedrich, Size and Development of the Shadow Economy of 31 European and 5 other OECD Countries from 2003 to 2013: A Further Decline). According to his latest study, the size of the shadow economy in 2015 amounts to 30.6%, compared to 18.3% in the EU.

<sup>2</sup> Packard, T. et. al, *In From the Shadow: Integrating Europe’s Informal Labor*, The World Bank, 2012

Figure 1: Shadow economy in Bulgaria and the EU as % of GDP



Source: Friedrich Schneider

work and income go, most experts attribute the slowly falling share of the shadow economy not to government efforts in recent years, but to the overall increase in living standards, and most of all – the positive impact of the introduction of the flat tax back in 2008.

At present, there are three main factors that drive people towards undeclared employment and tax avoidance: the lack of trust in public social security systems, the horrifying monstrosity that are the minimal social security payments, and the hastiness to catch up to rise of the minimum wage in recent years.

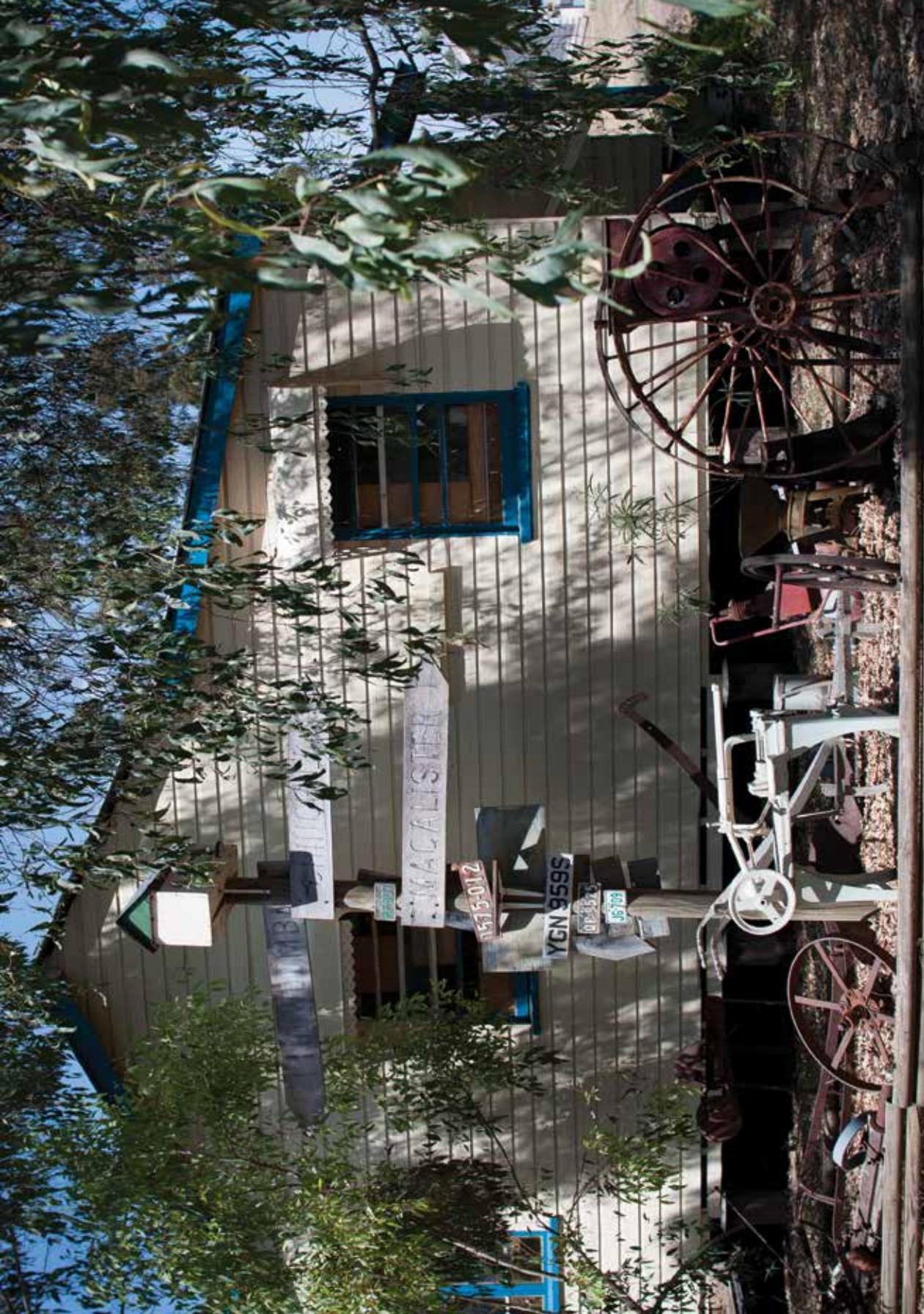
### FISCAL IMPACTS AND PUBLIC PERCEPTION

Perhaps the most severe consequence of the significant size of the shadow economy in the country is the deteriorating financial state of the social security system. According to the annual reports of the National Social Security Institute (NSSI), the pension sys-

tem deficit has already surpassed 50% and continues to grow. This means that the resulting gap has to be filled with transfers from the central government budget (other taxes), which illustrates the long-term unsustainability of the pension system.

One could hardly fail to see the relationship between the already mentioned lack of trust in the public social security systems and its deteriorating condition. As the financial state of the social security system worsens, taxpayers become less willing to make their social security payments in full (if at all). This leads to a slower revenue increase, which proves insufficient to ensure adequate levels of pension payments, especially when we take the rapid increase in the number of retired people and the declining ratio of the working/retired population into account.

The last several Bulgarian governments have tried to fill the widening financial gap by administrative measures such as raising



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THE SHADOW ECONOMY IN BULGARIA IS ESTIMATED TO HAVE BEEN ABOUT 35% OF GDP IN THE YEARS PRIOR TO EU ACCESSION (2003-2006). IN THE PERIOD THAT FOLLOWED ITS SIZE SHRANK TO ABOUT 30% OF GDP, REGARDLESS OF THE SLIGHT INCREASE DURING THE LAST ECONOMIC CRISIS

the level of minimal social security payments by economic activities. In recent years, there have also been several attempts by the social partners to force governments to raise the social security burden as a whole. In general, what Bulgarian governments repeatedly have done is try and close the “tax gap<sup>3</sup>”, while altogether ignoring the arguably more significant “trust gap”.

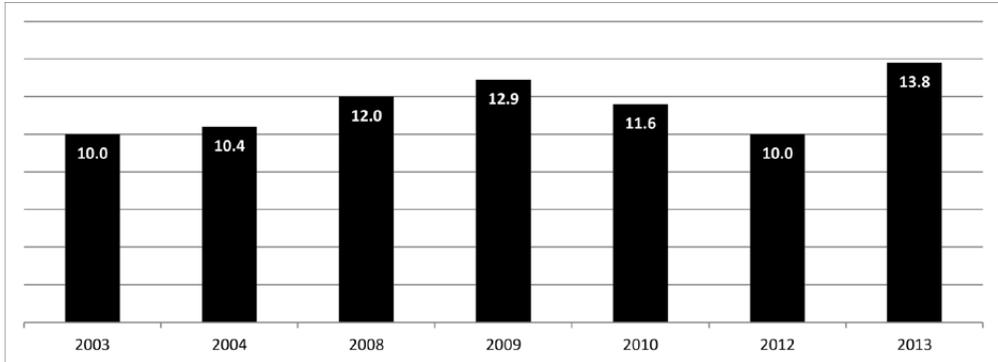
### **MINIMAL SOCIAL SECURITY PAYMENTS**

The Bulgarian system of minimal social security payments according to economic activity and occupation is something which has bewildered outsiders for quite some time. Broadly speaking, it is a system, which sets minimal thresholds of taxable gross salaries depending on the type of work and the position of the employee. As such, minimal social security payments act, in fact, as minimum wages in different industries, forcing employers to pay social security contributions according to an administratively set level. For instance, in 2015 the minimal social security payment for administrative staff in the financial sector is calculated on the basis of a BGN 498 gross salary, compared to a BGN 360 minimum wage. This is, in practice, the lowest level of the gross salary at which the amount of outstanding social contributions can be calculated. If an employer wants to hire someone to work for a lower gross salary, he will still have to make the minimal social security payment in full. This way the actual tax burden on labor would be greater.

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<sup>3</sup> Among the most commonly used indicators to measure tax compliance, (respectively, the level of tax collection, is the size of the so called “tax gap”). The size of the tax gap is the difference between the taxes being paid and the total amount of taxes that should be paid under the existing legislation. The indicator includes: 1) unpaid taxes due to tax avoidance; 2) declared but unpaid taxes; 3) a reduced amount of declared and paid taxes due to misunderstanding of the law by taxpayers and 4) other forms of non-compliance.

Figure 2: The share of Bulgarians that receive higher payment than specified in their labor contract, % (with breaks in time series)



Source: Center for the Study of Democracy (Sofia, Bulgaria)

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PEOPLE ARE MORE WILLING TO “ADMIT” THAT THEY ARE WORKING, BECAUSE OF THE LOW LEVEL OF THE FLAT TAX, BUT ARE RELUCTANT TO DECLARE THEIR ACTUAL INCOME, BECAUSE OF THE HIGH SOCIAL SECURITY BURDEN AND THE LACK OF TRUST IN THE SOCIAL SECURITY SYSTEM

For specialized staff the threshold rises to BGN 902, and for managers – all the way to BGN 1,422.

The continuous increase (as well as the very existence) of these thresholds is something which economists and institutions (including the European Commission) have repeatedly criticized, but is still considered by the government to be an essential part of the social security system. Thus, it is no wonder, that despite of the introduction of the flat tax in Bulgaria in 2008, the share of Bulgarians that are misreporting their actual income has remained high.

Furthermore, the latest study of the Center for the Study of Democracy (CSD) in 2013 shows that the share of people who hide their true income increased in 2013 as compared to 2012. The research claims that although the data shows only a slight increase in the practice of hiring workers without a formal employment contract, the rate of employment with the so-called “envelope wages” is the highest since 2002 – 13.8% of the employed reported to have received remuneration higher than the one stated in their contract. [See Figure 2]

Therefore, despite the fact that the introduction of the flat tax has helped bring people in the formal economy, they (just like their employers) are still reluctant to declare their actual wages. This is hardly surprising, considering the fact that in the current Bulgarian tax system social security contributions amount to 26.25% of the total employer expenditures, while the personal income tax amounts to just 7.37%.

Thus, people are more willing to “admit” that they are working, because of the low level of the flat tax, but are reluctant to declare their actual income, because of the high social security burden and the lack of trust in the social security system (including the low quality of some government services, such as healthcare).

### MINIMUM WAGE

Despite the significant increase in the Bulgarian minimum wage in recent years, its level remains the lowest in the EU – both in nominal terms and when adjusted for purchasing power. The rise of the minimum wage has been seriously outstripping the growth of average wages, GDP, and labor productivity. In 2014 and 2015 the minimum wage continued to grow at a fast pace (up to BGN 340 in 2014, BGN 360 effective January 1, 2015 and BGN 380 from July 1, 2015 onward), and the government’s medium-term plan is for it to reach BGN 420 in early 2016 and BGN 460 in 2017.

Considering the quick rise in the minimum wage, it is extremely important to research the potential effect of this policy on employment, especially amongst the most vulnerable groups on the labor market. A recent Institute for Market Economics (IME) study<sup>4</sup> suggests that every time the

minimum wage grows by BGN 100, the rate of employment amongst those with primary or lower education declines by an average of 1.4%. Measured against the size of the labor force in 2013, this means a loss of 24,520 jobs.

Furthermore, given that the coefficient of employment is traditionally very low in this segment of the labor market – varying between 9% and 26% in the different districts in 2013, such a reduction in employment in response to a hike of the minimum wage should not be underestimated and is arguably one of the main factors driving people towards undeclared employment. The growing wage gap between the capital city of Sofia and most other districts, coupled with the countrywide fixed rate of social security payments and the minimum wage force smaller companies from the countryside to lose competitiveness and in some cases - to engage in undeclared activities in order to remain active. The argument that minimum wage increases in Bulgaria help bring labor relations out in the open is yet to be proven by an empirical study, while there is plenty evidence that suggests they have a deteriorating effect on employment.

Even before the recent increases, the level of the minimum wage was over 50% that of the average wage in 18 of the 28 districts of the country. This means that each consecutive rise (in the absence of rising profits) places more and more companies in the dilemma whether to release workers, or to try and move them to the “shadow payroll”.

Despite positive trends on the national level, several of the country’s districts have yet to register any labor market improvement. In places such as: Vidin, Vratsa, Lovech and Silistra employment is stagnant at best. Less than 40% of the population aged 15+ is em-

<sup>4</sup> Nikolova, D., *How does the growth of the minimum wage impact on employment in Bulgaria?*, Institute for Market Economics, 2015



Chevrolet 1500

The  
*C.G. Beisel*  
FIRE  
ENGINE

ployed, while unemployment keeps rising and (with the exception of Lovech) is nearly twice the national 2014 average of 11.4%.

An IME in-depth analysis of the newly opened National Employment Agency database has shown that as of September 3, 2015, 1,346 (31.5%) of the total of 4,270 available jobs with specified wages and working time offered payment less than BGN 420 for an 8-hour working day (the level of the minimum wage from January 1, 2016). This relatively high proportion signals for one of the potential negative effects of raising the minimum wage in the beginning of 2016 to BGN 420— the rise in the minimum wage to that level will affect nearly a third of the 4,270 vacant jobs at the moment.

## WHAT GOVERNMENT DOES AND WHAT IT SHOULD BE DOING

Ever since the introduction of the proportional income tax (i.e. “flat tax”) of 10% of taxable income, Bulgarian governments have fallen short of introducing effective measures to counter the shadow economy.

At the end of 2013, the Institute for Market Economics (IME) took part in a project run by the Bulgarian Chamber of Commerce and Industry (BCCI), which focused on identifying and transferring best practices in the fight against the shadow economy from other EU countries.

In 2014 the project put forward over 20 concrete proposals that include:

### 1. ESTABLISHING A LEGAL DEFINITION OF THE TERMS “UNDECLARED WORK” AND “SHADOW ECONOMY”

The currently discussed “Uniform national strategy for increasing revenue collection, addressing the informal economy and reducing the cost of compliance<sup>5</sup>” actu-

ally tries to amend this, albeit clumsily. It broadly states that the informal economy strives to circumvent state regulation, taxes and control and is related to activities such as undeclared work and attempts at tax avoidance by businesses. According to the government, the shadow economy depends mainly on the level of corruption and the degree of control (via laws and regulations) that “the state applies as a major player in economic relations”. That is why most of the measures that are to be implemented in the next few years are aimed at the “legalization” of certain activities that are currently part of the informal economy. The aim of the government is to shift such activities to the real economy.

Despite the fact that an actual legal definition is still lacking, what makes efforts aimed at reducing such practices chaotic<sup>6</sup> at best. For instance, on two separate occasions, Bulgarian governments have actually considered criminalizing tax avoidance by employers, including by introducing penal responsibility (yes, actually sending people to prison). This arguably unconstitutional regulation is in clear violation of past Constitutional court rulings, which state that the right to work is inalienable and thus superior to the obligation of paying taxes. Even so, the idea remains popular to this very day.

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as “the Strategy”.

<sup>6</sup> Another example of the chaotic nature of the proposals put forward by the Bulgarian government is the reduction of the upper ceiling of cash payments from BGN 15,000 to 10,000 (EUR approx. 5,000). While most studies suggest that limiting cash payments is an effective tool in reducing the share of the shadow economy, it is also (without a doubt) an infringement of personal freedom and the freedom of contract. The Strategy foresees both a reduction of the ceiling and “analysis of the possible ways to reduce bank fees”. In other words, the government recognizes that its legislation will create an increase in the demand for bank services and at the same time is looking for a way to counter the economically logical increase in their price.

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<sup>5</sup> For the sake of clarity, it will henceforth be referred to

## 2. INTRODUCING EASY-TO-FOLLOW HIRING PROCEDURES FOR SHORT-TERM OR UNPREDICTED LABOR RELATIONS

This is one of the proposals that has already been partially implemented by the current Bulgarian government. In the spring of 2015, the Ministry of Labor and Social Policy prepared legislation (already in force) which enabled employers to purchase pre-paid “stacks of daily contracts”, which they can then hand out to seasonal short-term workers.

Although official data of the effects of this policy is not yet publicly available, preliminary evidence, brought forward by the Ministry, suggests that many employers (esp. in the field of agriculture) actually hired a significant number of people in such a manner during the summer of 2015. Since agricultural seasonal workers are widely considered to be one of the groups that is most likely to engage in undeclared work, providing additional (and somewhat flexible) legal ways for their employment seems justified.

In recent years, there has also been some progress concerning the regulation of flexible working practices (such as working remotely, i.e. from home). However, the anachronistic nature of the Bulgarian Labor Code prevents the effective implementation of such types of legislation.

## 3. INTRODUCING POSSIBILITIES FOR REGISTERED UNEMPLOYED TO KEEP RECEIVING THEIR BENEFITS WHILE ALSO WORKING PART-TIME FOR A CERTAIN PERIOD

Unfortunately, the introduction of this proposal might require an overhaul of the entire unemployment benefit system – a step that no government so far has been willing to consider. The reason is that at present Bulgaria has the second most generous

unemployment benefits in the EU. The net replacement rate at the seventh month of receiving the benefit amounts to 77% of the net salary, with only Luxembourg (85%) ranking higher and an EU-average of 43.7%. This is one of the reasons behind the high unemployment trap in Bulgaria – people are reluctant to engage in declared employment before their benefits run out. It would also explain why some studies suggest that in Bulgaria the unemployed are most likely to engage in undeclared work, followed by the self-employed.

Adopting this measure would require the overall or regressive<sup>7</sup> reduction of unemployment benefits so as not to overload the unemployment benefit system, but it will also create increasing financial incentive for unemployed Bulgarians to look actively for job opportunities, even if the offered payment is somewhat lower than the one they have received in previous periods (a regular occurrence in times of recession).

## 4. CREATING A PUBLIC REGISTRY (“WHITE LIST”) OF LAW-ABIDING COMPANIES, WHICH GIVES THEM ACCESS TO DIFFERENT ADMINISTRATIVE PRIVILEGES

Judging by the government’s latest Strategy, it is about to adopt the opposite approach – to create some kind of an internal “Black list” – an administrative electronic system containing information about issued protocols, acts of administrative violations and warrants, amount of imposed fines and financial sanctions. This might be all well and good as far as ensuring the communication between different government bodies and the monitoring of es-

<sup>7</sup> The level of unemployment benefits in Bulgaria is flat at 60% of gross income (which amounts to 77% of net income) for the duration of the claim. A regressive reduction would imply that the size of the benefit is reduced over time – a practice that has been adopted in nearly half of EU member states.



TO THIS DAY  
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THE SHADOW  
ECONOMY

tablished violators, but is a long way from building public trust and making taxpayers want to contribute to the budget.

### **5. FACILITATING A “CLEAR WAVE” SOCIAL CAMPAIGN AIMED AT RAISING PUBLIC INTOLERANCE TO UNDECLARED WORK ACTIVITIES**

Despite the fact that the current government has made an arguably effective effort to clamp down on illegal imports and the evasion of custom duties, the adopted approach is still undeniably negative. An ongoing campaign with the support of the highly controversial “Bulgartabac” company tries to convey the message that smoking and paying excise duties is what actually pays for the pensions of the retired. While this is most definitely the case (considering the state of the social security system), the underlying message and the way it has been put forward is highly disturbing, especially bearing in mind the public suspicion towards the company.

The closest the Bulgarian government has come to the “positive” approach, envisioned by this measure, is the idea of creating what can only be described as a “tax-receipt lottery” beginning in 2016. According to the government, this will help increase tax compliance, by strengthening the pressure from citizens to receive tax receipts upon purchase. The indicator that the government will base its evaluation of the program on is (naturally) the increase in retail turnover.

### **SOME POSITIVE DEVELOPMENTS**

To this day Bulgarian governments are adopting a “fight the consequences, not the reasons” approach in their struggle against the shadow economy. The realization that people and businesses respond to their own stimuli first and to government pressure second has been slow to break through, but despite the continuing strive

for more government control and regulation, it has managed to (somehow) find its way even in official government papers.

The Strategy actually contains some statements, measures and insights that show promise. Such is the conclusion<sup>8</sup> that: "Revenue collection is directly correlated with the complexity of the legislation. The more complicated the legislation, the more difficult it is for citizens and businesses to comply with it and thus the risk of non-compliance with legal requirements is higher".

Also<sup>9</sup>: "The measures have to be targeted at reducing the administrative burden and the improvement of administrative services. This implies increasing the scope of services, which can be provided electronically. Also, regulatory changes, measures increasing the role of 'one stop shops', automation of services, meeting deadlines and improving access to information for citizens and businesses."

The Strategy notes that the worldwide trend shows a continuous reduction in the time necessary for tax compliance. This is achieved via the pooling of tax forms, the reduction of the frequency for performing tax-related duties and via offering opportunities for electronic payments<sup>10</sup>. Although the time, needed for tax compliance in Bulgaria is still very high (454 hours per taxpayer, according to the government), the continuous introduction of additional e-based forms for filling tax documents is expected to contribute to lowering this time-burden on taxpayers.

<sup>8</sup> p. 9

<sup>9</sup> p. 13

<sup>10</sup> The author would argue it could most effectively be achieved by reducing the overall tax burden and abolishing some taxes entirely.

## CONCLUSIONS

Bulgarian labor markets are not flexible enough, which makes many employers and employees reluctant to declare their labor relations in order to avoid long administrative procedures and additional costs. The recent efforts of the Bulgarian governments are targeted at increasing compliance through a strange combination of improving administrative services and additional intimidation of businesses, rather than by earning the taxpayer's trust. This approach is something that shall undeniably be revised. ●



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# Alcohol Excise and the Shadow Economy in Estonia



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ROBERT  
MÜRSEPP

As alcohol is considered hazardous to public health, it is often the target of specialized policies – its availability is regulated via merchant licenses and price targeting through excise. On the other hand, alcohol excise can be expected to have negative aspects as they raise the price of legal alcohol on the market. This provides an incentive for people to engage in illegal production and trade of alcohol. The presented article shows how the trends in the Estonian alcohol policy have affected the market of illegal alcohol during tumultuous economic times, including the effects on crime related to illegal alcohol. It also shows that alcohol excise is not as popular amongst people as other issues related to alcohol policy.

**T**he shadow economy is a wide topic covering various economic phenomena from illegal and criminal activities to simply unreported everyday economic activities. Most economic research on the shadow economy focuses on monetary transactions of activities that are against the law. The scope of the Estonian shadow economy ranges from 3% to 26% depending on the study. The lowest level of the shadow economy, between 3% and 4%, is reported as the official unreported economy that is included in the GDP estimates. The highest bound for the Estonian shadow economy is estimated by Prof. Friedrich Schneider – other studies vary between these numbers depending on the economic activities estimated (Mürsepp, 2015).

A significant part of the shadow economy involves smuggling and trade of illegal products. One of the most common products in this category is illegally produced alcohol. The annual income from alcohol excise in 2014 was €220mln (Statistikaamet, 2015) – this is more than 1% of the Estonian

gross domestic product. If VAT is included as well, the tax revenue from the alcohol market would be close to 2% of the GDP. While the most common argument in favour of excise is the protection of public health and the promotion of healthy habits and culture, only 3.5% of Estonian alcohol excise is directed towards supporting cultural undertakings (Riigikogu, 2015). The rest of this income is available to the state without restrictions. As a result, alcohol excise has become a regular source of additional income whenever the costs of changing other policies need to be met. But what are the costs of this kind of policy to public health and the shadow economy?

### **ALCOHOL POLICY TRENDS**

When the economic crisis hit Estonia, the government was forced to cut spending in order to meet their target of a balanced state budget. But as the tax income dropped rapidly, several taxes were raised, especially VAT. Alcohol excise was increased twice in 2008, altogether by 33% (Äripäev, 2009). The result of this was that the amount of



WHILE THE PRICES OF LEGAL ALCOHOL HAVE BEEN RISING ON A STEADY BASIS, THE PRICE OF ILLEGAL VODKA HAS STAYED AT THE SAME LEVEL OVER A FOUR-YEAR PERIOD

collected taxes was far below the expected level. This happened again the following year.

While the economy recovered over the next few years, the government did not change its policies. Therefore, alcohol excise in Estonia has been rising ever since on a yearly basis (Riigikogu, 2015). Of course, there has been a general rise in prices over this period. But what is important to note is that the rise in alcohol excise has outpaced the consumer price index. As a result, the prices of alcoholic beverages have become relatively higher. While the following graph only represents the growth of excise for beer and wine, the change for other alcoholic products has been similar. [See Figure 1]

In addition, as the CPI has slowed down in the past few years and is not expected to grow faster than previously, the rise in excise is only increasing. In 2015, the excise was raised by 15% regardless of the

specific alcoholic produce. And, in 2016, the excise will rise another 15% (Riigikogu, 2015). This means that since 2010 excise has risen altogether an additional 33% on top of the rise encountered during the recession. This trend is the same for all alcoholic beverages.<sup>1</sup> As the income for the state has increased accordingly, there has been no strong incentive to review the policy. The excise income from alcohol has gone up by €50mln over a five-year period, increasing on an annual basis. But this is to be expected in a growing economic environment where consumers become more wealthy. To get a better idea of what has been happening, we need to look at other statistics.

As expected, this change in excise is clearly demonstrated in the comparison of prices of legal and illegal alcohol. While the prices of legal alcohol have been rising on a steady basis, the price of illegal vodka has stayed at the same level over a four-year period. That has happened even in spite of the rise in CPI. [See Figure 2]

One reason why there has been no change in the price of illegal alcohol can be explained by the change in competition on the market. Over this time period, the volume of the illegal alcohol market has shrunk from 2.1mln litres to 1.4mln litres, which corresponds to €15.7mln and €10.8mln respectively. But this is not only due to the work done by law enforcement in preventing smuggling and seizing unauthorized trade.<sup>2</sup> In fact, there have been notable changes in the consumption of alcoholic beverages.

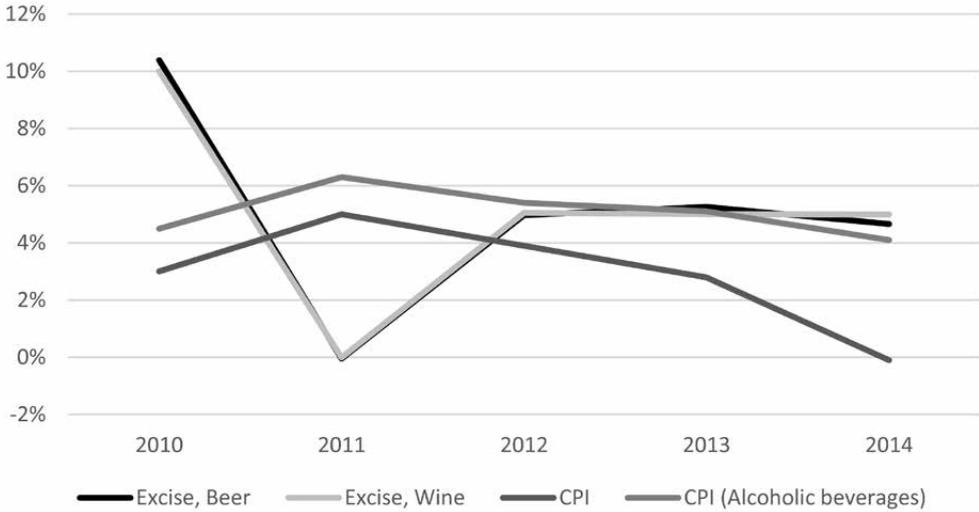
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<sup>1</sup> The rise for alcoholic intermediate products has been even faster – at 46% since 2010.

<sup>2</sup> In 2009, 2011 and 2012, customs managed to seize three times the amount of illegal alcohol than in other years.

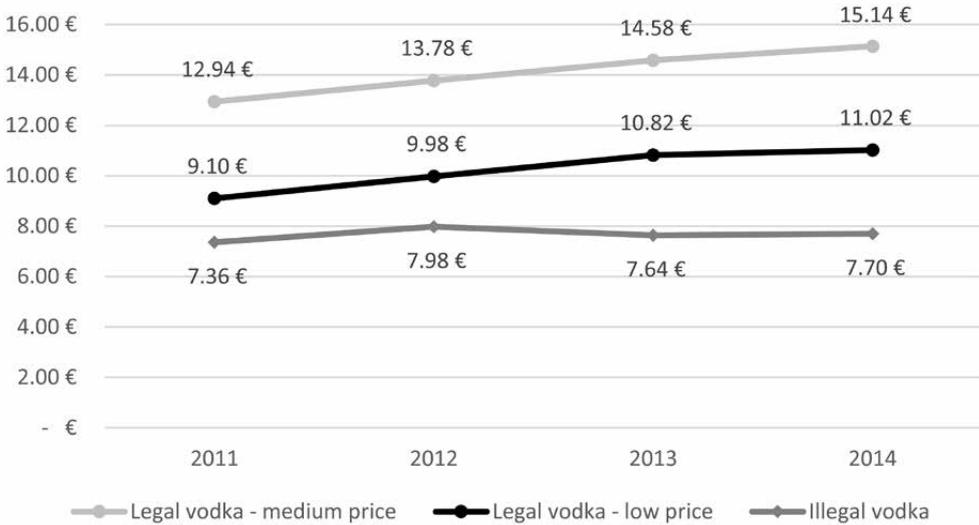


Figure 1. The change in CPI and alcohol excise.



Source: Statistics Estonia, author's calculations.

Figure 2. Price of vodka.



Source: Orro, 2014.

During the past few years, the consumption of strong alcoholic beverages such as vodka and spirits appears to have reached a plateau – people have been moving more towards lighter drinks (beer, wine and other light alcohol). This has affected the illegal market as traditionally it is focused on illegal vodka, moonshine and spirits. As people have become more wealthy, they have also been switching to higher quality alcoholic beverages. This can be seen in the statistics of the illegal market where the purchase of vodka has dropped dramatically but moonshine, which is more popular and widespread in rural areas, has been on the rise. While the illegal market has lost some of its share in the entire alcohol market, the total size of the market is still higher than during the boom. It is also noteworthy that the shadow market is not losing ground as fast as it did before the recession. This has happened in spite of the fact that the general level of wealth is now higher (Orro, 2014).

During the economic boom of 2005 to 2007, the share of the illegal market dropped to 8%–12% of the total alcohol market. In two years during the recession, the share of the illegal market shot up to 23%–27%, from €6.5mln to €14mln. For the state, the lost revenue from excise rose from €6.1mln all the way up to €16.1mln<sup>3</sup> (Orro, 2014). It is difficult to estimate how long it took for the state to recover the revenue they lost due to the growth of the illegal market. Still, it is clear that there was a negative effect on the government budget as the government had overestimated the potential income from the increase of excise. The actual revenue from excise in 2008 was over €10mln less than estimated (Äripäev, 2009). The changes in excise in

recent years have been so large that the estimated level of lost taxes has not changed significantly and is today again as large as it was in 2004.

### ILLEGAL ALCOHOL: RELATED CRIME

In addition to studying people's everyday behaviour regarding the consumption of illegal alcohol, it is also possible to gain some insight by studying crime and illegal activity statistics related to illegal alcohol. This is also significant because crime and poor quality of illegal alcohol are often of high importance when evaluating the well-being of citizens.

While the lost tax revenue has a negative effect on the state budget, it might not necessarily have a strong effect on people's daily lives. Nevertheless, criminal activity and poor alcohol quality can hurt their health and livelihoods significantly. Therefore, the state should not only focus on the finances of the public sector but should also look at other aspects. Even though people can and do get careless with legal alcohol in a manner that has negative effects on their health, the consumption of legal alcohol has caused no waves of mass deaths due to poor quality. The consumption of illegal alcohol does, on the other hand, result in death occasionally.

Up until the recession, the economy was on a strong growth path and the general well-being in Estonia grew on a constant basis. This manifested also in the development of public services and, as a result, law enforcement made great strides in establishing itself and eradicating criminal activities left over from the soviet period and the early years of the independent state. As a result, alcohol-related crime dropped at a fast pace in line with other crime (Orro, 2014). This was also supported by the economic boom that bolstered people's pockets and saw them turn to legal mar-

<sup>3</sup> The lost taxes are estimated on the volume of the shadow market. The lost taxes represent the amount the state would have received had the shadow trade been reported in the same way as the legal market.



ALCOHOL-RELATED  
CRIME IS ON THE  
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AND WHILE IT  
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IN PRICES

kets in almost everything as shown in various shadow economy reports. As people prefer legal products, we should expect to see that the changes in the alcohol and tax policy are reflected also in crime-related statistics.

As the recession hit, the acquisition, possession and distribution of alcohol that was not properly declared continued to fall and hit its low point of 121 reported crimes in 2010. But since then, the numbers have been rising and, in 2013, crime was already recorded 192 times. In a similar fashion, the low point for violation of the procedure for

handling alcohol was reached in 2009 – 19 reported crimes. Since then, it has more than doubled and 44 instances were reported in 2013 alone.

Also, during the economic recession, the illegal production of alcohol was detected only 4–5 times a year. This number has stayed relatively unchanged over the years, although in 2013, it had already been recorded 6 times. In addition, there has been a notable rise in other alcohol-related crimes that has risen since 2010 from 255 instances to 495 instances in 2013. This data shows clearly that alcohol-related crime is on the rise in Estonia. And while it cannot be directly linked to excise, it has become more of an issue during a time when the rise in alcohol excise has outpaced the general growth in prices (Orro, 2014).

#### **COST OF ILLEGAL ALCOHOL TO THE PUBLIC**

What is the cost of illegal alcohol to the public? One way to look at this subject is to consider the cost of treatment for alcohol-related diseases. Unfortunately, there is no way to separate legal and illegal alcohol-related cases in the statistics. But there are some cases that can be expected to be more common in relation to the consumption of illegal alcohol.

For example, the toxic effect of alcohol and accidental poisoning by and exposure to alcohol<sup>4</sup>: the cost for these two cases alone for the Social Services and for the Estonian Health Insurance Fund nationally in 2013 was more than two hundred thousand Euros. And while this number also includes cases with legal alcohol, it does not include treatment for people with-

<sup>4</sup> Unlike the misuse of legal alcohol, the misuse of illegal alcohol has caused some cases of mass deaths in Estonia – people either died straight after consumption or over the following years (Salong, 2011).





PROPONENTS OF RAISING THE EXCISE UNDER THE BANNER OF SAVING PUBLIC HEALTH CLAIM THAT IT IS POSSIBLE TO INCREASE TAXES SO THAT THE CONSUMPTION OF ALCOHOL IS REDUCED. WHILE THIS APPLIES IN THEORY, IT IS HARD TO ACHIEVE IN REAL LIFE DUE TO THE VOLATILE NATURE OF THE SHADOW ECONOMY

out health insurance. The entire treatment cost in 2013 for alcohol-related diseases was more than €3.2mln. While this amount is only a fraction of the tax revenue from alcohol excise, it should also be considered that illegal alcohol is associated with other setbacks, which include violent crime that can have an impact on a larger group of people than only those directly involved in handling the illegal product.

Proponents of raising the excise under the banner of saving public health claim that it is possible to increase taxes so that the consumption of alcohol is reduced. While this applies in theory, it is hard to achieve in real life due to the volatile nature of the shadow economy. If data for the period from 2009 to 2013 is considered, there has been no noticeable change in the consumed volumes of pure alcohol on the domestic market. This means that although the volume of general sales has decreased, the volume of real alcohol consumed has actually increased. The most notable trends in this regard are the fast growth in the consumption of wine and vermouth on the legal market and the growth of moonshine on the illegal market (Orro, 2014).

#### **PUBLIC ATTITUDE TOWARDS ALCOHOL POLICY**

Other important aspects to look at when discussing alcohol policy are the opinions and attitudes of the general public. No policy – no matter how well intended – will succeed if not approved by the public. While illegal alcohol is not seen as the biggest alcohol-related issue (as it is exceeded by the consumption of alcohol by youth, driving under the influence of alcohol and domestic violence), it is still considered to be an issue by roughly half of the consumers. And while the poor quality of alcohol and more principled attitudes against the shadow economy and illegal alcohol industry in general are the main arguments given by people for not purchasing illegal alcohol, the price of legal alcohol is an important argument for many as well.

Over the analyzed time period, less than half of the consumers of alcohol were found to consider legal alcohol to be affordable (Orro, 2014). When looking at these numbers, it is surprising that in 2014 only 3% of all consumers of alcohol were reported to purchase both legal and illegal alcohol. This

is an all-time low<sup>5</sup>. However, when considering the broader effect of excise, there is no way to skip over the fact that during the recession, when taxes were being raised at a fast pace, this number jumped up to 9% over a couple of years (Martens, 2015). This should be taken as cautionary in regard to the next few years as we can expect that a fast rise in excise in 2015 and 2016 will provide a strong incentive for the rise in the popularity of illegal alcohol.

It is also interesting that although people do not regard illegal alcohol favourably, they also consider the policy regarding alcohol to be already strict enough. Half of the population thinks that the current alcohol policy has very strict restrictions. And this point of view has become more popular as the excise and therefore the price of alcohol have increased in recent years.

On the other hand, 33% think that the policy has limited restrictions and only 4% think that it is as liberal as it could possibly be. Over the previous ten years, the views towards the alcohol policy have been that negative only once before, in 2006, during the peak of the economic boom. Looking at this statistic regionally, it shows that only in Tallinn do people view the policy to be milder – only 42% consider it strict. While in smaller towns this number reaches 60%<sup>6</sup> (Orro, 2014). This is important because the shadow economy in general is often more widespread in rural areas and regions further from large centres. This also means that people living in those areas are more vulnerable to harsh changes in public policy.

If we continue to analyze people's attitudes towards alcohol policy, we discover that those who support reducing alcohol

consumption consider that the appropriate steps should be related to adding more restrictions to the promotion of alcohol and with enlarged public supervision. They also find that the government should focus on creating and enabling access to more alternative activities to alcohol consumption. Only 24% of people in favour of limiting alcohol consumption support a further increase in excise and 35% are already against taking that step (Orro, 2014).

## CONCLUSIONS

While the illegal alcohol market in the shadow economy contracted during the years of fast economic growth, this course has changed since the recession. During that time the Estonian Government raised alcohol excise by 33% in one year and another 33% over the following five-year period. This has created ample ground for the growth of the shadow economy and a rise in alcohol-related crime. As the Estonian economy has recovered well from the recession and is growing on a steady basis, the market for illegal alcohol has not declined in the way that would be expected in an economy where people become more wealthy. Instead, the illegal market has grown and alcohol-related crime has risen as well.

As various studies on the shadow economy have shown, people are most sensitive towards prices of goods and services. This means that high taxes and poor economic security are the most common reasons why they become involved in the shadow economy. Accordingly, whenever considering tax policy that raises prices in a significant manner, new and stronger incentives arise for the shadow economy to expand.

There is also now, in Estonia, a strengthening opinion that the alcohol policy is becoming stricter and people sensitive to excise are becoming dissatisfied with

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<sup>5</sup> The same level of consumption was reached in 2007.

<sup>6</sup> This also applies to people with lower education and lower income.



WHILE RAISING ALCOHOL EXCISE DOES GENERATE INSTANT INCOME FOR THE STATE, THE EFFECT FROM LOST REVENUE TO THE SHADOW ECONOMY SHOULD NOT BE UNDERESTIMATED.

the course the government has taken. While raising alcohol excise does generate instant income for the state, the effect from lost revenue to the shadow economy should not be underestimated. Instead, it might be worth considering reversing the current policy in order to combat the shadow economy and promote public health by making it easier for people to access various healthy activities on the market rather than chasing elusive smugglers. As restrictions and high taxes give rise to the shadow economy, the current policy needs to be revised.

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# Micro View on the Lithuanian Shadow Economy



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VYTAUTAS  
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Measuring the scope and size of the shadow economy is an uphill task. We can, however, distinguish three main groups of methodologies: direct surveys and auditing approaches, indirect approaches which measure the shadow economy based on secondary data, and modelling. The presented article investigates the shadow economy in Lithuania based on data from a recent direct representative survey of the population, which was carried out by the Spinter Research company in June 2015. The survey targeted people aged from 18 to 75, with a total sample of 1,011 respondents. Designed by the Lithuanian Free Market Institute (LFMI), the aim of the research was to elicit the experience of Lithuanian citizens with the shadow economy and their perception of certain shadow economy practices.

**T**herefore, the main objective of this paper is to present the results of the survey itself, to show the size of the shadow economy in Lithuania and to discuss people's attitudes towards this issue. The first part of the article discusses public perception of shadow economic activity. The second part focuses on people's experience with unregistered purchases. The third part analyses engagement in undeclared labor, and the fourth part presents the profile of a person engaged in the shadow economy.

#### **PUBLIC PERCEPTIONS MATTER**

Before identifying the causes of the shadow economy or offering any specific cure, it is crucial to understand people's attitudes towards the matter. Without this knowledge, even the most thoroughly thought-out measures might appear useless and fail to achieve the desired result.

Available research reveals that the size of the shadow economy in a given country is highly dependent on the tax morality of its residents, which in turn is determined by

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THE SIZE OF THE SHADOW ECONOMY IN A GIVEN COUNTRY IS HIGHLY DEPENDENT ON THE TAX MORALITY OF ITS RESIDENTS, WHICH IN TURN IS DETERMINED BY THE PERCEPTION AND ATTITUDES OF THE PEOPLE

the perception and attitudes of the people. As a matter of fact, multiple studies show that beliefs and attitudes towards the shad-



## THE PERCEPTION OF THE LIKELIHOOD OF BEING DETECTED IN SHADOW EMPLOYMENT IS GREATER THAN WHEN MAKING UNREGISTERED PURCHASES

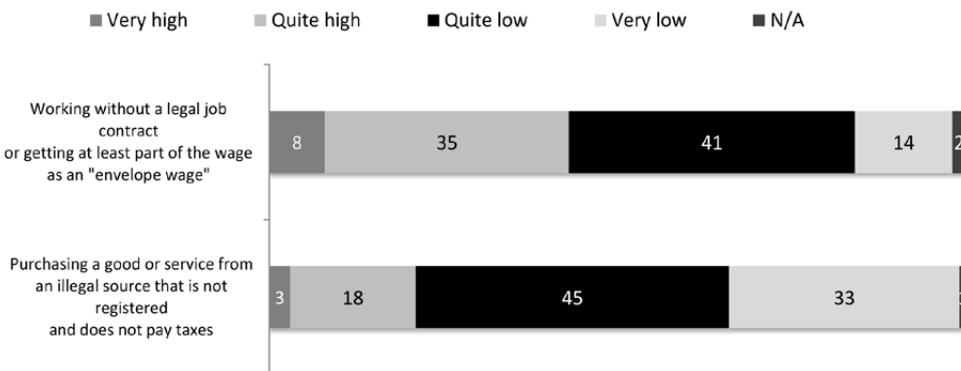
ow economy correlate more strongly with compliance than do deterrence factors. Therefore, the effectiveness of the measures that improve commitment to paying taxes is directly related to understanding people's attitudes towards shadow economic activities.

Analyzing people's understanding of the consequences of participation in shadow economic activity is crucial if we want to determine the motives behind their involvement in the shadow economy. For this reason, the first part of the survey was dedicated to investigate how people rate the severity of possible penalties, the likelihood of being detected, and most importantly, their justification of different shadow economic activities.

### SHADOW ECONOMY EXPERIENCE AND THE APPREHENSION OF BEING DETECTED

One of the main findings is that the perception of the likelihood of being detected in shadow employment is greater than when making unregistered purchases. When asked about the likelihood of being caught purchasing a good or service from an illegal source, 78% of respondents indicated that the chance is quite low or very low. Similarly, 55% of respondents had the same opinion about the likelihood of being detected working without a job contract or getting some part of income in the form of an "envelope wage". [See Figure 1]

Figure 1: In your opinion, what is the likelihood of being detected?



Source: LFMI survey data

It is important to note that respondents, regardless of their experience in the shadow economy, tend to think that the likelihood of being detected purchasing goods or services from an illegal source that is not registered or does not pay taxes is much lower than the likelihood of being detected working without a legal job contract or getting at least part of the wage as the aforementioned “envelope wage”. This might be true for a number of reasons.

One of them is the lack of liability. Once a person is caught purchasing something illegally, it might be difficult to prove that they knew about this beforehand. While the provider of illegal goods or services might be detected during a regular check, a customer may simply pretend that they were unaware that the source was not registered or was not paying taxes.

Sometimes it is actually extremely difficult to determine whether a seller has been declaring their income. Therefore, some people might truly be clueless whether their purchase is legal or not. One way to find out would be to request a receipt. In practice, however, unless a customer needs it for personal reasons, a receipt is usually ignored.

Another reason is the difference between the amount of time spent working illegally and the time it takes to make a purchase. All it takes to detect an illegal worker is one successful inspection. On the other hand, catching someone making illegal purchases is much harder simply because the transaction itself takes very little time. Moreover, illegal sellers often do not have a permanent work place where they could be inspected and caught.

Another important finding is that the perception of the likelihood of being detected appears to be much lower among re-

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82% OF THE RESPONDENTS THAT BOUGHT GOODS OR SERVICES ILLEGALLY WITHIN THE LAST 12 MONTHS CLAIMED THAT THE LIKELIHOOD OF BEING DETECTED PURCHASING GOODS OR SERVICES FROM AN ILLEGAL SOURCE IS QUITE LOW OR EVEN VERY LOW, COMPARED TO THE 74% WHO DID NOT HAVE SUCH AN EXPERIENCE

spondents who were previously engaged in shadow economy practices. Taking a closer look at the survey results shows that as many as 82% of the respondents that bought goods or services illegally within the last 12 months claimed that the

likelihood of being detected purchasing goods or services from an illegal source is quite low or even very low, compared to the 74% who did not have such an experience. [See Figure 2]

Additionally, even as many as 70% of the participants who have previously worked in the shadow economy believe that there is a quite low or very low chance of being caught while working illegally or getting at least part of the income paid in an “envelope”. This is 16 percentage points more than indicated by those who have never had such an experience. [See Figure 3]

The information obtained from the above data analysis suggests that people who were involved in some kind of shadow economic activity (whether they were making illegal purchases or participated in the shadow labor market) think that the likelihood of being detected is lower than is indicated by the answers of those who never had such an experience. While both are simply opinions of the respond-

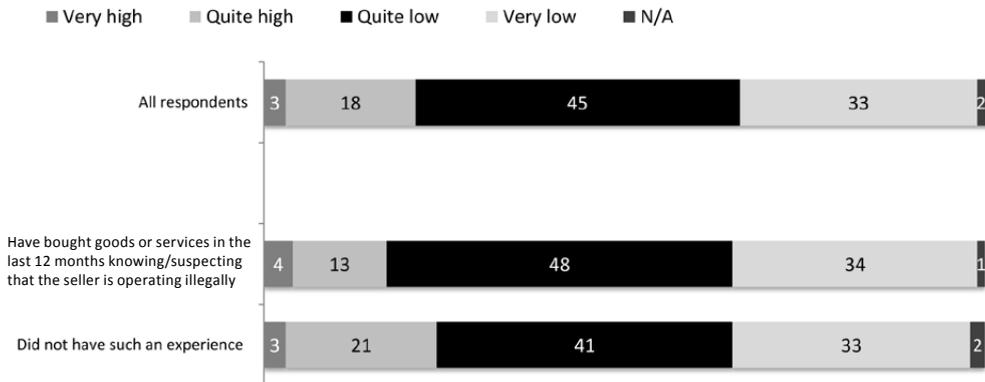
ents, there is a stronger chance that people who have previously been involved in shadow economic activities have a better understanding of the situation as they have witnessed it firsthand.

### PERCEPTIONS OF PUNISHMENT: BUYING VERSUS WORKING ILLEGALLY

People tend to think that the punishment for purchasing goods or services illegally is milder than for being illegally employed. When asked about their opinion on the severity of the punishments, 55% of respondents indicated that the punishment for working without a legal job contract or getting at least part of the wage as an “envelope wage” is very or quite severe, while only 38% claimed that they are somewhat mild.

As for purchases from unregistered sources that do not pay taxes, respondents had a completely opposite view. More than half of all respondents (52%) tend to think that the punishment is rather mild, while the remaining 37% think that it is very or quite severe. The reason behind this view might be

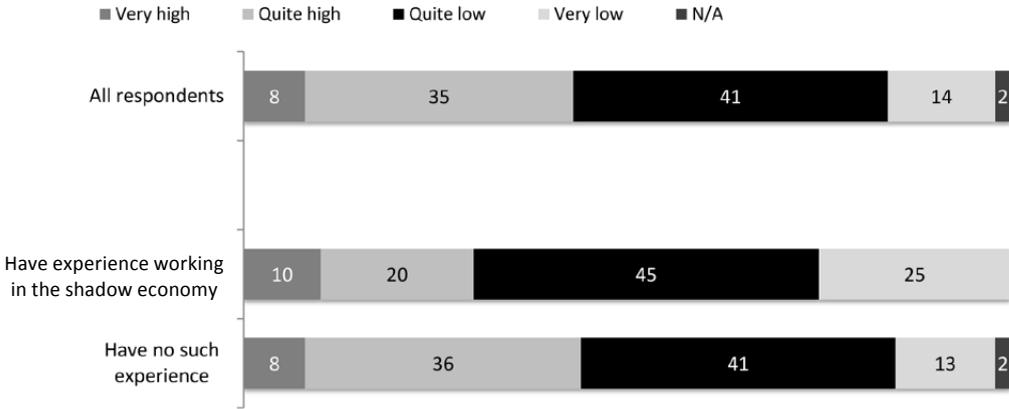
Figure 2: In your opinion, what is the likelihood of being detected purchasing goods or service from an illegal source that is not registered and does not pay taxes?



Source: LFMI survey data



Figure 3: In your opinion, what is the likelihood of being detected working without a legal job contract or getting at least part of the wage as an “envelope wage”?



Source: LFMI survey data



## THE PENALTIES FOR SHADOW EMPLOYMENT IN LITHUANIA ARE ACTUALLY MORE SEVERE THAN THE PENALTIES FOR PURCHASING ILLEGAL GOODS OR SERVICES

the participants’ knowledge of the actual punishments as well as a personal judgment of certain activities. In fact, the penalties for shadow employment in Lithuania are actually more severe than the penalties

for purchasing illegal goods or services. Based on the survey results, participants seem to be aware of this fact.

However, if a person is not familiar with the situation or severity of actual punishments then when answering the question they might have used their personal judgment instead. For example, if a person is more likely to justify unregistered purchases over illegal employment, it would not be unexpected that they would have indicated that the punishment for the former offence is milder. [See Figure 4]

To conclude, people who have previously worked in the shadow economy tend to think that the punishment for illegal employment is more severe than indicated by people who have never had such an experience. [See Figure 5]

When asked to evaluate the severity of the punishment for working without a legal job contract or getting at least part of the wage as an “envelope wage”, 60% of the respondents previously engaged in shadow

economic activities indicated that penalties are very or quite severe, and a considerably smaller percentage, that is 33%, responded that they are very or quite mild. In comparison, 54% of people who have never worked in the shadow economy believe that punishments are harsh, while 39% claim that they are to some extent mild.

People who have previously bought goods or services knowing or suspecting that the seller was operating illegally think that the punishment for being caught while making illegal purchases is milder than people who have not had such an experience. [See Figure 6]

The opposite situation can be observed when analyzing the respondents' perception of punishment over buying goods or services from an illegal source that is not registered or does not pay taxes. Among those who bought goods or services within the last year knowing or suspecting that the seller is illegal, 56% think that punishment is very or quite mild, while 48% of those who claimed they did not have such an experience thought the same.

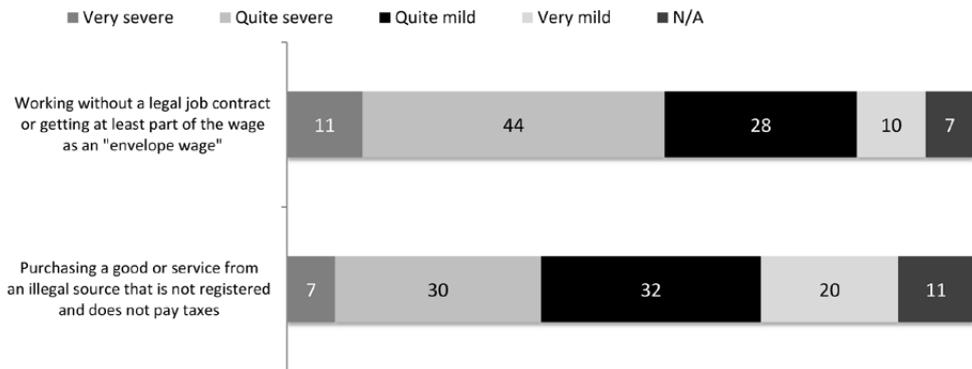
Is it possible, therefore, that the low chance of being detected and the mild punishments for involvement in certain shadow economic activities are the reasons behind people's engagement in shadow economic activities? While policymakers' new plan to fight the shadow economy actually focuses on harsher punishments, improved detection through better regulation as well as an increase in responsibility, further analysis of the survey results shows a different picture.

### HOW MUCH SHADOW ECONOMY DO WE TOLERATE?

While more than half of all respondents claim that they do not justify all kinds of shadow economic activities, a significant proportion favours certain practices.

Respondents of the survey were asked to provide their opinion about specific shadow economic activities and the level to which they justify them. The obtained results show that while the majority of participants do not justify involvement in any kind of shadow economic activity, a significant proportion of the population is supportive of some specific activities. [See Figure 7]

Figure 4: In your opinion, how severe will the punishment be in such circumstances?



Source: LFMI survey data

People are more likely to justify “envelope wages” and purchases with no receipt rather than working without a legal job contract and buying from illegal sellers. At the same time, among the least justifiable activities are employment when the entire wage is paid in the “envelope” and smuggling of illegal products. As many as 74% of all respondents said they rather not or do not justify at all the former activity, and 77% indicated they are not in favour of the latter practice.

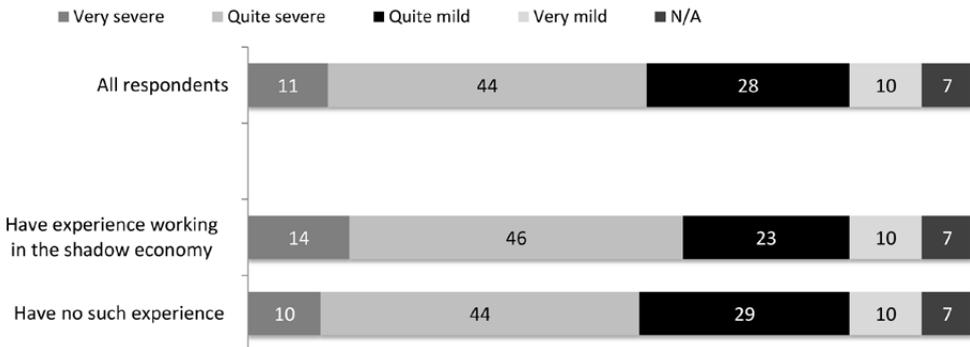
On the other hand, it appears that people are more favourable of such activities as receiving part of the income as an “envelope wage” and the purchasing of illegal goods or services when knowing that the seller is not declaring the payment. Even 42% of the respondents completely or rather justify part of the wage in an “envelope”, and as for illegal purchases, 36% have a similar opinion. What is the reason for such attitudes?

People tend to justify part of the income paid as an “envelope wage” more than working without a legal job contract and

getting the entire wage in an “envelope” because they might believe that the amount of unreported income is larger in the latter case. The cause of such reasoning might simply be the wording chosen to describe the two situations. The first case uses the term “part of the wage” unlike the second scenario, which says the “entire wage”. So consequently, to them the unpaid amount of taxes also appears to be larger in the case where the entire wage is received in an “envelope”.

Nevertheless, in reality, the size of both types of unreported income might be equal, but the evaded tax amount would really depend on the amount of money received legally. For instance, a person might receive the same 200 euros in an “envelope” as part of the wage, or as the entire amount. While the size of the undeclared income would be the same in both cases, the amount of unpaid taxes might actually be higher in the first case, when 200 euros is received as part of the wage. If a person had received 200 euros as their entire wage, then the tax would be counted after deducting the so-called “tax-exempt

Figure 5: In your opinion, how severe will the punishment be for: working without a legal job contract or getting at least part of the wage as an “envelope wage”?

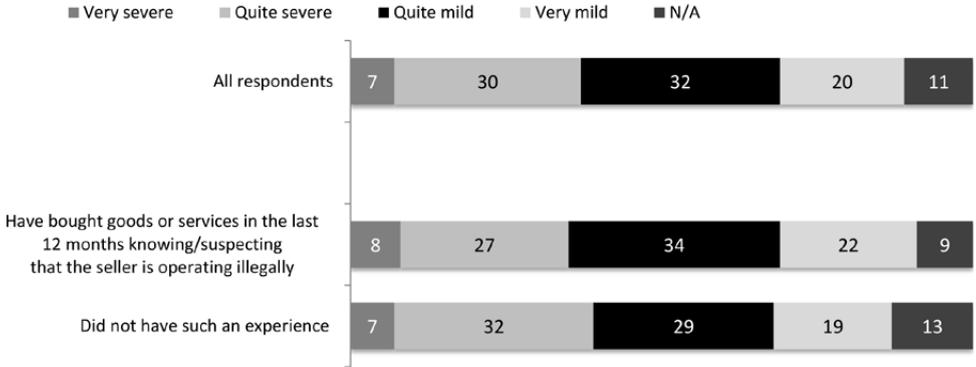


Source: LFMI survey data

**RESEARCH ROOM**  
**DALBY FAMILY HISTORY SOCIETY**  
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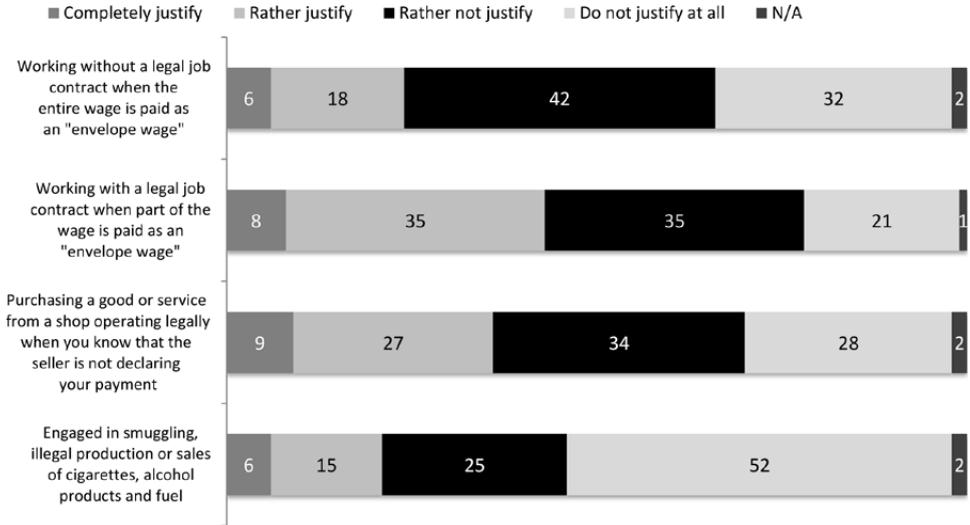


Figure 6: In your opinion, how severe will the punishment be for: purchasing a good or service from an illegal source that is not registered and does not pay taxes?



Source: LFMI survey data

Figure 7: Do you personally justify people engaging in the shadow economic activities listed below?



Source: LFMI survey data

amount”, and only the remaining part of the income would be subject to tax. However, if a person had received 200 euros only as part of their income, then that would mean that the remaining part of their wage received legally would cover some part of this deductible minimum. Hence, the tax payable



## MORE THAN HALF (58%) OF ALL RESPONDENTS PREVIOUSLY ENGAGED IN SHADOW LABOR JUSTIFIED THIS PRACTICE

on the 200 euros received in an envelope would be higher than in the case when 200 euros is paid as the entire wage.

A similar situation can also be applied to purchases from illegal sellers and from those who simply do not declare a particular payment. In the former case, people might think that by operating illegally the seller evades all taxes, while in the latter case the seller pays some of them at least, and therefore, commits a lesser offence. However, just like in the previously described case, the amount of evaded taxes de-

pends on other circumstances, and thus might be higher in any of these scenarios.

Therefore, once again, people who have been working in the shadow economy are more likely to justify shadow economy practices than those who never had such an experience. [See Figure 8]

The analysis of the responses based on the participants' previous involvement in the shadow labor market reveals that people who have worked without a job contract or received at least part of their wage as an "envelope wage" are less judgmental of such practices. At least a third of all participants with such experience claimed that they completely or rather justify all practices mentioned below.

Among the most justifiable forms of illegal activities, the group mentioned jobs with legal contracts when part of the wage was paid in an envelope. As a matter of fact, more than half (58%) of all respondents previously engaged in shadow labor justified this practice. The second most justifiable practice, similarly amongst respondents, who never had an illegal employment experience, appears to be purchases from legal sellers who do not declare the payment. The 44% of respondents with shadow employment experience, and the 36% without, defended this practice.

When analyzing characteristics of the respondents that are supportive of certain shadow economic activities, it was noticed that most of the support comes from people who are not satisfied with the Lithuanian Government or are members of low-income groups – which may lead us to the conclusion that people from low-income groups or those unsatisfied with the country's



## PEOPLE FROM LOW-INCOME GROUPS OR THOSE UNSATISFIED WITH THE COUNTRY'S GOVERNMENT ARE GENERALLY MORE LIKELY TO JUSTIFY SHADOW ECONOMIC ACTIVITIES

government are generally more likely to justify shadow economic activities. [See Figure 9]

Justification from participants receiving a low-income is not surprising. Shadow economic activities often attract people looking for ways to earn extra income just to cover their basic living expenses. The shadow economy can offer benefits, but it also involves high costs. Therefore, people involved in shadow economic activities are often doing it not for additional profits, but simply because they do not have another sufficient source of income.

A detailed analysis of the socio-demographic characteristics revealed that respondents who were previously involved in shadow economy employment are mostly 18–35 years old, without secondary education, earning a low income and living in

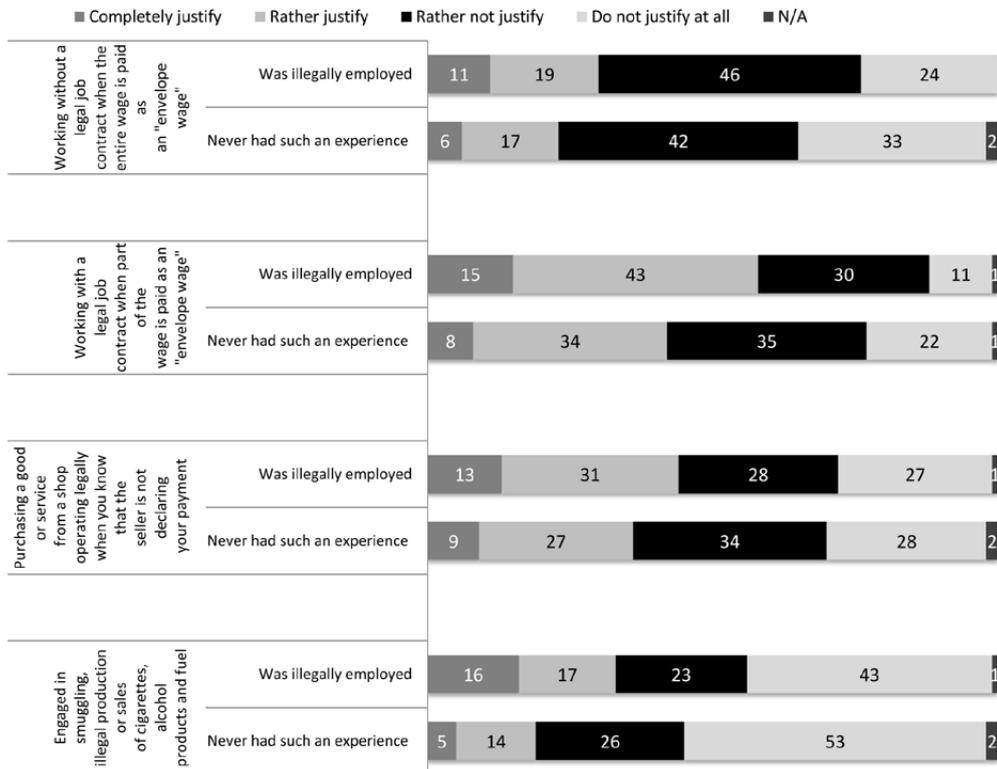
rural areas. Unsurprisingly, these respondents indicated that they are mostly unemployed, students, or blue-collar workers.

As for those who are not satisfied with the country's government, it only makes sense that people do not want to pay more taxes for public services they are not satisfied with. When residents of a country do not feel the benefits of public spending, they tend to believe that taxes they are obliged to pay are unjust. Therefore, it is natural that such people would be more supportive of illegal practices that minimize their tax burden.

Furthermore, when comparing the judgment of the participants not satisfied with a country's government and those that are happy with it, it is clear that the former group is more likely to justify different shadow economy practices. The category of "unsatisfied" respondents includes those survey participants who gave a 1–3 rating when asked to evaluate their satisfaction with the Lithuanian Government on a 1–10 scale, where 1 means completely dissatisfied and 10 very satisfied. Similarly, participants who are satisfied with the country's government rated their government 6–10. [See Figure 10]

30% of the unsatisfied respondents claim that they justify those working without a legal job contract, which is about 10 percentage points more than indicated by those who are satisfied with public services. Furthermore, 47% of the participants displeased with the government said that they justify those working with a job contract but getting part of the wage in an "envelope", compared to 43% of those who are satisfied. 40% of the former group favour purchases of goods and services from legal sellers knowing that the seller is not declaring the payment – again, more than 33% of the latter group. And finally, 28% of unsat-

Figure 8: Do you personally justify people engaging in the shadow economic activities listed below? (% of those who were/were not previously involved in the shadow economy)



Source: LFMI survey data

ified respondents support smuggling of alcohol, fuel and tobacco, while only 15% of those who are satisfied with the government have a similar view.

### WHY SHADOW ECONOMY?

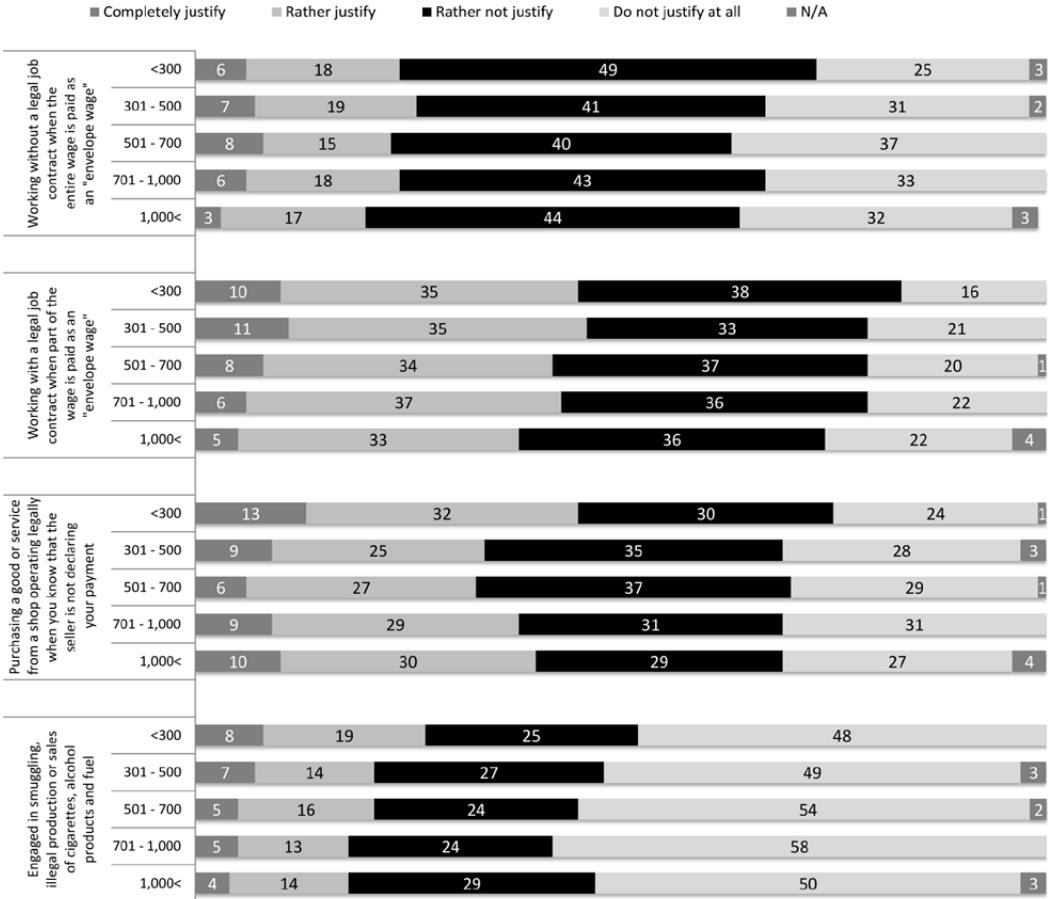
Another way to understand this relatively strong support for certain illegal activities is to investigate the reasons why people engage in shadow economy practices in the first place. To determine the reasons for involvement in the shadow economy, the survey participants were asked to indicate the main reasons for participation in certain shadow economic activities. The

respondents were given a multiple answer option and were free to indicate more than one reason.

### The main reason of unregistered purchases is that buying goods and services legally is too expensive.

A careful review of the survey data shows that according to Lithuanian residents, people are buying from illegal sellers, because buying goods and services legally is too expensive. This answer was indicated by 71% of the respondents. This opinion is especially noticeable among low-income respondents from rural areas, rather than higher income

Figure 9: Do you personally justify people engaging in the shadow economic activities listed below?



Source: LFMI survey data

earners from big cities or regional centres. The result is also supported by the fact that the majority of people who were previously involved in illegal practices come from low-income groups, students and the unemployed. [See Figure 11]

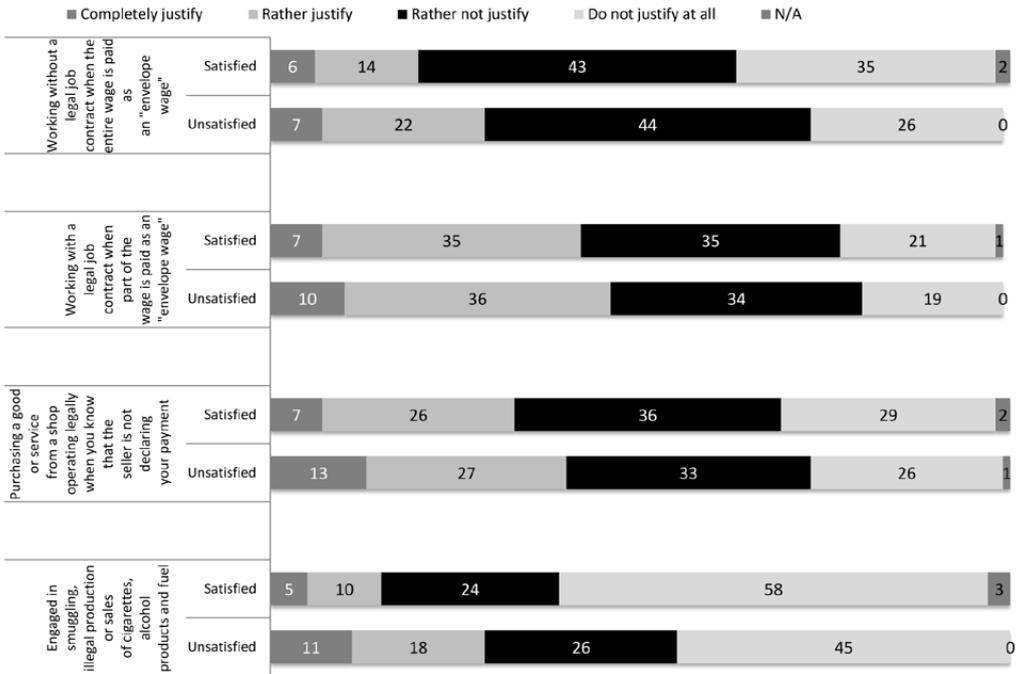
The second most popular reason, supported by more than half of the respondents, is that **people are simply unaware of the fact that some providers are illegal or do not declare their income.** As discussed before, this might actually be true,

however, it is hard to test. The problem is that people are often indifferent to whether the seller is legal or not as long as they can receive their purchase for a desired price.

**The main reason for undeclared labor is high taxes.**

As for the undeclared labor market, 67% of the respondents specified that people engage in jobs illegally or agree to receive part of their wage in the "envelope" due to high labor taxes. This finding is also confirmed by the answers provided by those who have previously worked in the

Figure 10: Do you personally justify people engaging in the shadow economic activities listed below? (% of those who are unsatisfied/satisfied with the country's government)



Source: LFMI survey data

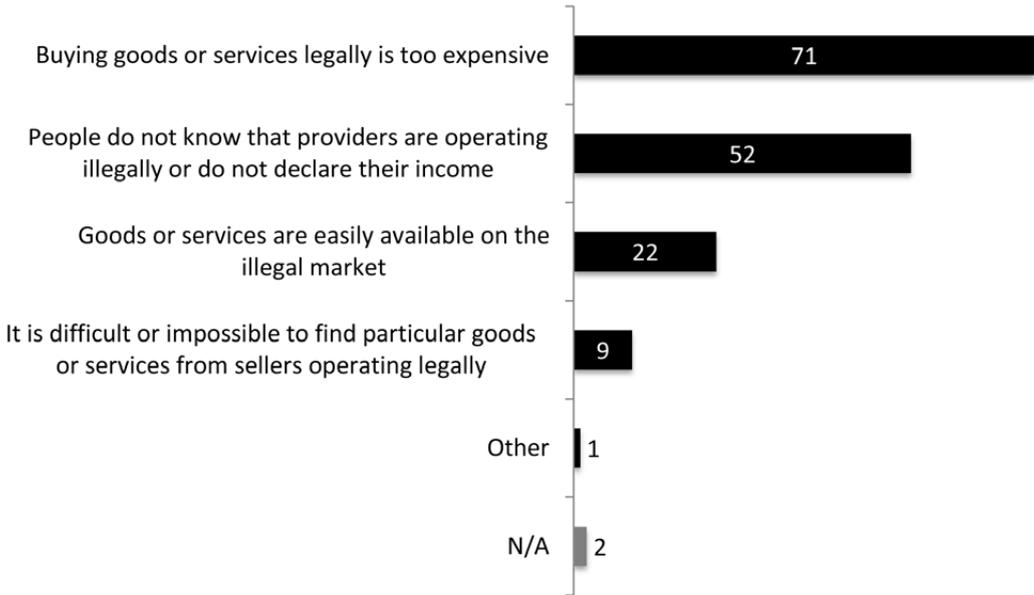
“  
 HIGH (69.9%) AND  
 LOW INCOME  
 (68.1%) EARNERS  
 BOTH AGREE  
 THAT PEOPLE ARE  
 ENGAGING IN  
 SHADOW ECONOMY  
 LABOR ACTIVITIES  
 BECAUSE OF THE  
 HIGH TAX BURDEN

shadow economy. A total of 69% of them indicated that high taxes were the primary reason for undeclared labor in the country. [See Figure 12]

It is very important to note that survey respondents, regardless of their income or satisfaction with the government, agree with this view. High (69.9%) and low income (68.1%) earners both agree that people are engaging in shadow economy labor activities because of the high tax burden. Similarly, people who are satisfied with the government (67.7%) and those that are not (68%) also share this believe.

**The second most popular reason turns out to be the fear of losing social benefits.** The finding suggests that the inefficient and excessive government compen-

Figure 11: In your opinion, why do people purchase goods or services from illegal providers or legal providers who do not declare their income?



Source: LFMI survey data

sation system not only discourages people to look for work in general, but also from seeking employment in the legal market. This reason was the most popular among women, housewives, part-time workers, residents of rural areas and, most importantly, those that actually have a positive opinion regarding the country's government. All these criteria more or less match a profile of an average person receiving social benefits.

The third reason indicated by respondents is the fact that **people simply do not see the point in paying taxes as government services are bad and insufficient**. As discussed previously, if residents do not feel any benefits from public services, it can even be expected that they will not want to pay more taxes to *sponsor* them. Consequently, these individuals will be more willing to justify different shadow economic activities. [See Figure 13]

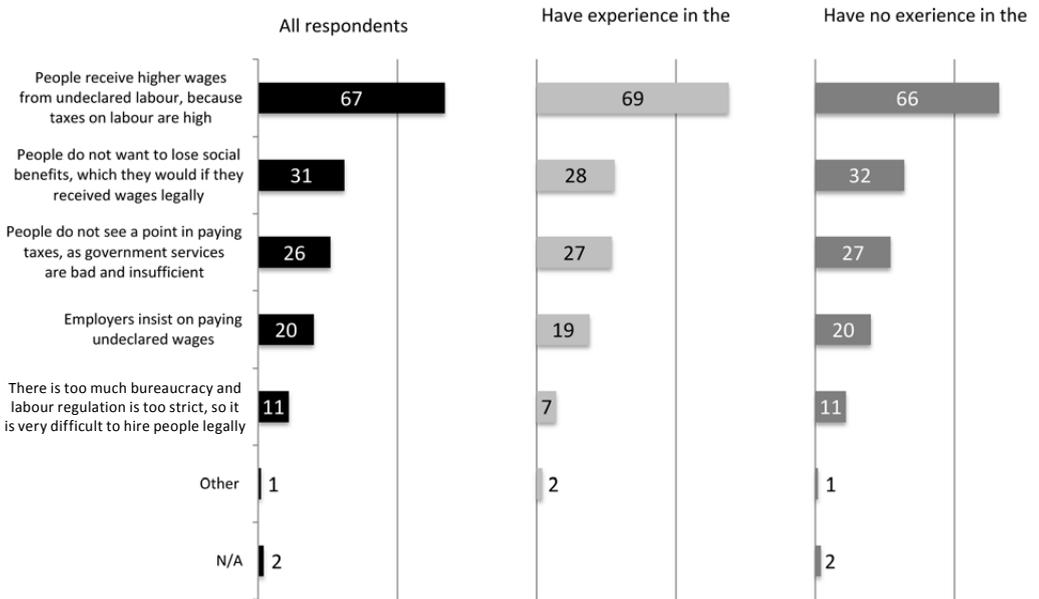
As a matter of fact, the average satisfaction rate with the Lithuanian Government is only 4.81 (on a 1–10 scale).

All the aforementioned findings oppose the widespread perception that people are engaging in shadow economic activities only because of the mild punishments or the small chance of being detected. The respondents of this survey did not indicate any of these reasons to be the causes of the shadow economy. Moreover, these reasons were also not mentioned by those who were involved in shadow economic activities previously.

### UNREGISTERED PURCHASES AND WHY WE ALL HAVE BEEN THERE

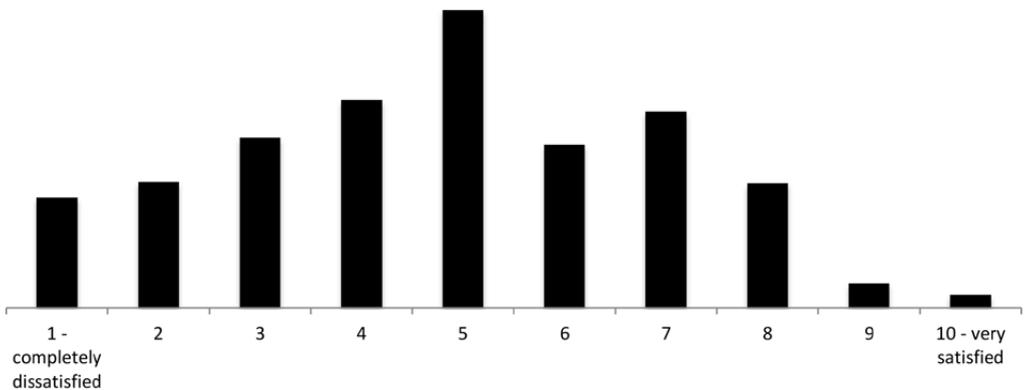
A significant part of the survey participants indicated that they had an experience with unregistered purchases. The survey results show that within the last year almost a third (31%) of all respondents have sometimes or

Figure 12: In your opinion, what are the main reasons why people work illegally without a legal job contract or receive part of their wage as an “envelope wage”?



Source: LFMI survey data

Figure 13: How satisfied are you with your country’s government?



Source: LFMI survey data



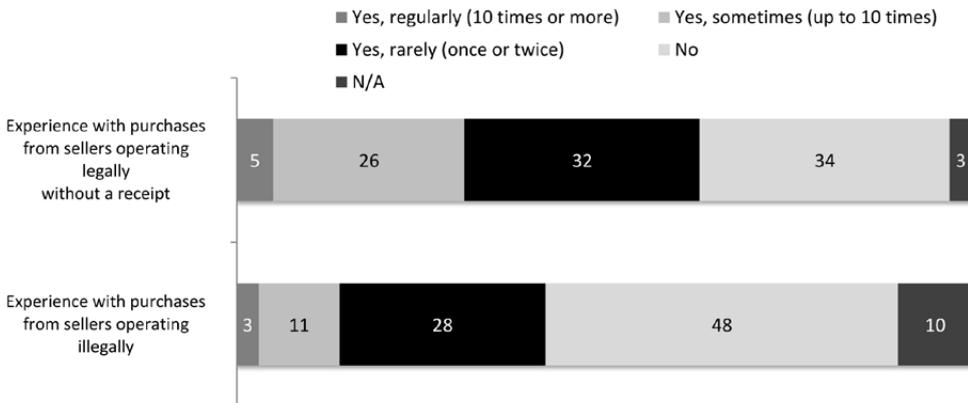
WITHIN THE LAST YEAR ALMOST A THIRD (31%) OF ALL RESPONDENTS HAVE SOMETIMES OR REGULARLY BOUGHT GOODS OR SERVICES KNOWING OR SUSPECTING THAT THE REVENUES WERE NOT LEGALLY REGISTERED

regularly bought goods or services knowing or suspecting that the revenues were not legally registered. Similarly, 14% indicated they have previously purchased goods or services from an illegal seller at least once in the last year knowing or suspecting that the seller was illegal. [See Figure 14]

Moreover, purchases from illegal sellers were more popular among people who have previously worked in the shadow economy. As many as 51% of the respondents that do not have illegal employment experience claimed they have never bought anything from illegal sources. The same was indicated only by 18% of those that have had such an experience. [See Figure 15]

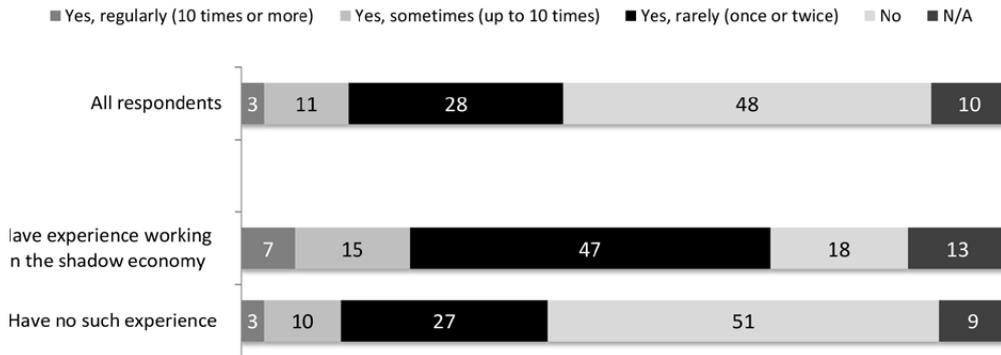
This is in line with logic, since respondents with shadow economy experience are better at detecting such sellers. Moreover, according to the previous findings, people previously involved in shadow economy employment are usually members of low income and education groups or even

Figure 14: Have you bought in the last 12 months any goods or services knowing or suspecting that the seller was illegal or that the revenues were not legally registered?



Source: LFMI survey data

Figure 15: Have you bought in the last 12 months any goods or services knowing or suspecting that the seller was illegal?



Source: LFMI survey data

unemployed individuals. Therefore, it is in their best interest to find the cheapest source for their purchases.

Participants of this survey were asked to identify the main goods and services they acquired during their unregistered purchases. Respondents were given the opportunity to choose more than one option in order to determine which items were the most popular.

Among the most popular items appear to be primary consumption goods such as food (28% of the respondents) and clothes (26%). Since low-income group residents make most of the illegal purchases, it is not surprising that food items are amongst the most popular as they account for the biggest part of their income. [See Figure 16]

As for the most popular services, respondents mentioned auto-repairs, medical, beauty, and hairdressing services, as well as construction and home renovation services. These services are usually provided by blue-collar workers and, therefore, it is only natural that they look for ways to earn income without paying more taxes. Moreover, the prices of these services are

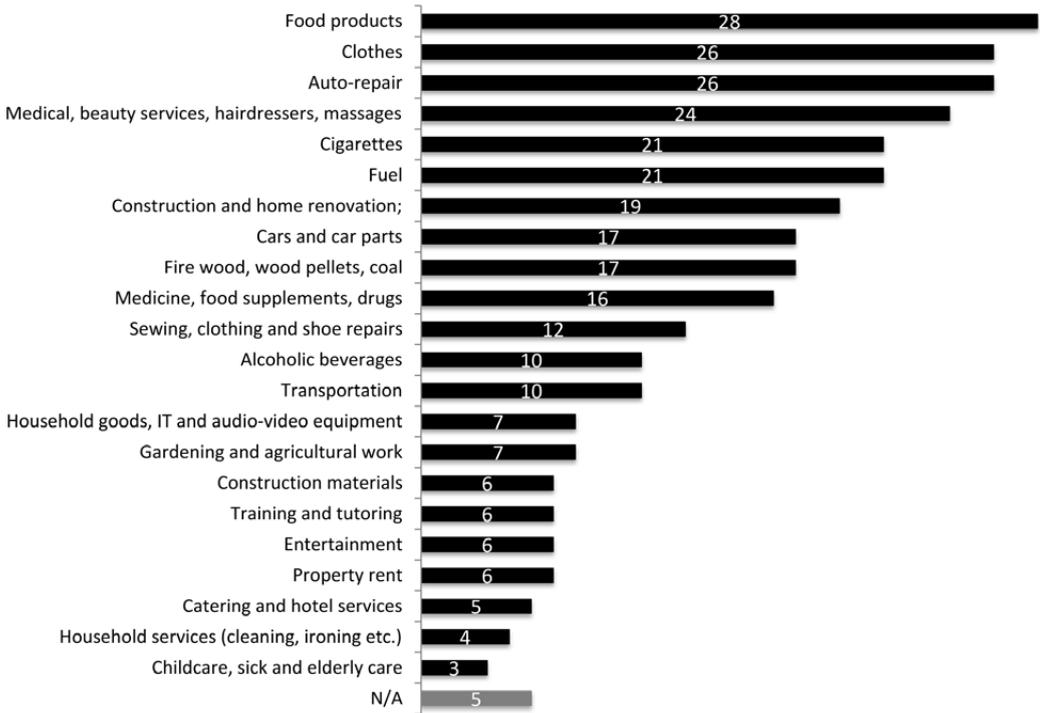
still relatively high for the average consumer, therefore, providers and consumers of these services are both interested in making unofficial deals.

Among other popular purchases, participants of the survey also mentioned such products as cigarettes (21%) and fuel (21%). This is a great example of highly regulated areas. While the government is trying to reduce cigarette and alcohol consumption through high excise taxes, people still try to satisfy their demand by looking for cheaper options on the black market.

A similar scenario exists with high taxes for fuel. They not only contribute to the growth of the shadow economy, but also lower revenues for the government. Therefore, the government is neither able to repair roads nor undertake other planned projects to be financed by the imposition of such taxes in the first place. More on regulation of these areas can be read in the previous LFMI "Lithuanian Shadow Economy" report.

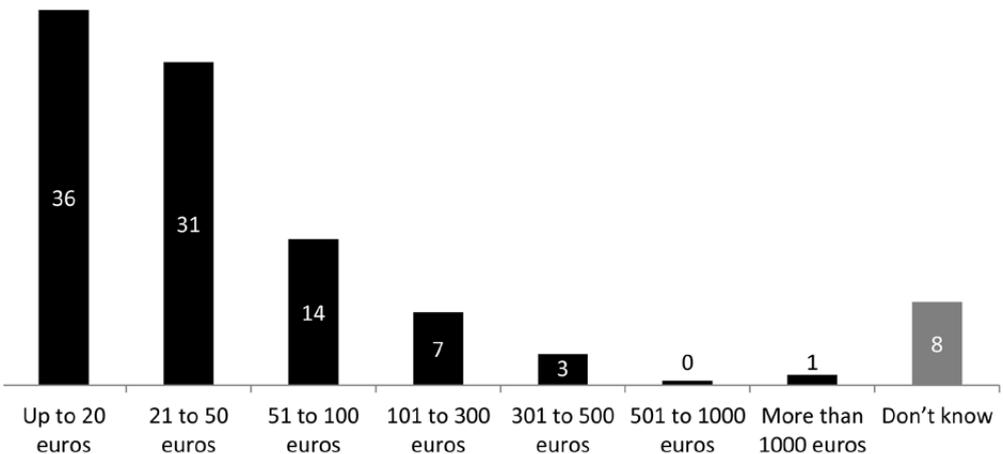
People tend to spend low amounts of their income on unregistered goods and services. The average amount spent on un-

Figure 16: What types of goods or services have you bought in any of the abovementioned ways (illegally or when the seller did not register the revenue) during the last 12 months?



Source: LFMI survey data

Figure 17: Approximately how much money have you spent on these goods and services per month?



Source: LFMI survey data

registered goods and services ranges from about 45 to at least 94 euros per month. The median amount spent per month is 21 to 50 euros. [See Figure 17]

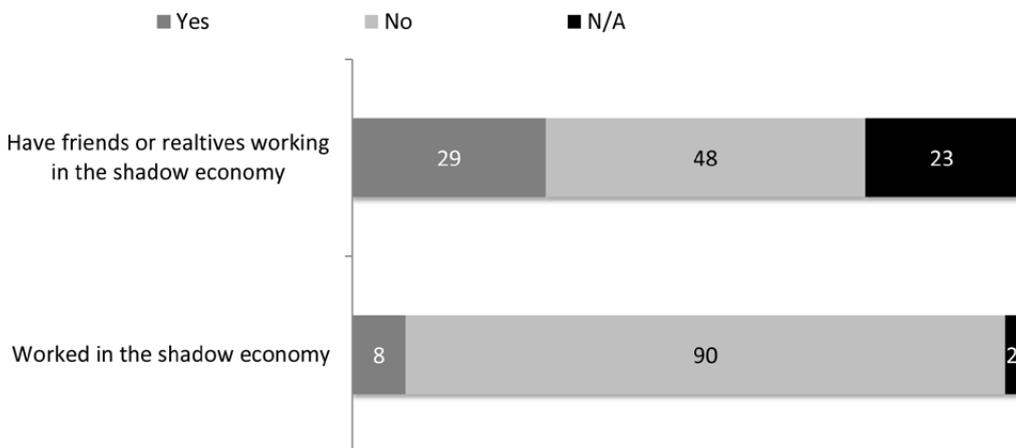
The distribution of the amounts spent on unregistered purchases appears to be positively skewed, meaning that most people are spending low amounts on these unregistered goods. Research shows that women, people living in rural areas, those with lower education and unsatisfied with government services spend the lowest amounts. This, however, does not mean that people are only spending insignificant amounts on illegal purchases. On the contrary, smaller amounts spent on unregistered goods and services suggest that it is most likely that the people, who are making these purchases, are from low-income groups. While 20, 50, or even 100 euros might not be a large amount of money for rich households, for a person receiv-

ing only 325 euros (the minimum wage in Lithuania), it is a very large portion of their income. Therefore, this finding serves as another proof that most people who are involved in shadow economy practices come from low-income households. If the amounts spent on unregistered purchases were larger, then that might mean that they are most likely spent by richer households, since a low-income person does not possess such amounts.

### WHAT DRIVES UNDECLARED LABOR?

The last part of the survey was dedicated to learning about people's experience in the shadow labor market. Since shadow employment is a sensitive topic and people might not be willing to discuss their experiences in detail, the participants of the survey were not only asked about their own experience, but also about the experience of their friends and relatives.

Figure 18: Have you worked in the shadow economy (without a legal job contract or when a part of wage has been paid as an "envelope wage") or do you have any relatives or friends that were involved in shadow employment in the last 12 months?



Source: LFMI survey data

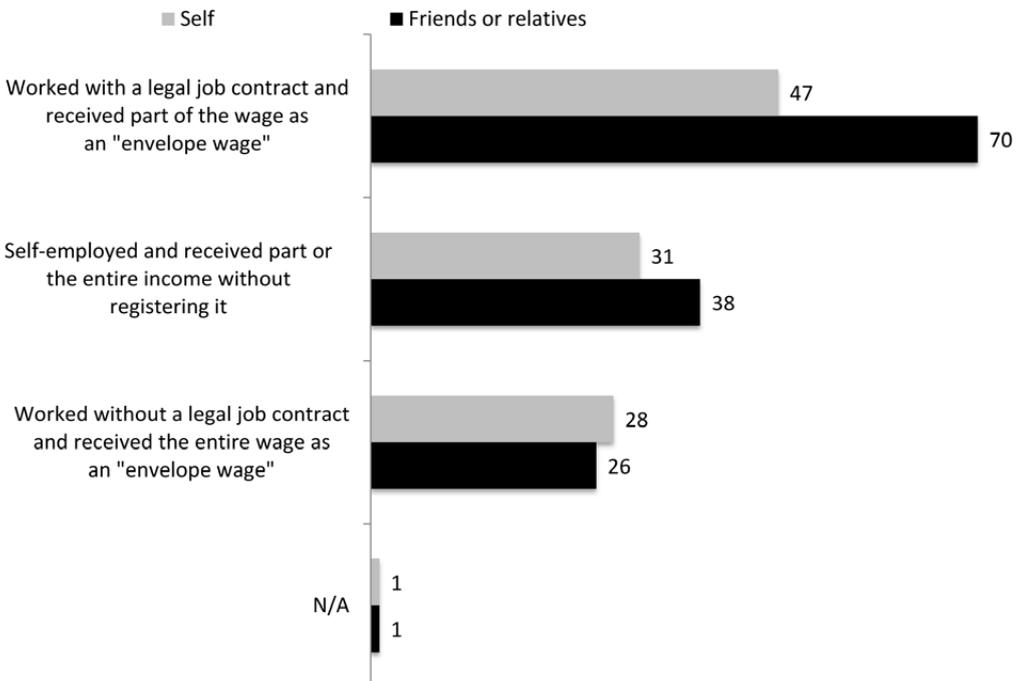
The results of the survey show that people have more friends or relatives involved in the shadow labor market than are involved themselves. Almost a third of all research participants on average knew 4.2 people who were involved in the shadow labor market. [See Figure 18]

While almost a third of all respondents indicated that they know someone involved in the shadow economy, only 8% confessed that they themselves have experience working in the shadow labor market. This distribution of responses might have occurred for a couple of reasons. Firstly, there is a statistically higher chance that a person knows at least one other person involved in the shadow economy apart from themselves if they are involved. Secondly, people might be less willing to share information about their personal experiences because shadow employment is a sensitive subject with serious consequences if detected.

Furthermore, the participants were also asked to indicate what kind of shadow employment they and their friends or relatives were most likely involved in. Respondents were given an option to indicate more than one answer in order to determine the most popular types of illegal employment.

The vast majority of respondents, who admitted knowing someone in the shadow economy or confessed that they have been involved in such an activity themselves, claimed that the most popular form of shadow employment among them and their friends was working with a legal job contract and getting part of the wage as an "envelope wage". As many as 70% indicated that their friends and relatives participated in this form of shadow labor, and 47% stated that they themselves worked in this way. [See Figure 19]

Figure 19: What kind of shadow employment have you and/or your friends or relatives had?



Source: LFMI survey data

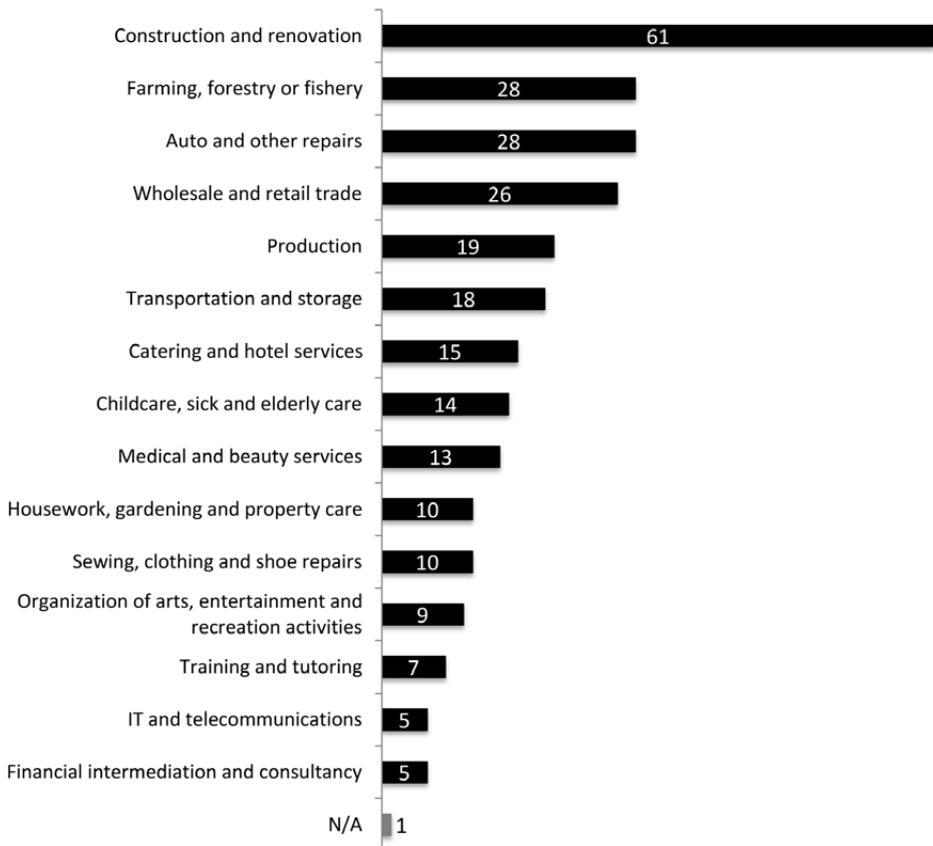
The distribution of answers about the types of personal shadow employment matches the one about the experiences of the respondents' families and friends. Among other popular forms of shadow labor appear to be self-employment when all or part of the income was not registered and work without a legal job contract when the entire wage is paid in an "envelope". [See Figure 20]

Participants who had friends or relatives engaged in the shadow economy were also asked to identify the main areas of shadow employment that they believe their friends and relatives have been participating in

within the last 12 months. In order to determine the most popular areas of shadow labor, participants were given multiple answer options, meaning that participants were allowed to indicate more than one area.

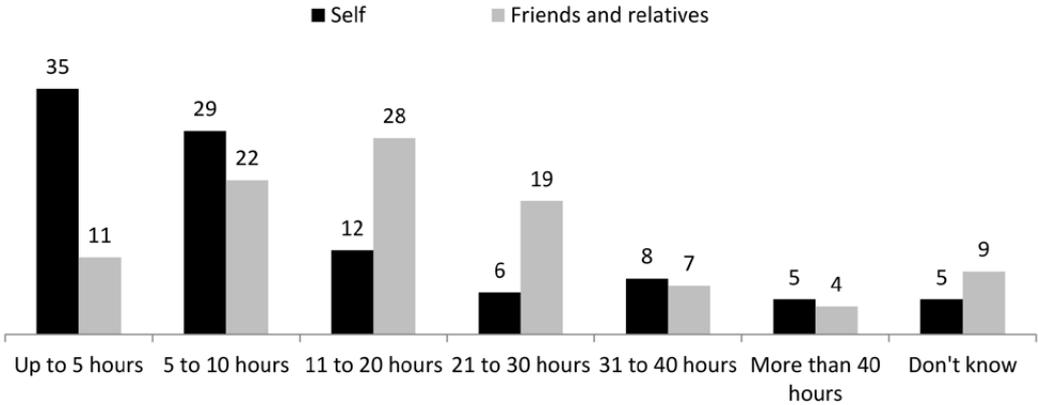
The answers provided by respondents show that the biggest participation rate was among blue-collar positions. Construction and renovation were the most popular areas, followed by farming, auto-repairs, production, transportation, wholesale and retail trade, etc. Higher paid positions, such as in telecommunications, IT, financial intermediation and consultancy, were among the least popular answer choices.

Figure 20: In what area(s) have your friends or relatives taken part in shadow employment in the last 12 months?



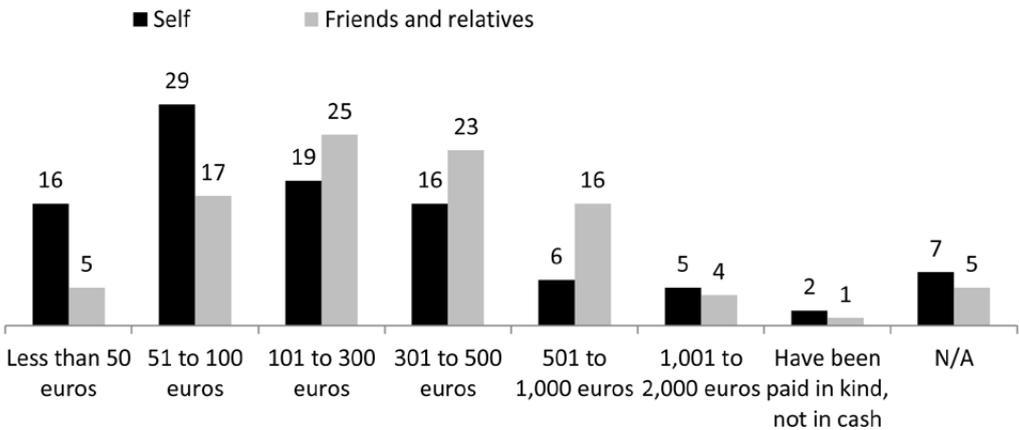
Source: LFMI survey data

Figure 21: How many hours have you and your friends or relatives spent on average per week on these activities in the last 12 months?



Source: LFMI survey data

Figure 22: How much have you and your friends or relatives earned on average from shadow employment in the past 12 months?



Source: LFMI survey data

In addition to the previous questions, participants of the survey were also asked to identify an approximate amount of time spent on shadow economic activities per week over the last year, as well as the amount of money earned on average from shadow employment over the last 12 months. A careful analysis of the survey data reveals that, based on the amount of time spent working and the amounts of cash earned, people were most likely to be engaged in part-time jobs or were paid for one-time projects. [See Figure 21]

The results show that more than half of the survey participants (61%), who admitted knowing someone working in the shadow economy, indicated that their friends or relatives spend on average 20 hours or less per week working in the shadow economy. The average time spent on illegal practices per week by friends or relatives ranges from 13 to at least 21 hours, while the median time indicated by the respondents is 11 to 20 hours.

The official working time of a full-time position in Lithuania currently is 40 hours per week. The fact that more than half of all respondents claimed that their friends or relatives were working 20 hours per week or less in the shadow labor market, indicates that their employment was most likely in the form of overtime, a part-time job or a temporary project.

A similar situation is also observed when analyzing answers provided by survey participants about themselves. The absolute majority (76%) indicated that they have spent 20 hours or less working in the shadow economy, therefore supporting the proposed assumption that illegal employment usually takes the form of part-time or temporary work.

This view is also supported by the amount of income earned while working in the shadow labor market. Almost half of all research par-

ticipants who admitted knowing someone in the shadow labor market indicated that their friends or relatives were earning up to 300 euros worth of wage. Furthermore, 70% of the respondents indicated that the total amount earned was 500 euros or less.

As for the monthly earnings of the participants who have worked in the shadow economy themselves, 64% indicated they were earning up to 300 euros, while 80% claimed that they earned up to 500 euros. [See Figure 22]

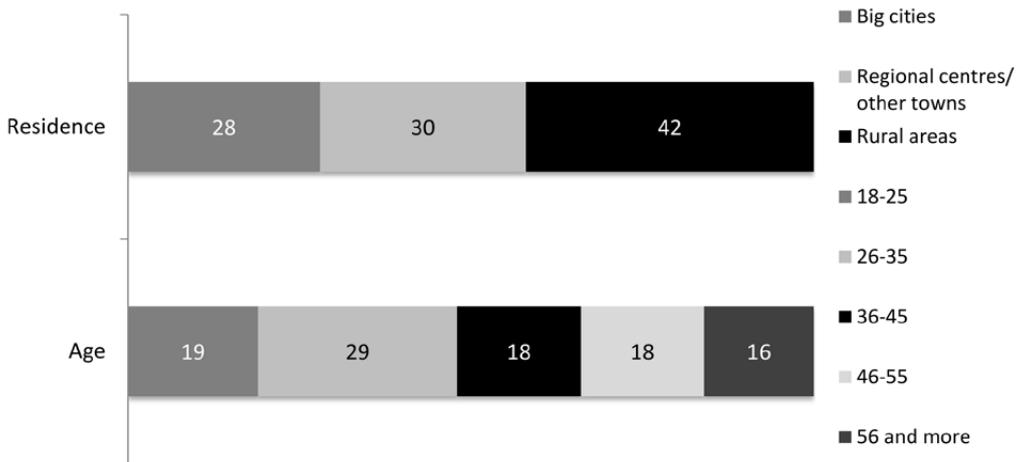
The level of income earned and the time spent in shadow employment discussed above suggest that these are mostly part-time or side jobs. The low amounts of income earned on the shadow labor market show that people are not engaged in shadow economy practices due to the high earnings. Similarly, if shadow economic activities were highly profitable, people would spend more time engaged in them, and this does not appear to be the case.

## WHO GOES INTO THE SHADOW ECONOMY?

The previously presented analysis of the survey of participants' experience in the shadow labor market together with a detailed analysis of their socio-demographic characteristics revealed a set of features that are common for people who have been engaged in shadow employment. The following characteristics were determined based on the answers provided by respondents who admitted that they have worked without a legal job contract or at least received part of their wage in an envelope. The distinction between the answers of those who have never had such an experience and those who admitted that they had, has helped to create a profile of an average person working in the shadow economy.

The analysis of the socio-demographic characteristics reveals that almost a third of all participants (29%) involved in the shadow econ-

Figure 23: Respondents who worked in the shadow economy (without a legal job contract or when part of the wage has been paid as an “envelope wage”)



Source: LFMI survey data

omy indicated that they were 26–35 years old. The average age appears to be 34–42 (or more), while the median age is 36–45 years. As for residency, 42% of participants that have been working in the shadow economy indicated that they were living in rural areas. The difference appears to be significant at the 95% confidence level. [See Figure 23]

When asked about their occupation, as many as 62% of respondents in the shadow labor market indicated that they had a legal full-time job, while a little over a quarter (27%) claimed they are unemployed. Furthermore, the majority of respondents involved in the shadow labor market indicated that their legal income is up to 500 euros, with 35% stating that they earn 301–500 euros per month. The average monthly earnings appear to be from 358 to at least 588 euros, and the median salary from 301 to at least 500 euros. [See Figure 24]

People tend to spend little time and earn low amounts of cash in the shadow labor market, suggesting that shadow employment is usually in the form of a part-time job, overtime or a one-time project. [See Figure 25]

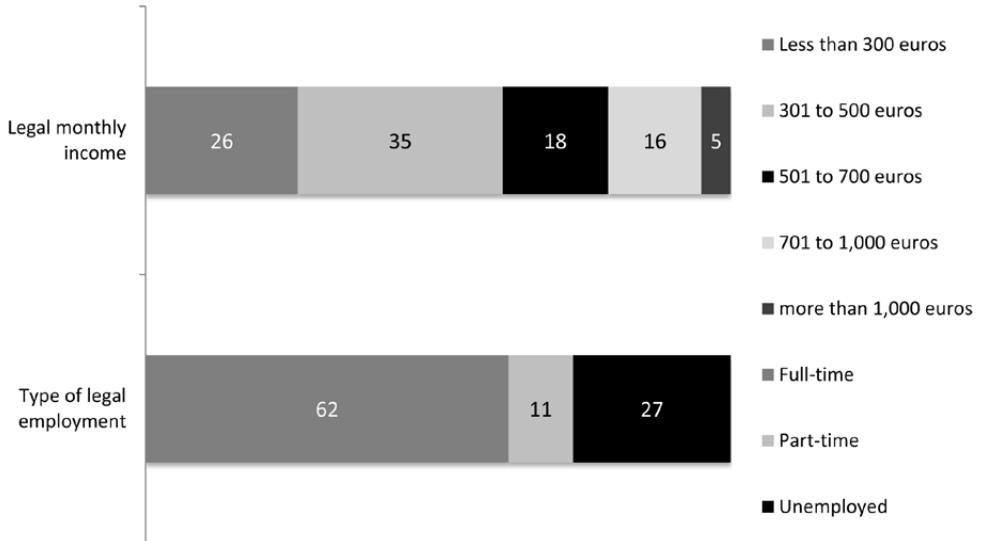
The majority of respondents who admitted they have shadow employment experience indicated that they spend up to 10 hours per week working in the shadow economy. The average time spent is 9–15 hours, while the median is 5–10 hours. Earnings made on the illegal market appear to be low with around a third of all participants engaged in shadow employment earning 51–100 euros per month. The average earnings from illegal employment appear to be 177–365 euros, and median 101–300 euros.

## CONCLUSIONS

To summarize, the survey of people’s perceptions of and attitudes towards the shadow economy conducted by the LFMI revealed some significant findings:

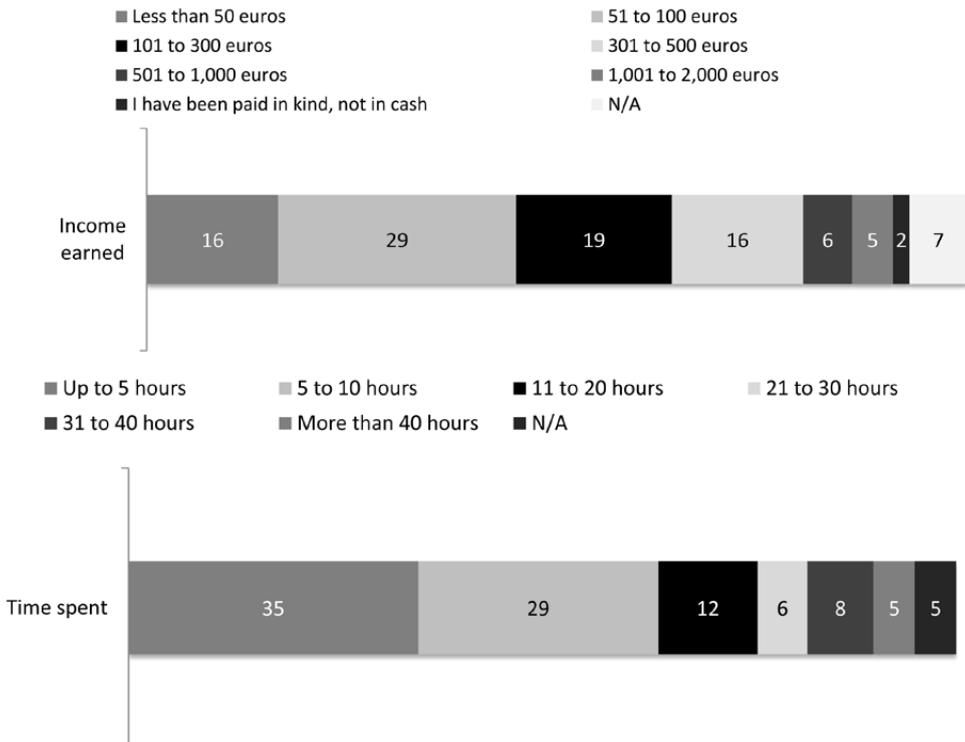
- People tend to believe that the likelihood of being detected and the severity of the punishment are higher when working without a legal job contract or getting at least part of the wage as an “envelope wage” than when purchasing a good or service from a seller who is illegal or does not register the payment.

Figure 24: Respondents who worked in the shadow economy (without a legal job contract or when part of the wage has been paid as an “envelope wage”)



Source: LFMI survey data

Figure 25: Approximately how many hours have you spent on these activities per week and how much have you earned from shadow employment per month? If you have worked with a legal job contract when part of the wage was paid as an “envelope wage”, indicate how many hours of your work correspond to illegal income.



Source: LFMI survey data

- The opinions of those with and without experience in the shadow economy can differ significantly. The perception of the likelihood of being detected appears to be much lower among people who were previously engaged in shadow economic activities. They also believe that the punishments are more severe for illegal employment and milder for making illegal purchases when compared to participants who do not have such experience.

- People are more likely to justify “envelope wages” and purchases without receipts than working without a legal job contract or buying from illegal sellers.

- People who were previously involved in the undeclared labor market, those unsatisfied with the government and low-income households are the most likely to justify shadow economic activities.

- The small likelihood of being detected, mild punishments and low morale are not the main reasons for the shadow economy. People believe that high labor taxes and high prices are the key drivers of undeclared labor and unregistered purchases.

Moreover, evidence about people’s experience with unregistered purchases and shadow employment also leads to some interesting conclusions:

- A significant proportion of people have experience with unregistered purchases. These purchases are more common among people who have work experience in the shadow economy.

- The most popular unregistered purchases are primary consumer goods, high priced goods and services, and highly regulated goods.

- The most popular form of shadow employment is working with a legal job contract when part of the wage is paid as an “envelope wage”.

- The amount of income earned and time spent in shadow economic activities suggest that these are mostly part-time practices.

Finally, most people engaged in undeclared labor are between 26 and 35 years old, they are residents of rural areas, have legal full-time jobs and lower or average levels of income, and they work in the shadow labor market part-time, overtime or on a one-time project basis.●



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JULIJA  
SIMIONENKO-KOVACS

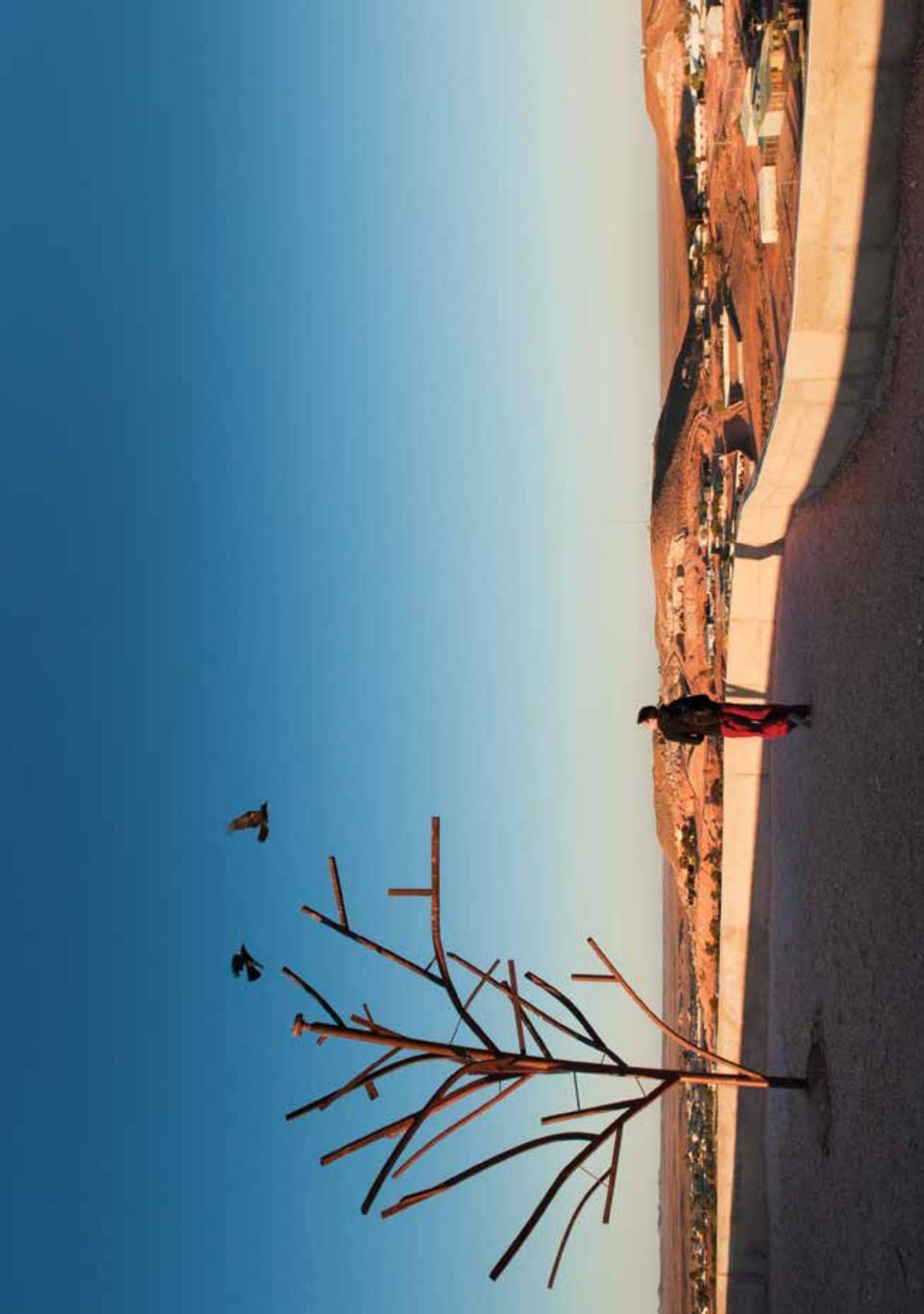
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# Vicious Circle of Small Scale, Low Productivity and Shadow Economy in Poland



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ALEKSANDER  
ŁASZEK



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RAFAŁ  
TRZECIAKOWSKI

Both anecdotal evidence and available studies indicate that a significant part of economic activity in Poland remains hidden in the shadow economy. The large scale of the unofficial sector has serious negative consequences for economic growth in Poland. Most obviously, businesses staying in the shadow avoid taxation, thus reducing public sector revenue which leads to higher tax burdens for legal businesses, necessary to make up for forgone revenues. What is even more important, the shadow economy distorts competition – companies not paying taxes and avoiding state regulations benefit from unfair advantage against law-abiding entities. Moreover, the shadow economy discourages investment and deeper specialization, as companies operating in such circumstances lack collateral needed to finance investments and prefer to stay as flexible as possible.

**T**he presented article gives an overview of the existing estimates of the size of the shadow economy in Poland and discusses its potential drivers – starting with the ample supply of unregistered labor, we go through the regulatory costs and uncertainty that discourages companies from increasing the size of their operations. Finally, it analyses the implications for productivity of the limited scales of operations and shows how the shadow economy enables less productive companies to stay afloat.

#### **WIDESPREAD SHADOW ECONOMY**

Estimates of the shadow economy in Poland are prepared on an annual basis by the Central Statistical Office (GUS) of Poland, but seem underestimated when compared to other studies. Additionally, the Polish Institute for Market Economics (Instytut Badań nad Gospodarką Rynkową, IBnGR) presents its own estimates on an annual basis; taking GUS estimates as the start-

ing point, they correct them for the areas of unregistered activities not accounted for by GUS.

In its annual publication, the Central Statistical Office of Poland (GUS, 2014a) estimates that the shadow economy accounts for around 15% of GDP. This number takes into account both unregistered (usually around 13%-14% of GDP, 14.5% in 2012) and illegal activities (below 1% of GDP, 0.8% GDP in 2012). The value of the estimated unregistered activities is twofold.

On the one hand, the officially reported values of production (per person employed) in companies employing below 50 persons are compared to expert estimates of the per person productivity in a given sector. The difference is considered as the degree of underreporting. Such methodology takes the outright assumption that in the corporate sector, shadow activities are concentrated in small companies.

On the other hand, a comparison between the registered unemployment and survey data (labor force survey) allows to check for undeclared work served by households. According to GUS, in 2012 the main source of the shadow economy was underreported work in registered entities, which accounted for 11.2% of GDP; work in unregistered entities constituted 3.3% of GDP. When it comes to illegal activities, the bulk of value added was created in drugs (0.6% of GDP), with remaining parts attributed to cigarette smuggling (0.15% of GDP) and prostitution (0.05% of GDP).

The Polish Institute for Market Economics (Lapinski et al., 2015) annually publishes its own studies, estimating the size of shadow economy at around 20% of GDP<sup>1</sup> (19.5% of GDP in 2014). This figure includes both the 14%-15% reported by GUS and additionally around 5% estimated by IBnGR. The institute bases its figure on an expert estimate of the value of 50 economic activities not sufficiently covered by GUS. The most important activities are: retail trade (not taken into account by GUS illegal trade in fuels and underestimated street markets/online shops), gambling, and shadow education.

As far as older in-depth studies are concerned, in 2007 a major study on undeclared work and shadow economy was conducted by two independent research teams for the Polish Ministry of Labor and Social Policy. Although the main focus was on undeclared work (estimated to constitute 10% of the labor force), estimates of the shadow economy based on the demand for cash and electricity were also made, putting the size of the shadow economy at slightly above 20% of GDP.

A recent study for the Mazowieckie Province (WUP 2015) puts the share of households making purchases in the shadow economy at around 15%, while the share of households supplying shadow labor at 7.5%. In this case, the lower percentage of workers in the shadow economy than in the abovementioned reports might be caused by the actual questions asked (in the study of Mazowieckie Province the question about the shadow economy concerned only the head of household). One can speculate that the main bread winner is more likely to do legal work than the second bread winner, who is not included in the WUP study, but taken into account by IBnGR and other sources. Still, wider review of the literature concerning the shadow economy (Pasterniak et al. 2014) gives brackets concerning the work in the shadow economy ranging from around 5% to 10% of the labor force.

### **WHAT DRIVES THE SHADOW ECONOMY IN POLAND AND HOW?**

While discussing the potential drivers of the shadow economy in Poland, it is useful to distinguish between (a) factors affecting households' decisions about providing work in the shadow economy, (b) factors affecting households decisions to consume goods and services purchased in the shadow economy (c) factors behind firms' decisions to buy inputs and sell outputs in the shadow economy and finally interactions between (a), (b) and (c). The most obvious is point (b). As the results from recent representative population surveys in the countries of the Baltic Sea region conducted by Spinter Research (Spinter, 2015) and the Lithuanian Free Market Institute, people purchase unregistered goods and services because it is cheaper or they do not know (and probably do not care) whether the purchase is legal or not. Thus, the main focus of the presented article will be on the supply of unregistered labor and the be-

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<sup>1</sup> Where GDP = reported activities + shadow economy estimates by GUS + part of shadow economy not covered by GUS and estimated by IBnGR.



havior of companies. Special attention will be paid to the factors that are particularly specific to Poland.

### UNREGISTERED LABOR IN SUPPLY

The tax wedge is the most obvious driver of undeclared work, but let's bear in mind that its impact is nonlinear. Results of the Spinter (2015) survey indicate that a higher "envelope wage" is the most frequently mentioned motivation for work in the shadow economy. Although this seems to be a rather universal conclusion, in Poland the effect is enhanced by the flatness of the tax wedge at the lower end of the scale (see Figure 1). This is particularly important because research indicates that low productivity workers are particularly sensitive to the size of the tax wedge (OECD 2006).

In the absence of a well-designed policy, that could boost employment of low productivity workers through targeted tax credits (see for example Batyra and Sneesens, 2010), the gap is partially filled by the shadow economy, which creates employment opportunities. This intuition is backed by our model, based on the results of a survey (LMFI/FOR, forthcoming), indicating that low earners are more likely to work in the shadow economy. Combining a legal but low wage job with additional unregistered work lowers the effective tax wedge. [See Figure 1]

Another issue is the poor design of social protection schemes, which creates incentives to remain in the shadow economy. In Poland, the majority of support through tax and benefit systems is conditional on income with rigid thresholds. Such a design, combined with the lack of coordination between the different policies, results in cases where an increase in gross income decreases net income. This happens when an increase in the working income is outweighed by the withdrawal of social ben-

efits after breaching the income criteria. Such a faulty design is particularly visible in the financial support for families with children (Myck et al. 2013).

Furthermore, some pension schemes are conditioned on not working. It is thus not a coincidence that housewives, pensioners and the unemployed more often than the rest of survey participants mentioned, fear losing social benefits as the reason for unregistered work (LMFI/FOR, forthcoming).

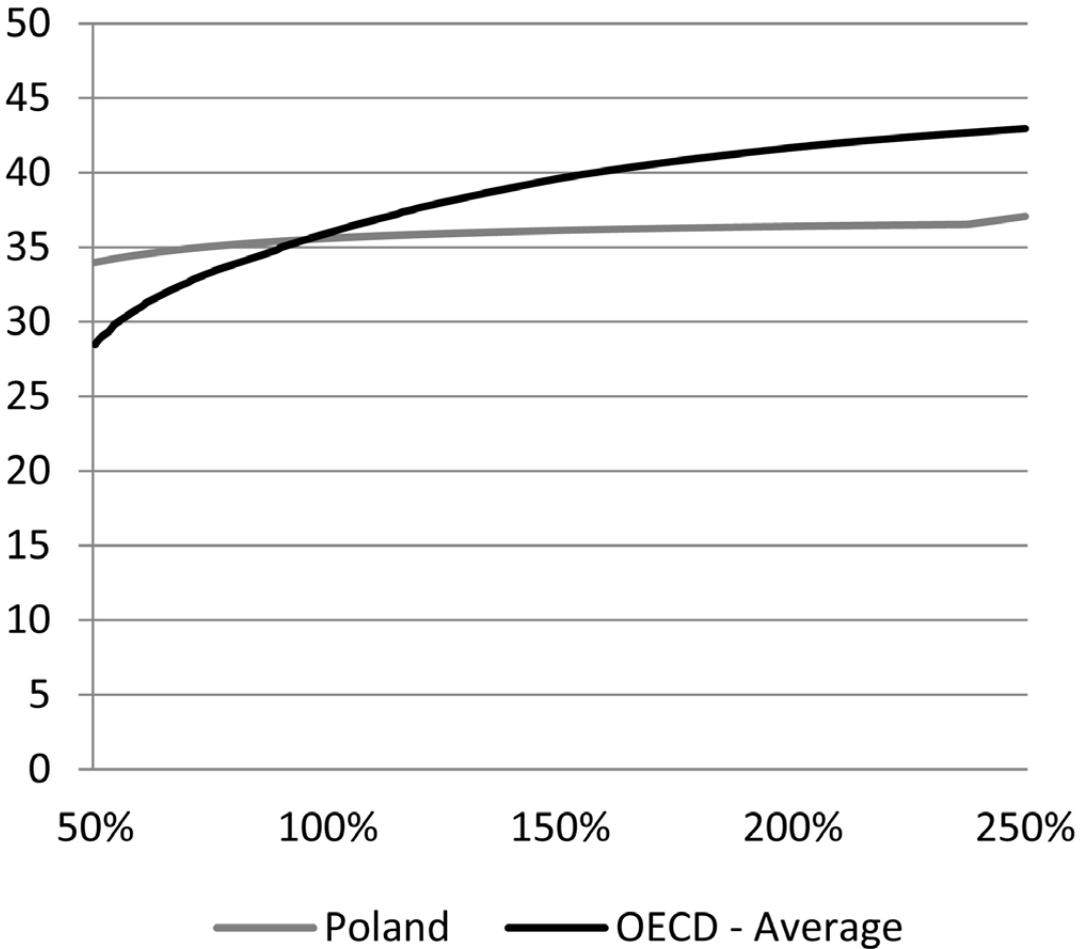
One could also point to other sector-specific institutions that drive the supply of unregistered labor. For example farmers, as long as they do not report a meaningful income outside of agriculture, are exempt from the aforementioned high tax wedge. Farmers in Poland pay a small lump sum contribution into a dedicated insurance scheme (KRUS) for farmers and are exempt from income tax (instead, they pay a special farm tax, also similar to a lump sum tax). Both schemes are very attractive, so in order to remain entitled to them, farmers hide other sources of income, contributing to the supply of the unregistered work force.

Moreover, some restrictions targeting particular goods and services might also stimulate the shadow economy. Apart from typical, obvious cases (high taxes on cigarettes, alcohol and fuel) one can point towards the ban on gambling (recently introduced after a major political scandal concerning casinos).

### OBSTRUCTED LEGAL BUSINESS ACTIVITIES

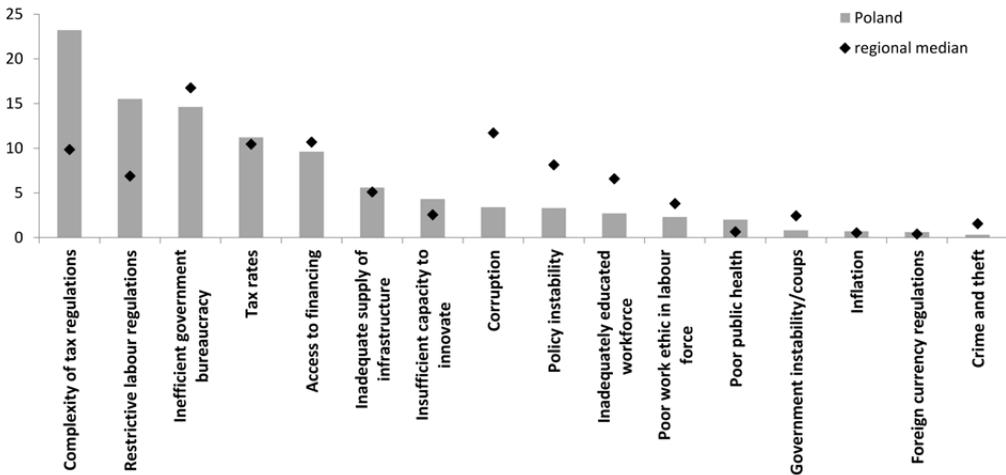
The complexity of tax regulations in Poland is the single biggest obstacle reported by businesses, so avoiding tax regulations can be an important benefit of staying in the shadow. In order to identify the main reasons for shadow activities of compa-

Figure 1: Tax wedge in Poland (red) and OECD countries (blue), 2014



Source: Own elaboration based on the OECD data

Figure 2: The most problematic factors for doing business, GCR 2014/2015



NOTE: Respondents were asked to select the five most problematic factors for doing business in their country from the list and to rank them between 1 (most problematic) and 5. The score corresponds to the responses weighted according to their rankings. The regional median was calculated for: Bulgaria, Czech Republic, Croatia, Estonia, Hungary, Latvia, Lithuania, Romania, Slovakia, Slovenia.

Source: Own elaboration based on the data from the "Global Competitiveness Report" (World Economic Forum)

nies, let's start with taking a look at a list of major problems reported by those entities. To have the broadest perspective possible, we have reviewed 12 different surveys concerning major obstacles for businesses – the results point to the complexity of the tax code (not tax rates!) as the biggest problem for enterprises in Poland. [See Figure 2]

Such an outcome is confirmed by Poland's poor performance in the World Bank's Doing Business reports. Although Poland ranks 32<sup>nd</sup> overall, in terms of the ease of paying taxes, Poland fares far worse and occupies 87<sup>th</sup> place, mainly due to the length of the process and number of payments, both well above OECD averages (on the other hand, the total tax rate is below the OECD average). To a large extent, taxes are responsible for the fact that the administrative costs<sup>2</sup> in Poland are much

higher than in other EU countries. According to estimates by Deloitte, in 2008 those amounted 6% of GDP compared to 3.5% of GDP in other EU countries<sup>3</sup>. 44% of those costs are generated by the three tax acts: PIT, CIT and VAT. Since 2008, the overall administrative costs have indeed fallen, but not enough to bring them to the level of other European countries. Based on RIAs (regulatory impact assessments) of four deregulation bills, this decline can be estimated at approx. 0.5% of GDP.

The tax system in Poland is not only complicated, but also unstable. Each of the tax laws and the general tax code have been amended on average, at least several times a year. The Ministry of Finance publishes more than 150 individual tax interpretations daily. Nearly three thousand interpretations

<sup>2</sup> Administrative costs are the costs imposed on businesses, when complying with information obligations stemming from regulations.

<sup>3</sup> Own calculation based on the data from: <http://www.administrative-burdens.com/>

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Tracy's UNDERGROUND HOME

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DESERT VIEW MOTEL  
UNDERGROUND APARTMENTS

RADISSON  
SUNSHINE COAST  
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Old Timers Mine  
Historic Opal Mine

DERGROUND B&B

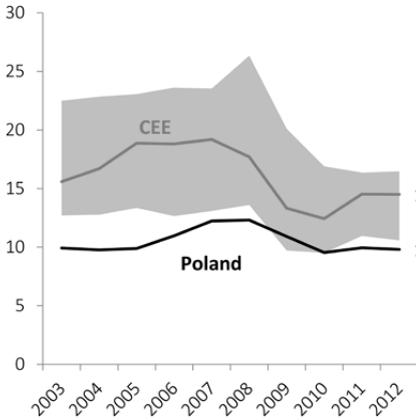
LOOKOUT CAVE  
UNDERGROUND ACCOMMODATION



DRY AREA  
NO DRINKING WATER  
NO SWIMMING  
NO BOATING

- NO SMOKING
- NO ALCOHOL
- ALL GUESTS MUST  
SHOW ID
- NO DRINKING WATER  
NO SWIMMING
- NO BOATING
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Figure 3: Business investment (% GDP), Poland and region



The gray area in Figure 3 represents the range of investment rates in the region, from countries with the lowest to the highest investment rate

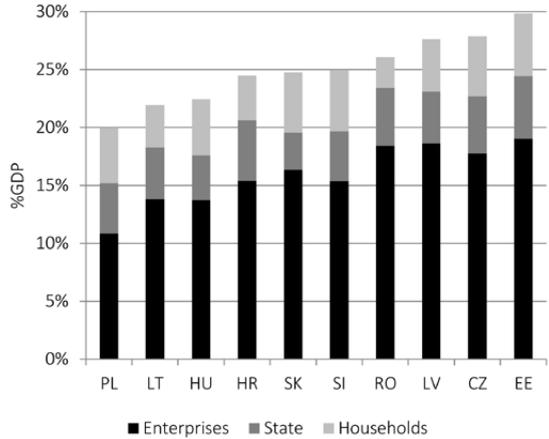
Source: Own elaboration based on Eurostat data; for further description see also FOR (2015)

yearly are appealed against before the administrative court, which declares more than half of the complaints as substantiated.

Complex and unstable tax legislation mutually reinforce their negative impact on business and investment. On the one hand, if the tax system was complicated, but stable, its learning would entail a one-off cost. If the rules are constantly being changed, tracking them has no end. On the other hand, if taxes were often changed, but simple, it would be possible to identify potential scenarios and prepare for each of them. When the number of parameters in the tax system that are subject to change is high, an analysis of potential scenarios becomes very difficult, if at all possible. These difficulties discourage from undertaking projects, which could entail serious losses, particularly investment in machinery, especially of a type not used by other entities.

The instability of the tax law is a manifestation of a wider problem of legislative inflation, which makes it very diffi-

Figure 4: Investment by institutional sector in 2003-2012

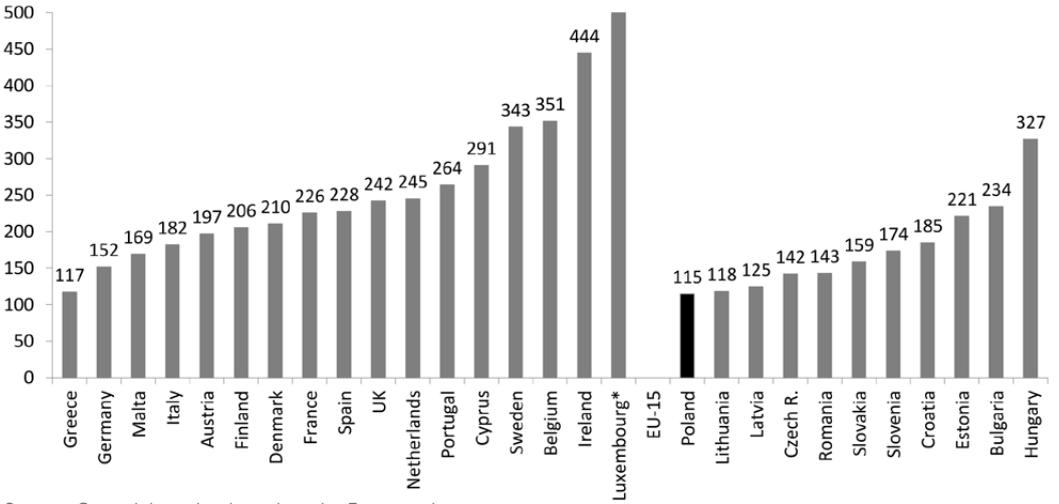


cult for people to assess whether they are acting in compliance with the regulations. Last year, almost 26 thousand pages of legislation entered into force in our country. In this regard, we outrun not only the Czech Republic, Slovakia and Hungary, but even France or Italy, often seen as abundant in red tape. If one wanted to familiarize oneself with all the changes in legislation being introduced in Poland, one would have to spend about 3 hours and 26 minutes reading about them each day (Grant Thornton, 2015).

## REGULATIONS LIMIT BUSINESS OPERATIONS

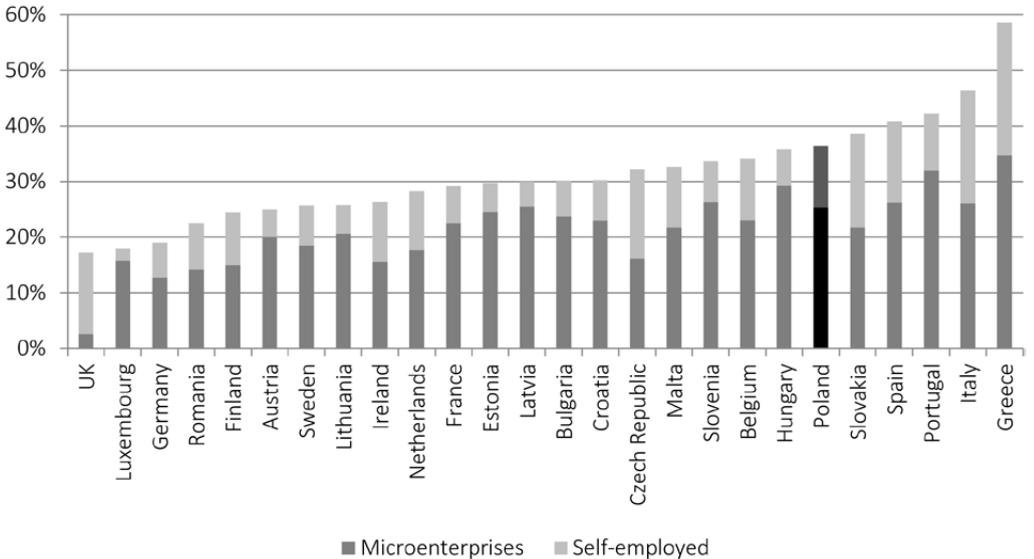
Business in Poland adapted to such an unstable regulatory environment by limiting investment and remaining as flexible as possible. During the previous 10 years, corporate investment in Poland was just over 10% of GDP, compared to the regional average exceeding 16% of GDP. Poland also stands out with the smallest assets of non-financial corporations in Europe, which confirms the limited scale of enterprises. [See Figure 3, 4, 5]

Figure 5: Assets of non-financial corporations 2012 (% of GDP)



Source: Own elaboration based on the Eurostat data

Figure 6: Employment share of microenterprises in the business sector



Source: Own elaboration based on the Eurostat data

Remaining flexible often means remaining very small. In Poland, microenterprises (employing less than 10 people) account for 36% of employment in the business economy, compared to 31% of the EU average and only 18% in Germany. A larger share of employment than in Poland is only in Slovakia and the following southern European countries: Cyprus, Spain, Portugal and Italy. Such an overrepresentation of microenterprises cannot be explained by the prevalence of self-employment or the sectoral structure of the Polish economy. Taking into account only enterprises with at least 2 workers (thus eliminating self-employment) or taking an unweighted average of the employment share of microenterprises by sectors (thus eliminating the impact of the differences in size of the particular sectors between countries) do not change the results. [See Figure 6]

Apart from limiting the irreversible costs associated with building company structures, the small scale of business means a less strict regulatory regime. The smallest companies in Poland are allowed to run simplified bookkeeping and are exempt from selected rules of the labor code. Such exemptions are justified – it can be shown that the cost of compliance with complicated regulations such as the tax code place a particularly heavy burden on smaller operators, provided that they act lawfully and are of a size at which they are covered by the same rules as larger companies. For example, in Canada, New Zealand and the UK they absorb 2% of annual sales in a company with revenues of less than USD 50 thousand, but only 0.04% in companies with sales in excess of one million dollars (GAO, 2011).

However, the large differences between simplified and normal regulatory regimes and poorly chosen thresholds

could have a detrimental effect on the competition. In our opinion, companies in Poland gain an advantage if (1) they conceal activities in the informal economy, (2) they have a size entitling them to employing simplified forms of taxation (which also helps them remain in the shadow), and (3) they are large companies, especially those that benefit from tax optimization.

Other regulatory thresholds, perhaps the use of a turnover tax instead of the regular CIT could also be a factor behind the small scale of enterprises and their participation in the shadow economy. Enterprises with turnover below EUR 150,000, with some exclusions, can choose to pay CIT at a lower tax rate levied on their turnover instead of the standard 19% CIT levied on profits. Rates of this turnover tax vary between 3% and 20%, depending on the sector of the economy. As one can easily guess there are virtually no companies operating at the 20% tax rate (such companies opt for the regular CIT) and the average tax rate is just 3.6%; 0.5 mn companies (out of 1.8 mn companies in total) opt for turnover tax.

The main benefit of choosing the turnover tax is its simplicity, as the documentation of costs is not necessary (the interpretation of what can be accounted as a cost and what cannot is the most frequent source of debate between the public administration and taxpayers). Simultaneously, such a tax creates multiple incentives to operate partially in the shadow economy. The low threshold means that companies which do not want to switch to the normal system are eager to underreport revenues, not only in order to minimize tax liabilities, but also to remain below the threshold. Furthermore, with no deduction of costs from the tax base, companies have

strong incentives to buy inputs in the shadow economy thus boosting their margins.

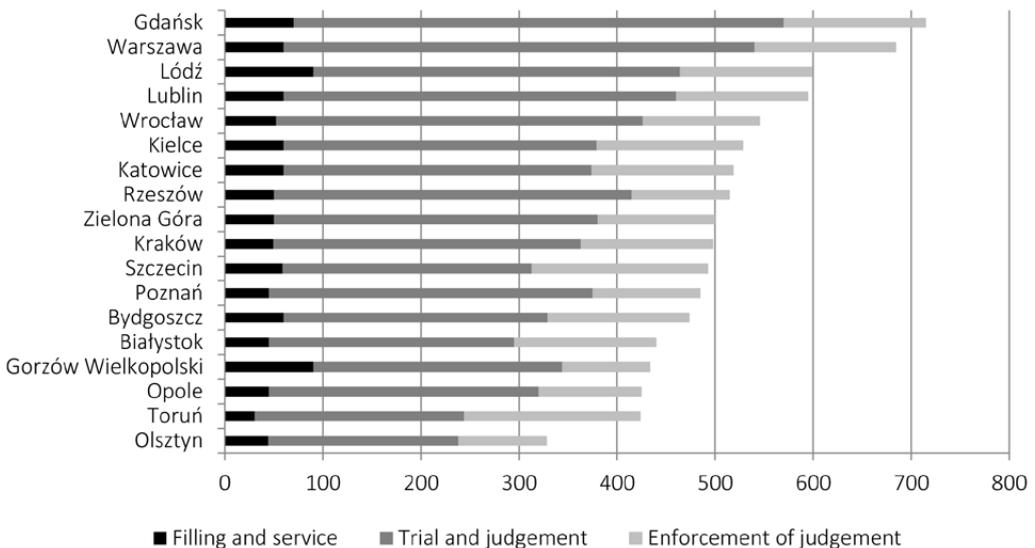
A review of literature on the subject indicates that the overrepresentation of microenterprises can be attributed also to a poorly functioning judiciary. An ineffective judiciary means that in cases of disputes the entrepreneur, even confident that he or she is right, cannot hope for a quick retrieval of due amounts from the Inland Revenue. Such an entrepreneur is also prone to serious problems with the recovery of debts owed by defaulting partners, which makes it difficult for him or her to fulfil timely own obligations, including the tax payments.

The average duration of contract enforcement differs strongly between regions (ranges from 328 days in Olsz-

tyn to 715 days in Gdansk), but is long everywhere (World Bank, 2015). This diminishes the level of trust between partners, and ultimately discourages specialization and operation on a large scale, where the relations between partners are depersonalized. Research indicates that the ease and certainty of debt recovery significantly increases the propensity of companies to invest (e.g. World Bank, 2005).

Indeed, the size of an average company is larger in the countries with more efficient judiciaries even among EU-15 Member States (Kumar et al., 2001; Rajan and Zingales, 2001). Sectors that rely heavily on intangible assets are particularly affected— an investment area in which Europe lags the United States after the financial crisis (van Ark, 2015). Furthermore, inefficient courts decrease the benefits of legal activity. If the enforcement of the

Figure 7: Average time of enforcing contracts



Source: Own elaboration based on the World Bank (2015) data

contract in courts is lengthy and costly, businesses might more often opt for informal contracts, thus avoiding taxes. [See Figure 7]

### OVER-SIZED MICROENTERPRISE SECTOR SUFFERS PRODUCTIVITY CONSEQUENCES

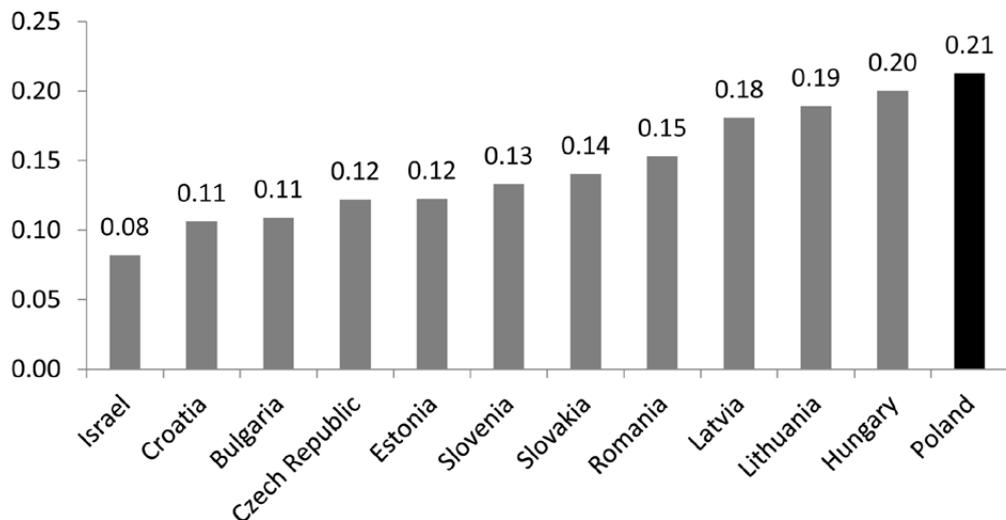
Regulatory uncertainty and problems with contract enforcement both discourage companies from investment and growth. Microenterprises in Poland invest over four times less than large companies. Although interpreting bank loans surveys is tricky, it seems that the low level of banking loans to private companies is more a result of low demand than banks' reluctance to grant a loan.

With low reliance on banking loan, microenterprises have no incentive for honest bookkeeping (underrecording of profits

might be beneficial for tax purposes but it also negatively affects credit applications). Such a modus operandi of micro-companies allows them to remain flexible, but also significantly lowers their productivity, which is also negatively affected by the lack of economies of scale.

Under normal circumstances, the competitive pressure should lead to the elimination of differences in productivity, forcing companies either to improve and expand or be eliminated. In Poland, distortions in market competition can be seen not only in the larger than elsewhere differences of business productivity, but also in higher mark-ups on costs than in the West and other countries of the region (Egert and Goujar, 2014), lower utilization of production capacity, and greater differences in profitability

Figure 8: Coefficient of variation of labor productivity (proxied by sales per employee), 2013



NOTE: Data was truncated from both ends; productivity in logarithms. Israel is shown as an example of a developed economy with a lower variation.

Source: Own elaboration based on the BEEPS data

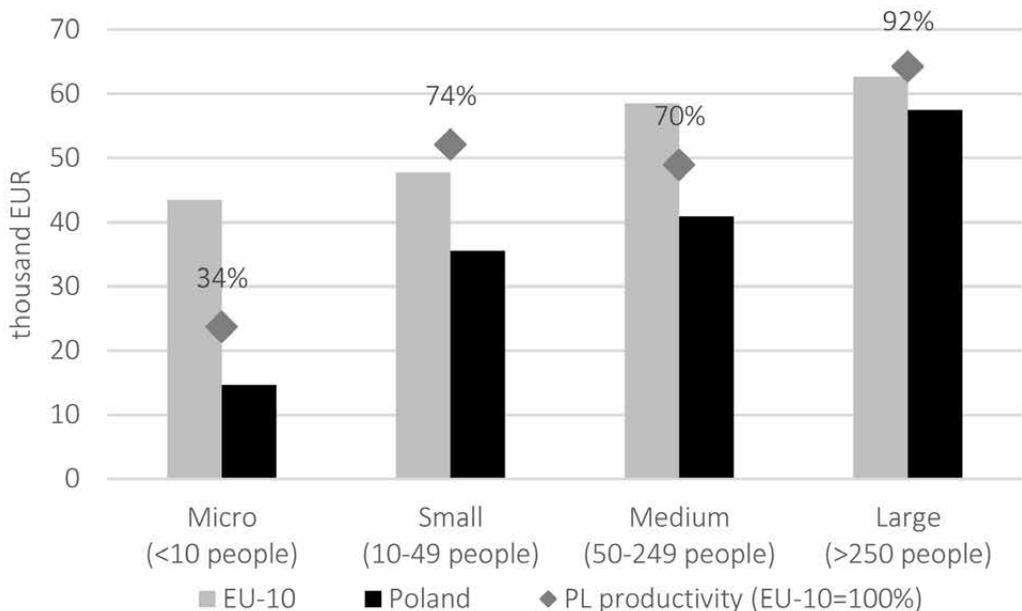
(Lewandowska-Kalina, 2012). The large scale of undeclared business activities has two effects.

Firstly, it inflates the differences in productivity – part could be attributed to underreporting. Secondly, it allows less productive companies to stay afloat despite lower productivity, artificially increasing their competitiveness through tax avoidance and circumventing burdensome regulations. One should also bear in mind that other factors also seriously distort competition in Poland, in particular the still large extent of public ownership and regulations limiting competition (for more see Łaszek et al., 2015). [See Figure 8]

The gap between productivity in Polish and Western enterprises is greatest for micro-enterprises, employing up to 9 employees. Their reported productivity does not exceed one third of the productivity of their counterparts from the old EU (excluding the peripheral countries), while in small and medium-sized enterprises (employing respectively 10-49 and 50-249 employees) this is lower by less than one quarter, and in large companies (with 250 or more employees) it is similar to the performance of large companies from the West (reaches 91% of their productivity). [See Figure 9]

Microenterprises are the least productive and most often operate in the shadow economy, what is clearly visible in the

Figure 9: Labor productivity (value added per employee) and company size, Poland vs. EU 10



NOTE: Data adjusted for differences in ppp. UE-10 encompasses: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Netherlands, Sweden, UK - Southern Europe has been dropped because we believe that Poland should compare itself to the better growing economies of Northern Europe. Luxembourg has been skipped as an outlier – city-state with a very large financial sector.

Source: Own estimations based on Eurostat data

prevalence of minimum wages among their employees. In microenterprises 57% of employees report receiving only a minimum wage; in larger companies (10 and more people) only 4% of the employed earn minimum wage. Such differences in wages can be largely explained by underreporting.

Indeed, microenterprises are more often involved in the shadow sector. Over 30% of enterprises below 20 employees report pressure from companies in the informal sector, while in the case of larger companies this percentage is only slightly above 20%<sup>4</sup>. It could be assumed that owners prefer to indicate that their competition underreports rather than confess to underreporting themselves.

Aside from underreporting, micro-enterprises are actually less productive – this can be seen in the questions regarding labor costs. For example, in the GUS survey, industrial micro and small companies report high labor costs as a problem two times more than their bigger counterparts. Such a result indicates that, given their labor productivity, they struggle to pay market wages. One of the solutions then is to remain in the shadow economy and make up for low productivity by avoiding taxes.

## CONCLUSIONS

Legislative inflation, regulatory uncertainty and inefficient courts discourage companies from investing and growing in Poland. Many remain small and flexible, but at the cost of lower productivity due to the lack of economies of scale and low investment. Despite their lower average productivity they are still capable of staying afloat by underreporting their activities and gaining an unfair competitive advantage by avoiding taxes and regulations. Operating par-

tially in the shadow economy is easier for companies due to an available supply of unregistered employment, generated by a poorly designed tax and benefit system.

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<sup>4</sup> Own calculation based on the BEEPS data; predefined company sizes are below and above 20 employees.

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# Strategies for Combating the Shadow Economy



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VYTAUTAS  
ŽUKAUSKAS

The shadow economy is an issue addressed by government institutions in almost all countries worldwide. Policies and measures designed to reduce it vary significantly depending on their philosophy, direction, scope and efficiency. In order to create a comprehensive strategy for fighting the shadow economy, one needs to be aware of different ways that might be pursued in this regard. The aim of this article is to show the scope of and classify such policies.

### **FACTORS BEHIND THE SHADOW ECONOMY**

Why does the shadow economy evolve and what does it depend upon? One of the ways to answer this question is to analyse the results of existing empirical research. Friedrich Schneider has conducted such analysis and discussed major factors influencing the undeclared labor market<sup>1</sup>. The table below summarises the results of several studies about the causes of the shadow economy in the labor market. These causes not only include the ones that directly contribute to the emergence of the shadow economy (e.g., taxes and regulation), but also other factors that can influence the shadow market.

The table shows that the studies that include and exclude the factor of tax morality are examined separately. The analysis suggests that the tax rate and the amount of social security contributions are the most important factors influencing the shadow economy. Depending on the country, they explain from 35% to 52% of the size of the shadow economy in the labor market. The second major factor is the tax morality

which determines from 22% to 25% of the shadow economy. The third factor is the quality of public institutions – labor market regulation comes fourth.

Scientific literature reveals an interesting relationship between people's willingness and determination to pay taxes (the tax morality) and dissuasive measures. For example, although the dissuasive measures are applied as a signal for people to pay taxes, their extensive application may lead to an opposite and detrimental effect on taxpayers' morality. Secondly, taxpayers' morality is highly dependent not only on the quality of public services, but also on the general satisfaction with the public policy decisions and fairness of public institutions towards people.

### **MEASURES FOR COMBATING THE SHADOW ECONOMY**

All the measures to combat the shadow economy may be divided into four categories:

1. Reducing the primary causes of the shadow economy;
2. Burdening the participation in shadow economy activities by increasing the risk and costs;
3. Raising public awareness;

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<sup>1</sup> Survey on the shadow economy and undeclared work in OECD countries

Table 1: Factors that influence the shadow economy

Factors that influence the shadow economy	Influence on the shadow economy, %	
	The average result of the 12 analysed studies (including tax morality)	The average result of the 12 analysed studies (excluding tax morality)
(1) Social security contributions and tax rates	35-38	45-52
(2) Quality of public institutions	10-12	12-17
(3) Social welfare system	5-7	7-9
(4) labor market regulation	7-9	7-9
(5) Public services	5-7	7-9
(6) Tax morality	22-25	-
<b>Total influence</b>	<b>84-98</b>	<b>78-96</b>

Source: Friedrich Schneider

4. Increasing personal income and the standard of living.

According to the analysis, factors falling into the first category determine from 47% to 70% of such activities. These factors include the amount of taxes and social security contributions, labor market regulation and transfers.

Interestingly, the table does not include the factors that would be assigned to the second category. According to Friedrich Schneider, the methodology used to evaluate the influence of various factors on the shadow economy did not reveal any statistical significance of the influence that the measures belonging to the second category had on the scope of the shadow economies in different countries. In general, there is a considerable lack of empirical research that demonstrates the influence of dissuasive measures on the size of the shadow economy. There may be several reasons for this.

Firstly, the measures and factors of the second category are less effective in the fight against the shadow economy. Secondly, there is a lack of reliable and comparable data that would allow cross-country comparison and a precise evaluation of the effectiveness of these measures. Thirdly, the impact of dissuasive measures depends on such factors as taxpayers' morality and these may be negatively affected by the measures themselves.

Tax morality, which explains from 22% to 25% of the shadow economy, may be assigned to the third category, while the fourth category entails the quality of state institutions and public services. These factors determine 15% to 26% of the shadow economy. Therefore, the analysis by Friedrich Schneider shows that the measures aimed at reducing the primary causes of the shadow economy



are of major significance. The following is an in-depth analysis of each of the categories.

The overview shows that taxes and regulation of economic activity are the major causes of the shadow economy. The incentive to engage in illegal activities arises from taxation and regulatory restrictions on legal activities. Therefore, keeping other conditions constant, the higher the taxes and regulations are, the higher the incentive to engage in the shadow economy.

However, there are many other factors that determine how high taxation and regulation of economic activity influence the shadow economy. These factors may be in nature economic (e.g., the standard of living or the economic situation of a country), social (e.g., public tolerance of the shadow economy), legal (e.g., laws regulating the activities of the institutions combating the shadow economy), or other. According to the specificity of the impact, the measures to combat the shadow economy may be divided into four categories.

### **1) REDUCING THE PRIMARY CAUSES OF THE SHADOW ECONOMY**

Since the motives of those engaged in shadow and legal activities are the same, the structure of illegal activities is similar to that of legal. Both are aimed at profit and imply costs and income. The income and profitability of the shadow economy arises from its non-compliance with the law.

Firstly, profit may be generated from incurring less costs as compared to those incurred when engaging in legal activities (e.g., by avoiding certain taxes, requirements or mandatory standards), thus avoiding "legality costs". Secondly, profit is generated when legal goods or services

are unavailable, because they are prohibited (e.g., drug trafficking, prostitution, etc.) – in this case, illegal income and profit are generated from engaging in certain activities prohibited by the law.

Both cases show that the potential of illegal activities is consistent with restrictions on legal activities (taxation or regulation) – the more activities are restricted or even prohibited, the greater the potential for shadow economy activities (keeping other conditions constant). Therefore, the shadow economy may be reduced by diminishing its economic motive (profit) by means of decreasing taxation and regulation of legal activities as well as removing prohibitions to engage in certain activities, thereby making transparent activities more attractive.

There are two types of measures aimed at reducing the primary causes of the shadow economy. Firstly, they may be aimed at improving the conditions of economic activity for all market participants by means of:

- reducing taxation (taxation on labor, excise duties, VAT and other taxes influencing the emergence of the shadow economy market);
- reducing the regulatory burden on economic activities that influence the shadow economy (e.g., decreasing the minimum wage, relaxing the stringency of labor regulations and requirements for fixed-term employment contracts, as well as the costs of employment contract termination);
- introducing legal and easy-to-access forms of economic activity, e.g., by making it possible to formalise minor economic activities (the absence

of such an opportunity is frequently the incentive to remain in the shadow economy);

- facilitating the return to the legal labor market and self-employment opportunities for the unemployed (e.g., by gradually decreasing, rather than immediately cutting, the provision of social allowances);
- establishing uniform rules of tax administration that would ensure minimum standards (including the stability of the tax and administrative burden) and the undertaking not to raise taxes at the international level.

The first category of measures to combat the shadow economy is targeted at its causes. In this case, the taxation and regulation of legal economic activities are reduced in order to increase the attractiveness of transparent activities and decrease the incentives to engage in illegal activities.

Secondly, the measures may be aimed at reducing the primary causes of the shadow economy by means of selectively improving conditions for certain economic activities where the improvement is most needed as their taxation and regulation are the major contributors to the shadow economy. Examples of such measures include:

- targeted direct tax advantages (tax deductions of the Personal Income Tax or other taxes applied when purchasing certain goods and services legally, with a possibility of establishing a maximum amount deductible);
- a decrease in VAT and other indirect taxes in individual sectors (aimed at increasing accessibility of certain goods and services of a particular sector by reducing their prices);

- a selective decrease in the taxation of labor in individual sectors (for those with lower wages, young market participants and newly established jobs, as well as for the first year or another temporary period of employment);
- an amnesty for the whole market, particular sectors or enterprises. An individual amnesty applies when an enterprise voluntarily admits having paid wages illegally or engaged in other shadow economy activities (a timeframe is given to legitimise in order to ease or avoid the sanctions);
- advice to illegally acting enterprises on legalisation of their activities.

However, it must be borne in mind that a selective improvement of the conditions for certain economic activities aimed at combating the shadow economy may distort conditions of competition as well as increase the possibilities for corruption. Therefore, better conditions for all market participants should be the priority.

### **"MINI JOBS"**

A new set of rules called "mini jobs" entered into force in April 2003, in Germany. These rules apply to part-time employees who earn up to €450 per month or those working up to two months per year. The said employees are exempt from social security contributions (compulsory health, pensions and unemployment insurance) while their employers pay reduced contributions as well. These rules are aimed at decreasing the scope of illegal employment by means of enhancing legal employment possibilities for the said employees. According to Friedrich Schneider, the "mini jobs" reform resulted in a significant decrease in illegal employment in 2004 and 2005 which equals approximately €9 billion.

### REDUCING LABOR TAXATION IN THE EU

According to the European Commission, the biggest reduction in the taxation of labor from 2003 to 2012 has been observed in Holland, Cyprus, Sweden and Slovenia (from 5 to 7 per cent per person earning two thirds of the average wage). In the same period, the shadow employment level has also decreased in all four countries.

	Reduction in the taxation of labor from 2003 to 2012, %	Reduction in shadow employment levels from 2003 to 2012, %
Holland	6,9	3,2
Cyprus	6,7	3,1
Sweden	6,3	4,3
Slovenia	5,0	3,1
Slovakia	3,9	2,9

There are significant advantages of such measures:

- Empirical research shows a significant effect on reducing the causes of the shadow economy;
- It is relatively easy to identify which taxes or regulations create incentives to engage in shadow economy activities;
- Deregulation and the abolishment of prohibitions on economic activities do not entail budgetary expenditure;
- A reduction in taxation and deregulation contribute to economic growth;

- An opportunity to repeal unjustified and ineffective regulation and reduce over-taxation on certain activities.

The disadvantages of such measures are as follows:

- A reduction in taxation and deregulation implies a refusal of other objectives of those measures (e.g., to reduce the accessibility to goods and services);
- A reduction or the elimination of taxation are often thought to imply a loss of budgetary revenue. However, this is not always the case in practice, because a reduction in taxation may result in revenue increases from the surge and legalisation of economic activity (the Laffer Curve effect);
- The legalisation of certain activities associated with the shadow economy is not acceptable to the society.

### 2) OBSTRUCTING PARTICIPATION IN SHADOW ECONOMY ACTIVITIES BY INCREASING THE RISK AND COSTS

Although the profitability of illegal activities arises from restrictions on economic activity, it is also influenced by operational costs. In addition to regular operational costs, there is also specific shadow economy activity-related expenditure which includes fines, confiscation of goods, losses related to the absence of the possibility to employ legal mechanisms to ensure the execution of contracts, bribes to avoid liability, etc.

The fight against the shadow economy may employ a number of different measures aimed at increasing operational costs. Such measures include strengthening and increasing the efficiency of the institutions combating the shadow economy, the provision of more severe penalties for engaging in illegal activities, a proactive identification of potential irregularities, and the implementation of



ART  
ARTIFACTS  
SOUVENIRS

anti-corruption measures in state institutions that would decrease the possibility of bribing state officials in order to avoid liability.

Indeed, the majority of the aforementioned measures to combat the shadow economy, in both practice and literature, belong to the second category aimed at burdening the participation in shadow economy activities by increasing the risk and costs. These measures may be subdivided further, but their common feature is that they are aimed at increasing the efficiency of the fight against existing illegal activities by increasing the risk and costs, rather than reducing their causes.

The second category of measures to combat the shadow economy is aimed at increasing the risk and costs of engaging in shadow economy activities. In this case, the aim is to reduce the incentives to engage in the shadow economy as well as to make it unprofitable.

- **Monetary and non-monetary penalties** (e.g., monetary fines, prohibitions for participation in public procurement, confiscation of detained goods, etc.)
- **Additional regulation and restrictions on economic activity** (e.g., restrictions on cash payments, the reverse charge principle applied to VAT in particular sectors, monitoring of social allowance recipients for illegal employment, linking pensions and other public benefits with a person's state of employment, stricter accounting requirements of employees, etc.)
- **Operational coordination of the authorities, data dissemination and cooperation** (e.g., the exchange of information between law enforcement authorities, cooperation with foreign institutions, the exchange of information regarding the number of employees, wages, taxes paid, and workload between state institutions, strategic coordination between public institutions engaged in the fight against the shadow economy, etc.)

- **More effective identification** (e.g., the identification of risky business operators by means of analysing the data available [a comparison of the real and declared income as well as the consistency of, for example, electricity consumption and the amount of production declared], the collection, accumulation and evaluation of data regarding legally sold production, better labelling [excise stamps, for example] of legal goods, etc.)

- **Utilisation of Information Technology (IT) and other equipment** (e.g., the improvement of tax administration and monitoring the movement of goods by employing IT, electronic cash registers, cash registers with a "black box", etc.)

When addressing measures to combat the shadow economy aimed at burdening the participation in illegal activities by increasing the risk and costs, it is of vital importance to take into account their relationship with the measures of the first category (aimed at reducing the primary causes of the shadow economy). It is therefore important, besides evaluating the costs of such measures and their influence on the risk of engaging in the shadow economy, to evaluate the fact that such measures frequently pose a significant additional administrative and regulatory burden on legally acting people and enterprises.

For example, although cash payment restrictions is regarded as a means of burdening shadow economy activities, it does not come without additional expenditure for legally working people and enterprises. Therefore, measures that provide a disproportionate burden on legitimate market players should not be implemented. If applied, such measures will create a vicious circle because the shadow economy, created by restrictions on economic activity, cannot be reduced by introducing additional limitations.

### CASH REGISTERS WITH A "BLACK BOX"

On January 1, 2010, a new cash register law entered into force in Sweden. Under the law, enterprises supplying goods or services are required to have a certified cash register with a connected "black box". The "black box" records all transactions (including card payments) and its data may only be accessed by the state tax inspectorate. Enterprises were forced to spend €1,785 on a new tax register, because those breaking the rule could receive a fine of €1,190 or €23,800 for continuous ignorance of the requirement. The introduction of cash registers with a "black box" is said to have a positive effect on increasing the legal income of enterprises. However, it is also important to consider the financial burden of such a requirement.

### THE REVERSE CHARGE PRINCIPLE APPLIED TO VAT

On July 1, 2007, the Swedish government introduced a draft law on VAT with the aim to solve the issue of shadow work. The law introduced a reverse charge principle which implies the designation of the recipient as the person liable for the declaration and payment of VAT. For example, if a construction company purchases construction work from another company, the latter does not have to include VAT on the invoice as the former is responsible for the declaration and payment of VAT. Such a system is believed to reduce tax evasion by means of diminishing the seller's incentives to hide the transaction.

However, the reverse charge principle applied to VAT in Sweden has resulted in an increased administrative burden for companies affected by the new rule. The State Tax Inspectorate has conducted a survey and the majority of enterprises indicated an increase in expenditure in terms of man-hours.

There are two major advantages of such measures:

- some are free of charge in the initial stages of implementation (e.g., increasing fines);
- and

- compared to the first category, some are more politically attractive as they do not imply the rejection of other objectives of the regulation and a loss of budgetary revenue.

The disadvantages of such measures include the following:

- research shows that the second category is less effective compared to the first one;
- measures are frequently associated with an increase in budgetary expenditure (e.g., usually, an increase in the effectiveness of state institutions is extremely costly);
- measures may be detrimental to transparent market participants and pose additional administrative and regulatory burden on them (tighter controls also affect legal market participants);
- tighter control of legislation without the support of society which does not see the requirements as justified may result in the opposite effect – a deteriorated view towards the legal framework and compliance with the law.

### 3) RAISING PUBLIC AWARENESS

People's engagement in the shadow economy depends on their attitude towards it. The more favourable the attitude is, the stronger the incentives to engage in shadow economy activities are (other conditions being constant). This category of the measures to combat the shadow economy is aimed at diminishing people's tolerance for illegal activities. This may be achieved by raising public awareness about the

negative effects of the shadow economy (e.g., a decrease in budgetary revenue) and the risks related to the engagement in the shadow economy (e.g., fines or faulty goods and services).

Another way of raising public awareness is by showing the relationship between the state revenue and public services. Normally, these measures include a variety of publicity campaigns aimed at youth, as well as people or enterprises involved in the shadow labor market. Such campaigns are generally focused on:

- risks and damages related to the shadow economy;
- the benefits of engaging in legal activities;
- the ways of legalising shadow economy activities;
- the ways in which people's actions can reduce the shadow economy (by demanding a receipt for purchases, etc.);
- raising the awareness about the objectives of the tax and regulatory framework;
- informing about increasing quality of public services;
- the identification and publicity of legal and transparent businesses;
- raising awareness about the legal framework, its requirements and structure, and the elements of justice.

The advantages of such measures are twofold:

- public attitude towards the shadow economy has a strong impact on people's engagement in the shadow economy;
- a positive way which does not pose any additional burden on legal market players.

And the disadvantages are as follows:

- shaping public attitude is difficult, costly and time-consuming;
- given a low standard of living, the impact of educational measures is very limited.

#### **4) INCREASING PERSONAL INCOME AND THE STANDARD OF LIVING**

The economic situation of a country also influences the size of its shadow economy. Depending on the level of economic development, labor productivity and average income, the same amount of tax and regulation may have a different impact on the shadow economy in different countries.

Taxes and regulations will create fewer incentives to engage in illegal activities in economically strong countries with a high standard of living and higher income. Therefore, measures aimed at the improvement of the economic situation and increasing the standard of living are effective means of combating the shadow economy. In order to reduce the shadow economy by employing these measures, it is of primary importance to consider measures that would create the most favourable conditions for the development of economic activity as well as the growth of investment, labor productivity and income.

Therefore, this category consists of economic policy measures aimed at ensuring the conditions for accelerated growth of the country's economy:

- a low tax burden;
- a low and stable regulation of economic activity;
- a stable monetary and a responsible fiscal policy;
- the implementation of reforms necessary for achieving economic growth.

By their nature and content these measures are similar to the first category aimed at reducing the primary causes of the shadow economy. However, these categories may be distinguished on the basis of two aspects.

Firstly, the measures of the fourth category are aimed at a long-term reduction of the shadow economy (it takes time to increase income and the standard of living). Secondly, the measures of the first category are aimed at those taxes and regulations that create incentives to engage in illegal activities while the measures of the fourth category are focused on the economic growth of the country and an increase in the income level. Therefore, although the measures of the first and fourth categories may overlap, in addition to the former, the latter also covers the measures indirectly related to the shadow economy, but effective in increasing the growth prospects of the country (e.g., structural reforms).

The advantages of such measures:

- the measures of this category are aimed at both reducing the size of the shadow economy and improving the economic situation of the country.

The disadvantages of such measures:

- the improvement of the country's economic situation and the growth of income are long-term processes. Economic policy is only capable of formulating the conditions and establishing the foundations for a sustainable growth of the country's economy.

## CONCLUSIONS

To summarise, all of the measures to combat the shadow economy can be divided into four categories:

1) **Reducing the primary causes of the shadow economy.** The more legal activities are restricted or even prohibited, the greater the potential for shadow activities. Therefore, the shadow economy may be reduced by diminishing its economic motive (profit) by means of decreasing taxation and regulation of legal activities as well as removing prohibitions to engage in certain activities, thereby making transparent activities more attractive;

2) **Burdening the participation in shadow economy activities by increasing the risk and costs.** This category includes measures to combat the shadow economy aimed at increasing the risk and costs of engaging in shadow economy activities;

3) **Raising public awareness.** People's engagement in the shadow economy depends on their attitude towards it. The more favourable the attitude is, the stronger the incentives to engage in shadow economy activities are. This category of measures is aimed at diminishing people's tolerance for illegal activities. These measures include a variety of publicity campaigns aimed at youth, as well as people or enterprises involved in the shadow labor market;

4) **Increasing personal income and the standard of living.** Taxes and regulations will create fewer incentives to engage in illegal activities in economically strong countries with a high standard of living and higher income. Therefore, this category consists of economic policy measures aimed at ensuring the conditions for accelerated growth of the country's economy.

The analysis suggests that the tax rate and the amount of social security contributions are the key factors influencing the shadow economy. The second major factor is tax morality. The quality of public institutions and labor market regulation come third and fourth respectively. •



\*

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### RAINBOW IN THE DUST

The sky over the Australian town of Coober Pedy takes on a reddish-gray hue, thick from the desert's dust wind. The streets are completely empty, only signs, signboards and a few houses remind of an existence of a man in this lost colony in the middle of the desert. Coober Pedy, called the world capital of opals (over 80% of those stones comes from here) thrived in the second half of the 20th century. In the space where water access is limited and where an average annual temperature is around 40 degrees, people had to adapt their lifestyles to the harsh conditions. Most of app. 3,000 inhabitants live in the caves and tunnels formed during the search for opals. Underground houses, hotels, shops and churches make the town look like a big excavation area in itself. Nowadays, most inhabitants still believes, that one day they will discover this one and only precious stone hidden underground. Meanwhile, they make ends meet thanks to tourism industry. However, walking on the empty streets of Coober Pedy in an incredible heat, it is really hard to believe it.

*Photos from the collection: pp. 15, 21, 29, 37, 39, 123, 127, 131, 143, 147*

### ONE'S TRASH, ANOTHER'S TREASURE

Pioneer Park Museum in Dalby, Australia, seems to be a place frozen in time. Located on Black Street – once very quiet, now a parking spot for trucks, the museum is a magical space with colonial houses, rustling leaves and trilling birds. Elaine and Daniel Fox, the main founders of the museum, began the collection 23 years ago with seven ancient tractors. Today, they have one of the largest display of operating ancient agricultural machinery in Queensland. Together with a few passionate volunteers they keep the place alive. However, with a fast developing technology and little funding, they struggle to maintain their museum in a modern, quickly changing mining town that Dalby has become.

*Photos from the collection: pp.53, 57, 63, 73, 77, 85, 89, 93, 99, 103*



## KASIA STRĘK

Born in Lodz, Poland, she shares her time between Poland and France. While studying at the Fine Arts Academy in Lodz, École nationale supérieure des beaux-arts in Lyon and Queensland College of Art, Griffith University in Brisbane, Australia, she has been progressively turning towards photography. In her work she seeks to illustrate greater social issues, visualize the impact of human activity, ways of adaptation and impacts of economic or social changes on various communities.

## MEMBERS OF 4LIBERTY.EU NETWORK

**Free Market Foundation** (Hungary) is a think tank dedicated to promoting classical liberal values and ideas. The organization's projects focus on advocating a free market economy and fighting racism. The Foundation's activities involve education, activism and academic research alike, thus reaching out to different people.

**Liberální Institut** (Prague, Czech Republic) is a non-governmental, non-partisan, non-profit think tank for the development, dissemination and application of classical liberal ideas and programs based on the principles of classical liberalism. It focuses on three types of activities: education, research, and publication.

**Svetilnik** (Ljubljana, Slovenia) is a non-profit, non-governmental and non-political association. Its mission is to enlighten Slovenia with ideas of freedom. The goal of the association is a society where individuals are free to pursue their own interests, and are responsible for their actions.

**The Lithuanian Free Market Institute** (Vilnius, Lithuania) is a private, non-profit, non-partisan organisation established in 1990 to promote the ideas of individual freedom and responsibility, free market, and limited government. The LFMI's team conducts research on key economic and economic policy issues, develops conceptual reform packages, drafts and evaluates legislative proposals and aids government institutions by advising how to better implement the principles of free market in Lithuania.

**The F. A. Hayek Foundation** (Bratislava, Slovakia) – is an independent and non-political, non-profit organization, founded in 1991, by a group of free-market oriented Slovak economists. The core mission of the F. A. Hayek Foundation is to establish a tradition of market-oriented thinking in Slovakia – an approach that had not existed before the 1990's in our region.

**IME** (Sofia, Bulgaria) is the first and oldest independent economic policy think tank in Bulgaria. Its mission is to elaborate and advocate market-based solutions to challenges citizens of Bulgaria and the region face in reforms. This mission has been pursued since early 1993 when the Institute was formally registered a non-profit legal entity.

**The Academy of Liberalism** (Tallinn, Estonia) was established in the late 1990s. Its aim is to promote liberal world view to oppose the emergence of socialist ideas in society.

**INESS** (Bratislava, Slovakia), the Institute of Economic and Social Studies, began its activities in January 2006. As an independent think tank, INESS monitors the functioning and financing of the public sector, evaluates the effects of legislative changes on the economy and society and comments on current economic and social issues.

**Projekt: Polska** (Warsaw, Poland) Projekt: Polska are people who are dreaming of a modern, open, and liberal Poland. Those, to whom a democratic, effective and citizen-friendly government is a key goal, and who help accomplish this goal while enjoying themselves, forming new friendships, and furthering their own interests.

**Liberales Institut** (Potsdam, Germany) is the think tank of the Friedrich Naumann Foundation for Freedom dedicated to political issues such as how liberalism can respond to challenges of contemporary world and how the liberal ideas can contribute to shaping the future.

**Fundacja Industrial** (Lodz, Poland) is a think tank created in Łódź in 2007. Its mission is to promote an open society, liberal economic ideas and liberal culture and to organize a social movement around these ideas. Among Foundation's most recognizable projects are: Liberté!, Freedom Games, 6. District. Foundation is coordinating 4liberty.eu project on behalf of Friedrich Naumann Foundation.

**Republikon Institute** (Budapest, Hungary) is a liberal think tank organisation based in Budapest, focusing on analysing Hungarian and international politics, formulating policy recommendations and initiating projects that contribute to a more open, democratic and free society.

**Civil Development Forum (FOR)** (Warsaw, Poland) was founded in March 2007 in Warsaw by Professor Leszek Balcerowicz as a non-profit organization. Its aim is to participate in public debate on economic issues, present reliable ideas and promote active behaviour. FOR's research activity focuses on four areas: less fiscalism and more employment, more market competition, stronger rule of law and impact of the EU regulations on the economic growth in Poland. FOR presents its finding in the forms of reports, policy briefs and educational papers. Other projects and activities of FOR include among others Public Debt Clock, social campaigns, public debates, lectures, spring and autumn economic schools.

## COOPERATING PARTNERS FROM EASTERN PARTNERSHIP COUNTRIES

**The Institute for Economic Research and Policy Consulting** (Kiev, Ukraine) is a well-known Ukrainian independent think tank, focusing on economic research and policy consulting. IER was founded in October 1999 by top-ranking Ukrainian politicians and scientists and German Advisory Group on economic reforms in Ukraine, which has been a part of Germany's TRANSFORM programme. Its mission is to provide an alternative position on key problems of social and economic development of Ukraine.

**New Economic School – Georgia** (Tbilisi, Georgia) is a free market think-tank, non-profit organisation, NGO. Its main mission is education of young people in free market ideas. It organizes seminars, workshops and conferences for education and exchanges of ideas. NESG was founded by Georgian individuals to fill the gap of the market economy knowledge in the country and the deficit of good teachers and economics textbooks.

**ALEXEI PIKULIK**

**DRIVERS OF THE SHADOW ECONOMY IN CENTRAL AND EASTERN EUROPE**

**PAGE 004**

The main purpose of the presented article might seem somewhat unambitious: mapping out the main drivers for the shadow economy as found in the literature, contextualizing them to the perspective of Central and Eastern Europe and providing with a few additional drivers discovered in the consortium study in Belarus. Nevertheless, pinpointing those instances might serve as a great overview and a perfect introduction into the issue of the shadow economy.

**TĀLIS PUTNIŅŠ, ARNIS SAUKA**

**SHADOW ECONOMY INDEX FOR THE BALTIC STATES 2009-2014**

**PAGE 016**

The Stockholm School of Economics in Riga (SSE Riga) Shadow Economy Index is estimated annually based on surveys of entrepreneurs in the Baltic states. The Index combines estimates of misreported business income, unregistered or hidden employees, as well as unreported "envelope" wages to estimate the shadow economies as a proportion of GDP.

**JONÁŠ RAIS**

**UNDERSTANDING SHADOW ECONOMY IN THE CZECH REPUBLIC**

**PAGE 054**

In a survey of European Commission (2014), almost one fifth of the Czech respondents answered that they purchased goods and services produced with undeclared labor in the previous 12 months and one third of the respondents knows someone who works fully or at least partially undeclared. Therefore, it is not surprising that the topic of the shadow economy has been gaining traction both among the Czech media and the general public for the past few years.

**YAVOR ALEKSIEV**

**WHY DECLARE? BULGARIA'S LABOR MARKET AND ITS SHADOW**

**PAGE 070**

Despite recent modest improvements, Bulgaria continues to be the EU member state with the largest share of its shadow economy. While state and local corruption, the lack of proper control and bad legislation are arguably the main driving forces behind this, there is much to be said about the meddling of Bulgarian governments in the labor market and their reluctance to reform the social security system.

**ROBERT MÜÜRSEPP**

**ALCOHOL EXCISE AND THE SHADOW ECONOMY IN ESTONIA**

**PAGE 082**

While the most common argument in favour of excise is the protection of public health and the promotion of healthy habits and culture, only 3.5% of Estonian alcohol excise is directed towards supporting cultural undertakings (Riigikogu, 2015). The rest of this income is available to the state without restrictions. As a result, alcohol excise has become a regular source of additional income whenever the costs of changing other policies need to be met.

**VYTAUTAS ŽUKAUSKAS**

**STRATEGIES FOR FIGHTING SHADOW ECONOMY**

**PAGE 140**

The shadow economy is an issue addressed by government institutions in almost all countries worldwide. Policies and measures designed to reduce it vary significantly depending on their philosophy, direction, scope and efficiency. In order to create a comprehensive strategy for fighting the shadow economy, one needs to be aware of different ways that might be pursued in this regard. The aim of this article is to show the scope and classify such policies.