The shadow economy and how to fight against it

(with focus on Moldova and the best Slovak experience)

Peter Goliaš

Institute for economic and social reforms (INEKO), Slovakia

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To help Moldovan experts and policy makers, this study reviews key causes of the shadow economy and explores the ways how to reduce it including the World Bank recommendations and the best Slovak experience.

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Executive summary

The shadow economy in Moldova represents more than 44% of GDP whereas in Slovakia it is only 17%. To help Moldovan experts and policy makers, this study reviews key causes of the shadow economy and explores the ways how to reduce it including the World Bank recommendations and the best Slovak experience. Among the causes, the most important are high taxes for people with low income, low risk of detection, low social capital and trust to the government, and more generally, poor quality of the business environment. Reducing tax burden (including social insurance contributions) for low-earners belongs to the top priority measures especially in countries with low formal income, i.e. where the risk of absolute poverty is higher. The "minijobs" introduced under the Hartz IV reform in Germany might be inspiring: Monthly wages less than €400 are not subject to social insurance contributions and for monthly incomes between €401 and €800, the contribution rate rises gradually to the full share.

Among other recommendations, Moldova should take inspiration from the Slovak tax reform which radically simplified the tax system. It should also initiate cooperation with the OECD and the World Bank and compute key indicators influencing motivation of people to go informal: productivity of social insurance, Employment Protection Legislation (EPL) index, tax wedge, formalization tax rate, and marginal effective tax rate. Based on the results, Moldova should introduce measures aimed at improving these indicators. The Slovak Labor market reform shows that to create more legal jobs, it is essential to keep low costs of dismissing employees and to support flexible forms of employment. This is true especially for seasonally sensitive sectors such as agriculture which creates around 16% of Moldovan GDP and employs more than 27% of employees. However, even good rules may not work if there is low level of social capital and weak institutions. Therefore, Moldova should build its social capital, trust to politicians and government institutions. This is a long lasting process that requires increasing transparency in public spending, fighting corruption, and improving the quality of institutions and public benefits.

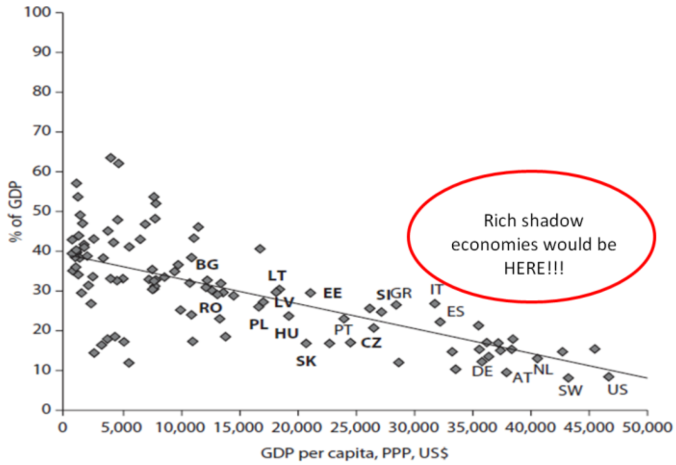
1. <u>Shadow economy – definition and structure</u>

The shadow economy is often referred to also as a „grey market“, or an „informal economy“. It should be distinguished from the “black economy” which means naturally illegal activities such as crime or producing and distributing drugs. On contrary, the “informal economy”, as defined by Wikipedia, is “part of an (otherwise legal) economy that is not taxed, monitored by any form of government, or included in any gross national product (GNP), unlike the formal economy.” Here are some other definitions of the shadow economy:

- Schneider (2010): (Naturally) legal activities hidden deliberately from public authorities
- BusinessDictionary.com: The part of an economy involving goods and services which are paid for in cash, and therefore not declared for tax
- OECD Glossary of Statistical Terms: Underground production consists of activities that are productive in an economic sense and quite legal (provided certain standards or regulations are complied with), but which are deliberately concealed from public authorities for the following reasons:
    a. to avoid the payment of income, value added or other taxes;
    b. to avoid payment of social security contributions;
    c. to avoid meeting certain legal standards such as minimum wages, maximum hours, safety or health standards, etc;
    d. to avoid complying with certain administrative procedures, such as completing statistical questionnaires or other administrative forms.

According to Schneider (2010) around 2/3 of the „shadow“ income is spent in the official economy. Therefore the question might arise whether it is good or bad to have a shadow economy. On positive side, the evidence shows that the shadow economy works as a buffer between unemployment and regular employment. It is a sort of social safety net that may increase economic output. On the other hand there are strong arguments against. It usually means less income security for “shadow” workers, lack of legal rights, lack of access to the public health care, low future public pension, underfinanced public goods, and competition distortion (free riding) – see Chapter 3 for more detail. As shown in the following figure, the evolution teaches us that the official economies beat the shadow ones.

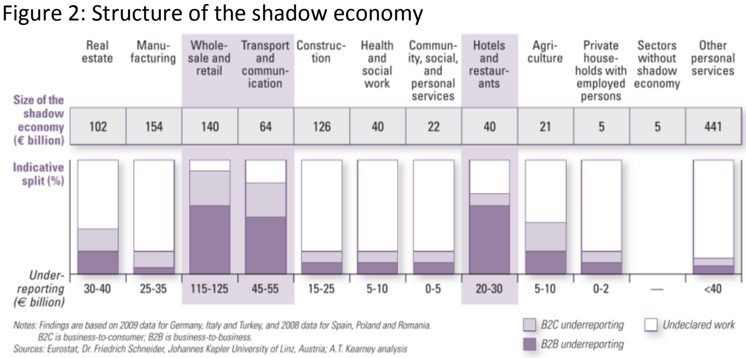
Figure 1: The shadow economy as a percentage of recorded GDP, various countries, 2007



Source: Schneider, Buehn, and Montenegro (2010); Jurzyca (2012)

Schneider (2010) identifies two types of the shadow economy. Around 1/3 is created by underreporting of profits – undeclared transactions in Business-to-Business (B2B) and Business-to-Consumer (B2C) relations. Around 2/3 is created by undeclared work – workers paid „under the table“. In most sectors, employing of undeclared workers prevails. However, underreporting of profits is most frequent in wholesale and retail, transport and communication, hotels and restaurants.

Figure 2: Structure of the shadow economy

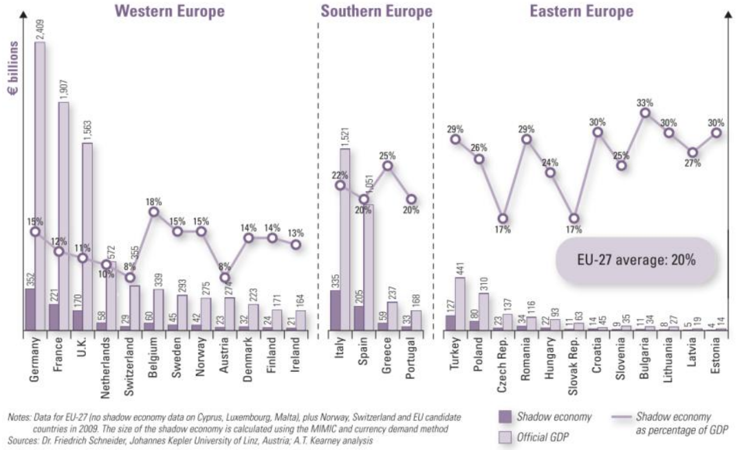


Source: Schneider (2010)

Because it is undeclared, there are specific problems with measuring the extent of the shadow economy. In most respected studies it is measured by a combination of direct methods such as statistical surveys asking about direct experience of respondents and indirect methods such as comparing national accounts with electricity consumption, or measuring the use of cash transactions. Widely respected research on the extent of the shadow economy was developed by Friedrich Schneider from the Johannes Kepler University in Linz, Austria. In Figure 3, we show that according to his model, the shadow economy is mostly spread in the Eastern Europe (e.g. 33% of GDP in Bulgaria), less in southern Europe (e.g. 25% of GDP in Greece) and the least in Western Europe (e.g. 18% of GDP in Belgium). However there are substantial differences among countries in particular region. For example in the Czech Republic and Slovakia the shadow economy represents only 17% of GDP, but in Spain and Portugal it is 20% of GDP and in Austria and Switzerland it is only 8% of GDP.

According to Schneider, Buehn, and Montenegro (2010) the **shadow economy in Moldova represented 44.3% of GDP in 2006 which was 135th position from among 165 countries**. Only Ukraine (46.8%) and Georgia (62.1%) had higher rates from among transition countries.

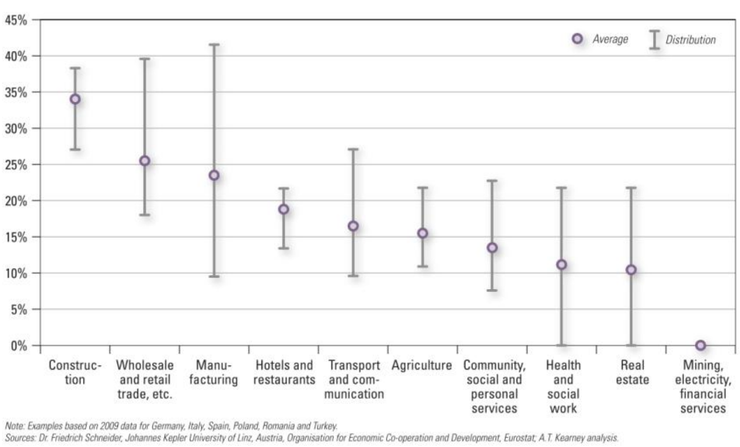
Figure 3: Shadow economy in Europe



Source: Schneider (2010)

Schneider found great differences in the extent of the shadow economy among various economic sectors. For a given set of countries (Germany, Italy, Spain, Poland, Romania, and Turkey) it is mostly spread in construction, wholesale and retail trade, manufacturing, hotels and restaurants, transportation and agriculture. On contrary it is almost nonexistent in mining, electricity and financial services.

Figure 4: Shadow economy in sectors

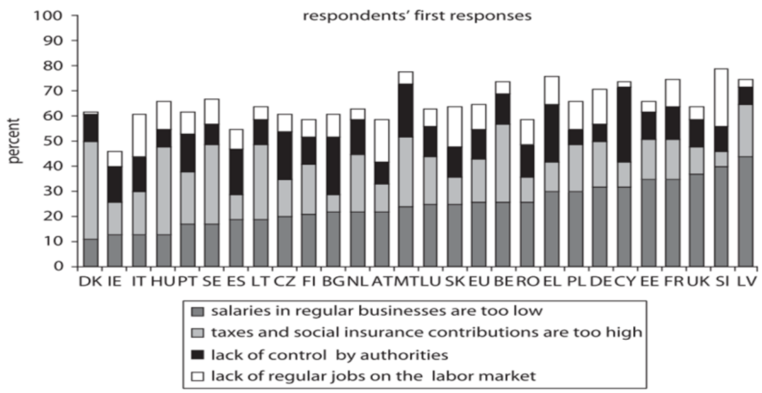


Source: Schneider (2010)

2. <u>Causes of the shadow economy</u>

In the Eurobarometer survey from 2007, respondents identified four primary reasons for doing undeclared work. Most frequently their answer was “too low salaries” and “too high taxes”. These two reasons probably relate to each other because some people may consider their salary to low because they have to pay too high taxes. It shows that the tax system plays major role in deciding whether to declare or not to declare. Among other reasons “lack of control by authorities” plays important role in several countries such as Bulgaria, Greece, Cyprus, and the Czech Republic. The fourth examined reason was a “lack of regular jobs” which was frequently pointed out in Austria, Slovakia, Italy, or Slovenia.

Figure 5: What, in your opinion, are the primary reasons for doing undeclared work?



Source: Leibfritz (2011) based on “Undeclared Work in the European Union”, Eurobarometer survey, October 2007

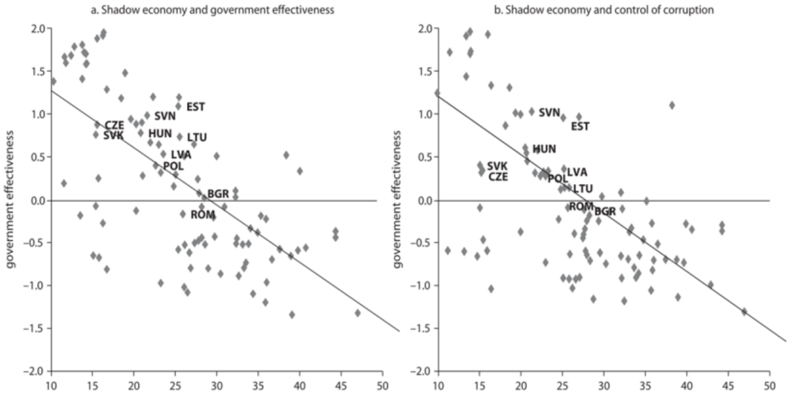
Schneider (2010) identifies four key causes of the shadow economy:

1. High tax burden
2. Lack of „guilty conscience“: Shadow economy is considered to be normal usually if there is **low quality of state institutions** and benefits
3. High spread of cash payments
4. Low risk of detection: It depends on effectiveness of control and penalties

Compared to the Eurobarometer survey, besides taxes and repression, this list includes “quality of state institutions and benefits” and “spread of cash payments” among key causes of the shadow economy. The logic is straightforward. If people do not trust government institutions, for example because they perceive high corruption in the government, they feel less guilty if they or their neighbors and trading partners avoid paying taxes. Similarly, if people do not get sufficient value in benefits offered by the state they are less willing to pay taxes. It is also easier to hide cash transactions than electronic payments.

As shown in Figure 6, there is a strong negative correlation between government effectiveness and the shadow economy. In other words, the shadow economy is bigger in countries with weak governance and weak institutional credibility.

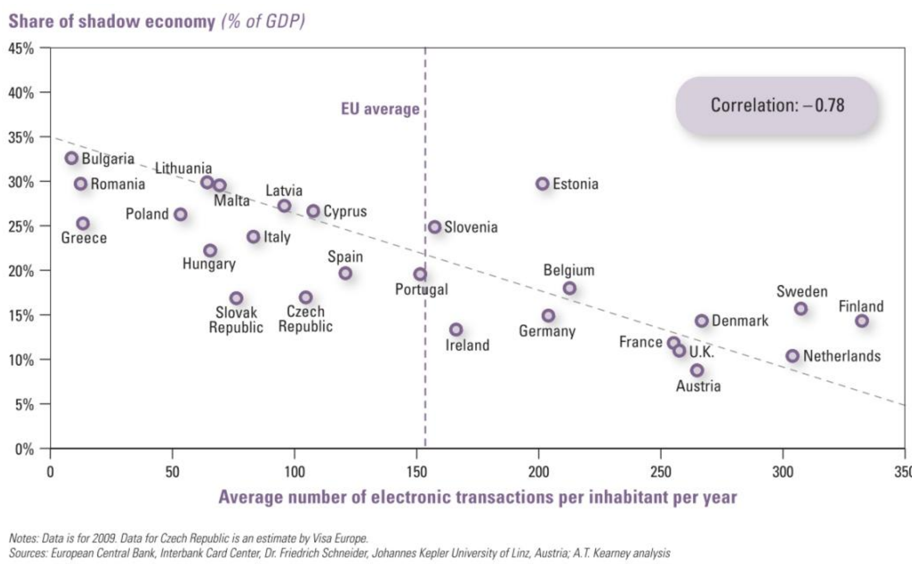
Figure 6: Shadow economy and its correlation with government quality



World Bank (2012)

Similarly, as shown in Figure 7, there is a strong negative correlation between frequency of electronic payments and the shadow economy. In other words, the size of the shadow economy is bigger in countries where people use less electronic payments.

Figure 7: Shadow economy and its correlation with electronic payments



Source: Schneider (2010)

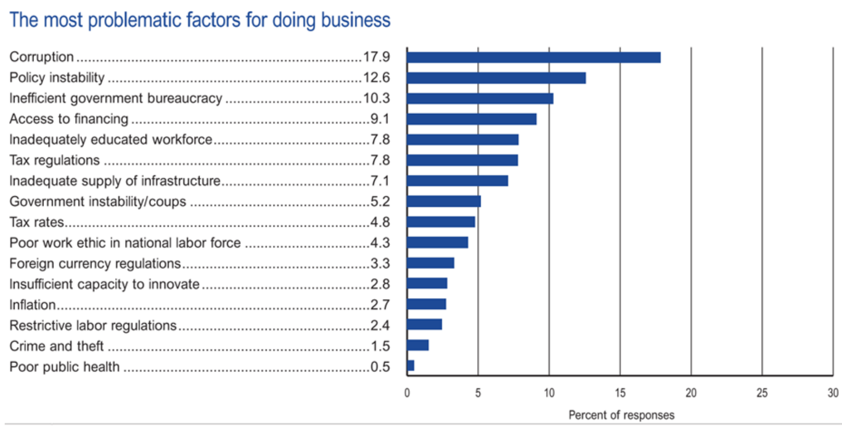
As described in the World Bank (2012) study, from more general perspective, the shadow economy is caused by a wider spectrum of barriers to healthy business environment. This may include tax regulations and administration, flexibility of labor market regulations, administrative burden on businesses or corruption incidence. As we can see from international rankings measuring quality of business environment, Moldova is lagging behind particularly in economic freedom and corruption perception.

Table 1: International rankings – Moldova compared to selected countries

	Economic Freedom Index, 2012	Corruption Perception Index, 2011	Doing Business, 2013	World Competitiveness Report, 2012-13	Shadow Economy Index, 2000-07
Moldova	**124.**	**112.**	83.	87.	**135.**
Romania	62.	75.	72.	78.	77.
Slovakia	51.	66.	46.	71.	25.
Germany	26.	14.	20.	6.	18.
USA	10.	24.	4.	7.	2.
Source:	Heritage Foundation	Transparency International	World Bank	World Economic Forum	Schneider, Buehn, Montenegro

According to the World Competitiveness Report 2012-13, the businesses in Moldova mention corruption as the most problematic factor for doing business, tax regulations are the 6th most problematic factor.

Figure 8: Businesses mention corruption as the biggest barrier in Moldova



Source: World Competitiveness Report 2012-13

The Gallup WorldView survey shows that Moldovans perceive relatively high corruption in government and have relatively low confidence in police and judicial system. They also perceive low quality of healthcare as well as roads and highways. On the other hand Moldovans have relatively higher confidence in their education system and public transportation.

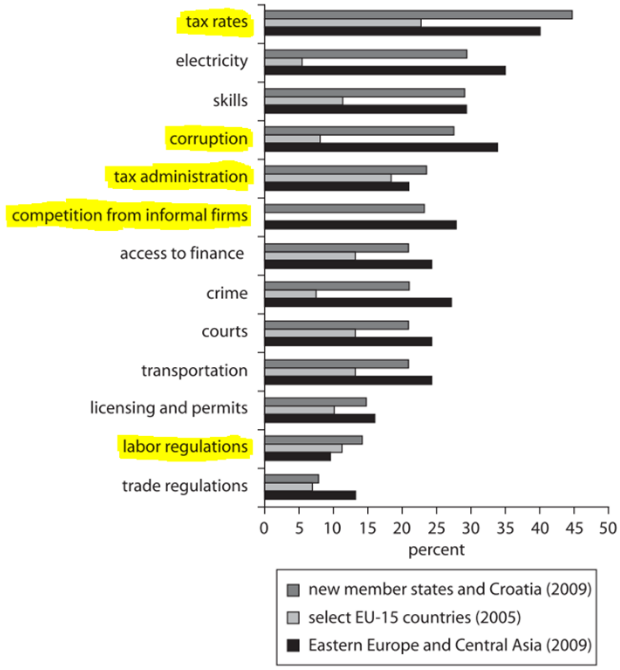
Table 2: Trust to government in Moldova and selected countries (data taken in the fall of 2012)

	Moldova	Romania	Slovakia	Germany	USA
Confidence in police	**36%**	55%	62%	82%	79%
Confidence in judicial system	**27%**	**24%**	34%	61%	48%
Confidence in government	**24%**	**12%**	**28%**	42%	35%
Quality of healthcare	**43%**	**38%**	63%	91%	73%
Educational system	54%	54%	62%	66%	64%
Honesty of elections	**31%**	**17%**	50%	62%	42%
Corruption in government	**81%**	**87%**	**78%**	63%	73%
Roads and highways	**17%**	36%	35%	77%	66%
Public transportation	55%	61%	59%	67%	61%

Source: Gallup WorldView

The World Bank (2012) study suggests that the firms in the EU new member states and Croatia considered tax rates the main obstacle to doing business. Among other important obstacles they quoted corruption and tax administration.

Figure 9: Obstacles to doing business



Source: Authors, based on World Bank 2012.
Note: The bars represent the percentage of firms that identify the respective issue as a main obstacle to doing business. Averages are unweighted. Selected EU-15 countries are Germany, Greece, Ireland, Portugal, and Spain.

Source: World Bank (2012)

Note: Factors mostly relevant to the shadow economy are marked with the yellow color.

3. How to fight against shadow economy

3.1. Principles

As mentioned in the first chapter around 2/3 of the “shadow” income is spent in official economy. It is a sort of social safety net that may increase economic output. According to the World Bank (2012), there is certain pattern of how the shadow economy reacts to the economic cycles. If the economy is growing, people move from unemployment to both regular and informal employment. Interestingly, there is no clear pattern about moving from informal to formal employment. It probably depends on other factors such as rules, repression, and social capital. On the other hand, if the economy falls into recession, the informal employment falls if unemployment rises – informal workers get unemployed.

Moreover, according to the World Bank (2012), it is people with low-paying and casual part-time jobs who are mostly involved in the shadow market. This makes fight against the shadow economy little tricky. If you wipe it out you might end up with disappearing small jobs and hurting the weakest. And you might slow down your economic growth.

But the negatives of the shadow market are also obvious. The World Bank (2012) warns against them:

- At the household level workers and families are unable to properly manage their income risks because they have **no formal access to social security**.
- Businesses that operate outside regulation lack access to credit and to protection of property rights while formal companies are overburdened due to tax revenue losses and **unfair competition** from informal firms.
- At the societal level, a large informal sector **erodes the financing of public goods and services**, thereby inhibiting the government’s capacity to provide proper education and health care services and a well-functioning infrastructure.

The World Bank (2012) also says that the governments in Eastern Europe cannot afford a large shadow economy, neither in the short run due to fiscal concerns, nor in the long run due to the shrinking labor force caused by aging. The shadow economy in Eastern Europe is so widespread that it risks undermining the region's long-term growth potential. The ongoing financial crisis has created a *"renewed sense of urgency"* to end the practice of untaxed and unregulated work.

Based on these observations, we propose several principles in fight against shadow economy:

1. Take gradual approach: Being IN is better than being SHADOW, but being SHADOW is better than being OUT; speed and scope of shadow economy decrease has its optimum.
2. Take care of right order: **Hard regulation should come after good rules are applied.** With bad rules for example due to high tax/administrative burden there is a strong motivation of people with low income to stay informal. If you fight shadow economy with repression and you have bad rules, you risk harming the economy; they might get unemployed. Moreover, there is usually

limited repression with bad rules because it is politically inconvenient to punish low-earners. As a consequence, there is more room for rich free-riders and the damage to the economy is bigger.

3. Build social capital: It is important to apply measures aimed at increasing transparency and fight against corruption. **Even good rules may not work if there is low level of social capital and weak institutions.**

3.2. <u>Structural incentives</u>

Choosing right rules means choosing right incentives for people to stay in the official market; in literature, these rules are also referred to as „structural incentives". The World Bank (2012) identifies following key structural incentives:

- Tax system:
    - Tax burden: Tax wedge, Formalization tax rate (FTR), Marginal effective tax rate (METR)
    - Tax mix: Structure of labor, capital, consumption, and real estate taxes
    - Tax administration (capacity, complexity, corruption)
- Income-dependent social benefits
- Labor market:
    - Employment protection (e.g. restrictions on dismissal)
    - Active and passive interventions
    - Labor Union power, Minimum wage
- Link between contributions (social insurance) and benefits
- Bureaucracy, market competition, etc.

<u>Tax system</u>

According to the World Bank (2012), **the high taxes on labor especially at low earnings** are among key causes of the shadow economy in Central and Eastern Europe. This is mainly due to high social insurance contributions. With too high taxes, the firms and workers often face trade-off between compliance and survival. This problem is even more serious in poorer countries. As Leibfritz (2011) explains:

"Relatively low formal salaries, together with relatively high taxes on labor, may explain why in the new members of the EU undeclared work often takes the form of under-declaration of income through payment of part of registered workers' wages in cash or through false registration of workers as self-employed."

The formal employment does not decline if people under-declare their income, but the government revenues are lower.

The tax system may inflate shadow economy also in other ways:

- A combination of high taxes on labor and low taxes on capital can induce individuals to transform labor income into capital income to reduce their tax burden.
- Where the effective tax burden is lower for the self-employed than for dependent workers, workers may shift—voluntarily or coerced by employers—from dependent employment to self-employment.
- The tax treatment of families may encourage secondary earners to work informally if additional formal income is taxed at a high marginal rate.
- Ineffective tax administration (complexity, corruption) discourages people to declare taxes. As shown in Table 3, Moldova ranks number 109 out of 185 economies in the ease of paying taxes indicator computed by the World Bank Doing Business report. It has rather low tax rates but it lags behind in number of tax payments and total time to comply with tax duties.

Table 3: Ease of paying taxes

	Moldova	Romania	Slovakia	Germany	USA
Ranking	**109.**	**136.**	**100.**	72.	69.
Payments (number per year)	**48**	**41**	20	9	11
Time (hours per year)	**220**	**216**	**207**	**207**	175
Total tax rate (% of profit)	31.2	44.2	47.9	46.8	46.7

Source: WB Doing Business 2013

As mentioned above, high social insurance contributions especially for people with low income is a key barrier to enter legal employment and declare taxes. It is useful to compute “productivity of social insurance contributions” to find out how serious is this problem in particular country. The indicator is computed as a percentage of social insurance contributions of GDP (it means real money that is collected) divided by a percentage of total rate of social insurance contributions (it means nominal rate that should be paid). The hypothesis is that the higher is the result, the less people avoid paying social insurance contributions. This is true theoretically, but to be precise one should take into account also differences in the bases of social insurance contributions. However, as shown in Figure 10, according to this simplified calculation, Romania, Bulgaria and Slovakia belong to countries with the lowest discipline in paying social insurance contributions. The differences among countries are huge. For example it is alarming to see that Estonia with total social insurance rate of 33% raises 12.6% of GDP, but Romania with rate of 52% raises only 10.3% of GDP.

Figure 10: Productivity of social insurance contributions for selected countries, 2008

Country	Revenue (% of GDP) (1)	Total social security rate (%) (2)	Implicit productivity: (1) divided by (2)
Estonia	12.6	33.0	0.38
Slovenia	14.3	38.2	0.37
Czech Republic	16.2	45.0	0.36
Poland	11.4	37.7	0.30
Hungary	13.9	50.5	0.28
Lithuania	9.3	34.0	0.27
Latvia	8.8	33.1	0.27
Slovakia	12.1	48.6	0.25
Bulgaria	8.1	34.4	0.24
Romania	10.3	52.0	0.20

Source: Leibfritz 2011, for this volume.
Note: The total social contribution rate is the sum of employer and employee contribution rates to public insurances for old age pensions, sickness, work injury, and unemployment.

Source: World Bank (2012)

The **tax wedge** is used to measure how much of personal income is taken away by state institutions. It is defined as a difference between labor costs and the take-home pay of workers:

Tax wedge = (Social insurance contributions paid by employers and employees + Personal income tax paid by employees) / (Total labor costs)

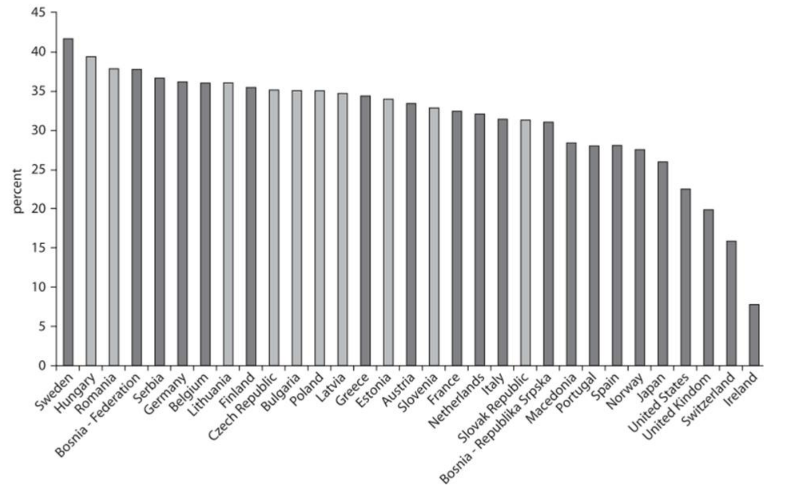
Box 1: Taxation of individuals in Moldova, as of 2009

- Two progressive Personal income tax ("PIT") rates:
  - 7% for annual income up to MDL 25,200 (around EUR 1,669)
  - 18% for annual income that exceeds MDL 25,200 (around EUR 1,669)
- Personal exemption for resident individuals is of MDL 7,200 (EUR 477) per year
- Income from any professional or entrepreneurial activity is taxed by 0% for the private entrepreneurs and farming enterprises
- The social security contribution rate for employees is 6%, while the rate due by Moldovan employers is 23%
- The 6% employee social security contribution rate is applied to a base capped at five times the national average salary for the year, i.e. MDL 15,700 (approximately EUR 1,040)
- Health insurance contributions rates are 3.5%, both at the level of employers and of employees

Source: PwC (2009)

The tax wedge usually depends on family type (single/couple, number of children), type of earnings (e.g. employment, self-employment) and wage level. According to the World Bank (2012), labor taxation is higher for low-wage earners in the EU new member states. For example, for a single person with no children who receives a gross wage 33 percent of the average wage, only a few EU-15 countries—including Sweden, Germany, Belgium, and Finland—charge higher taxes than most of the EU's new member states.

Figure 11: Tax wedge for low-earners in selected countries



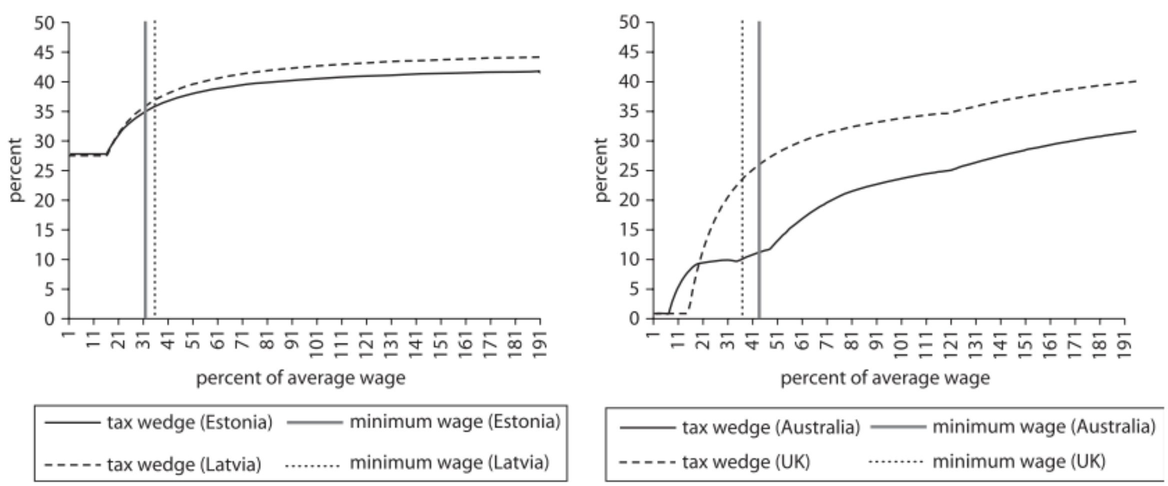
Source: Koettl and Weber 2012a, for this volume, based on OECD Tax and Benefit model.
Note: Columns represent the tax wedge for low-income earners (singles with no children at 33 percent of average wage) in 2008 (for Bosnia, Macedonia, and Serbia, 2009). Countries whose bars are light gray are the new member states.

Source: World Bank (2012)

It is important to compute also tax wedge progressivity; it means how the tax wedge changes, as the income rises. As shown in Figure 12, in Estonia and Latvia, the tax wedge for low-wage earners is higher than in Australia or the United Kingdom. Typically, people with low income pay lower taxes in Anglo-Saxon countries compared to continental European countries. It is probably no coincidence that the Anglo-Saxon countries have usually low unemployment and small shadow economies.

Figure 12: Tax wedge progressivity in selected countries

Figure 3.6 In Estonia and Latvia, the Tax Wedge for Low-Wage Earners Is Higher than in Australia or the United Kingdom



Source: Koettl and Weber 2012a, for this volume, based on OECD 2008.
Note: Graphs show the tax wedge for single person with no children.

Source: World Bank (2012)

Compared to the tax wedge, the **formalization tax rate (FTR)** offers more exact information about motivations of people to switch from the informal to the formal economy. It is mainly because it involves both labor taxes and income related social benefits. The FTR is defined as a share of informal income that an informal worker has to give up to formalize:

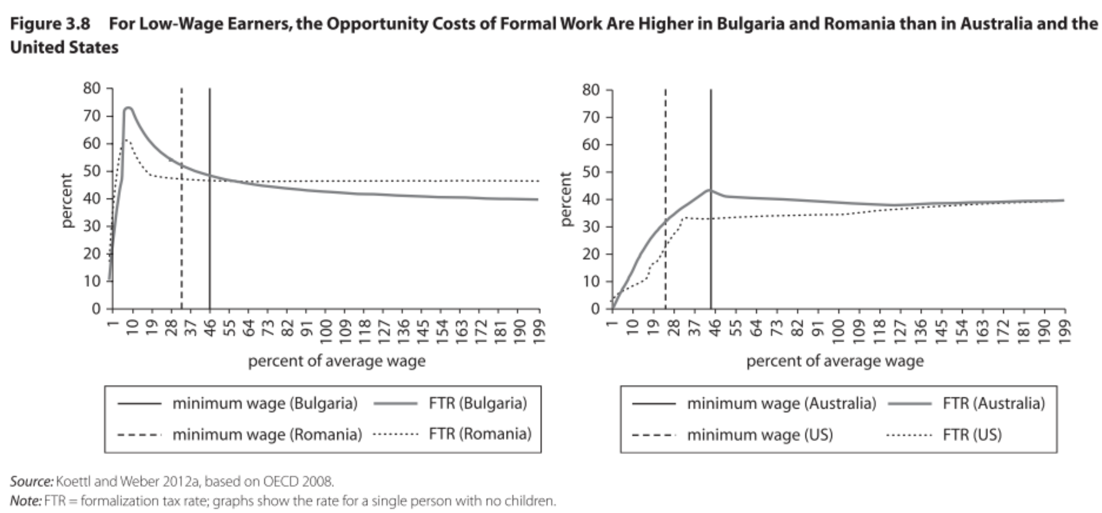
FTR = [Informal income (informal wage + social benefits) - Formal net income (formal net wage + social benefits)] / Informal income

For individual, turning from informal to formal employment means:

- Loss of tax wedge
- (At least partial) Loss of income-tested benefits: Social assistance, housing benefits, in-work and family benefits
- Gain of social insurance benefits: Old-age and disability pension, health insurance, unemployment and sickness benefits, employment protection, etc.

Similarly to the tax wedges comparisons, the Anglo-Saxon countries usually have lower FTR compared the continental European countries. For example, according to the World Bank (2012) study, for low-wage earners, the opportunity costs of formal work are higher in Bulgaria and Romania than in Australia and the United States. More specifically, in Bulgaria, single persons with no children who earn less than the minimum wage in the informal sector have to give up from 50% to 70% of their income to formalize whereas in the USA they have to give up less than 35% of their income.

Figure 13: FTR in selected countries

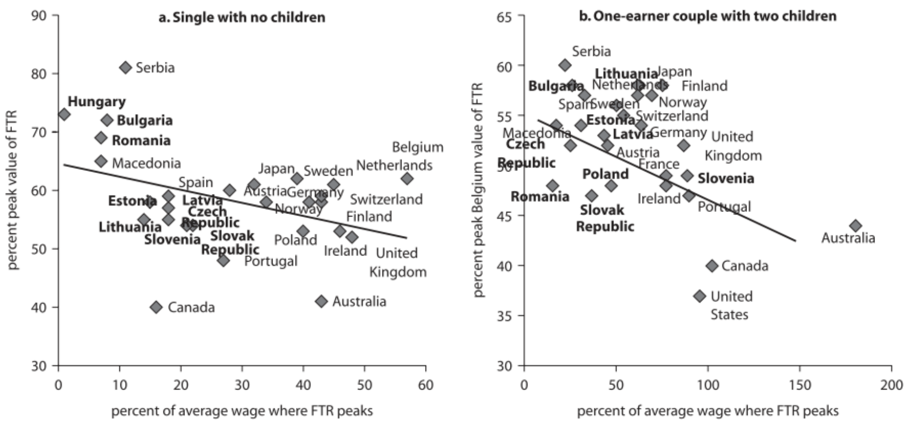


Source: World Bank (2012)

As displayed in Figure 14, the post-communist countries usually have highest FTR (peaks) at lower wage levels. It means that low-earning people in these countries face the biggest financial barrier to enter the formal market. For example in Romania single people without children with income less than 10% of average wage have to give up almost 70% of their informal income to formalize, in Serbia they have to give up even more that 80%. In Australia, the peak is at 40% for people who earn more than 40% of the average wage.

Figure 14: FTR peaks

Figure 3.9 In the EU New Member States, the Opportunity Costs of Formal Work Tend to Be Highest at Lower Wage Levels



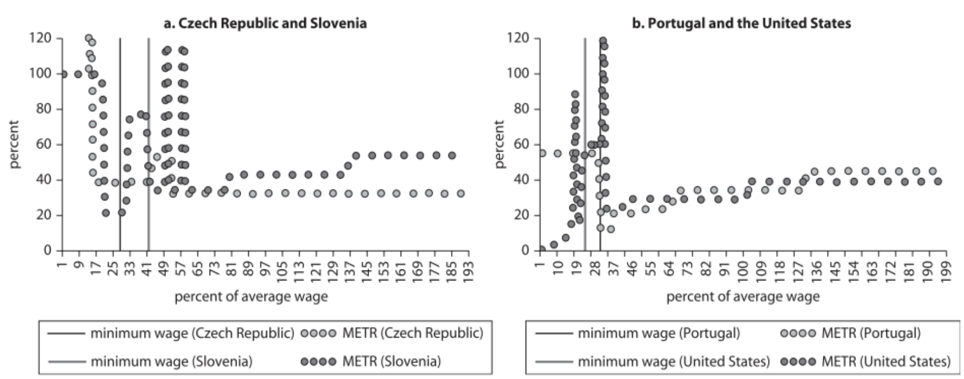
Source: Koettl and Weber 2012a, based on OECD 2008.
Note: The scatter plots depict the wage level where the formalization tax rate (FTR) peaks (x-axis) versus the peak value of the FTR (y-axis). Countries with a continuously and significantly increasing FTR were omitted. In countries where the FTR forms a plateau and increases only slightly with the wage level, the lowest wage level at which it stops increasing significantly was chosen as the peak. The new member states are in bold.

Source: World Bank (2012)

It is necessary to compute **marginal effective tax rate (METR)** to get a complete picture about how the tax rates and social benefits influence motivation of people to stay in formal economy. The METR measures, at a given wage level, how much of an additional euro earned in formal gross wages is taxed away, either as labor tax or in the form of withdrawn benefits. Thus, it is an indication of how much it pays for workers to earn more gross income, either by increasing work hours or receiving higher wages. As shown in Figure 15, according to the World Bank (2012), the new EU members tend to have high METRs—usually 100 percent—at low wage levels. For example, in the Czech Republic and Slovenia, every additional euro earned in formal income is 100% taxed away through withdrawal of social assistance at wage levels below 20% of the average wage. In Portugal, it is only 50% and in the US it is even less.

Figure 15: METR in selected countries

Figure 3.10 For Low-Wage Earners, the METR Is 100 percent in the Czech Republic and Slovenia but Is Much Lower in Portugal and the United States



Source: Koettl and Weber (2012a), for this volume, based on OECD (2008).
Note: Graphs show the marginal effective tax rate for a single person with no children.

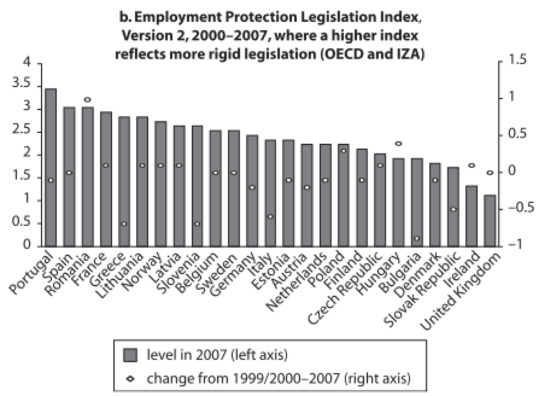
Source: World Bank (2012)

Conclusion: According to the World Bank (2012), the regression analysis on microdata shows that the levels of both the FTR and METR have a strongly significant, positive correlation with the probability that a worker is engaged informally. In other words, greater individual disincentives to formal work (as measured by FTR and METR) correlate strongly with higher probabilities of being informal. Of course, correlation says nothing about causality.

Employment protection

One of the most complex indicators of labor law flexibility is the **Employment Protection Legislation Index** computed by the OECD. It is a composite of three indicators: (1) Protection of permanent workers against individual dismissal, (2) specific requirements for collective dismissal, and (3) regulations on temporary forms of employment.

Figure 16: Employment protection in OECD and selected non-OECD countries



Source: World Bank (2012)

Contribution-benefit link

The strong contribution-benefit link means that the higher contributions you pay the higher benefits you receive. Typical example is a public pension. If you have to pay more money to the state pension fund and you get proportionally higher pension, you have high motivation to declare your income. On contrary, if you have to pay a lot, but you receive disproportionally little pension, you search for ways how to avoid mandatory payments. As the World Bank (2012) notices, the effect of strengthening the link depends critically on whether workers perceive the link between contributions today and benefits far in the future to be strong and credible. It means this effect depends on the credibility of institutions.

The World Bank (2012) emphasizes that the health insurance is the most important from among social insurance entitlements in regard of their influence on informal economy. The reason is that people feel immediate threat of falling sick in contrast for example to distant pension promises. Therefore, an easy access to free health insurance (e.g. paid by state) decreases motivation to work formally. Hence two recommendations:

- Entitlements to free health insurance should be (1) limited to the poor and (2) based on a means test, not an income test nor a formal employment status (such as registered unemployment).
- States should build robust means-testing mechanisms (or their proxies, e.g. based on electricity consumption, or frequent contact with a social worker).

3.3. Specific measures including the best Slovak experience

The following text offers several reform examples of how particular countries improved structural incentives in their tax system and labor market legislation:

Germany Hartz IV reform in effect from early 2000s (Source: World Bank, 2012): The reform introduced "minijobs" – monthly wages less than €400 are not subject to social insurance contributions. For monthly incomes between €401 and €800, the contribution rate rises gradually to the full share.

USA: Refundable tax credits (source: World Bank, 2012): The "earned income credit" and the "making work pay" credit are available to low-wage earners and their families. For a U.S. taxpayer with one child, 34 percent of earned income up to US$9,000 is refundable, which amounts to the equivalent of a cash benefit of about US$3,000. This refundable credit is phased out at incomes above US$16,000. Similar benefits are available for other family types and single persons earning low incomes.

Denmark's renowned "flexicurity" model (Source: World Bank, 2012): The word "flexicurity" was created by mixing the words "flexibility" and "security". The logic behind is that the reform increased flexibility in hiring and firing workers and at the same time increased security of people who lost employment. In other words, the reform shifted protection away from jobs to the people who lose employment by shifting the financial burden from businesses to the state. For businesses this means low costs of hiring and firing the employees. At the same time, the state offers more generous unemployment benefits and intensively deploys active programs such as retraining and job search assistance for unemployed people.

Chile introduced a mixed system of unemployment insurance in 2001 (Source: World Bank, 2012): The reform introduced the individual saving accounts underpinned with a risk-pooling safety net. The employers and workers are required to pay into accounts, and when workers leave or lose employment, they can draw on a specified portion their accumulated savings. Should a person's job search extend longer than five months, they receive a defined minimum unemployment benefit (safety net).

The best Slovak experience:

Slovak flat-tax reform from 2003/04 (Source: Goliaš, 2005):

- Unifying direct income taxes to 19% for individuals and businesses. The old system was strongly progressive with 5 personal income tax rates ranging from 10% for the lowest income to 38% for the highest income. The reform also decreased the corporate income tax rate from 25% to 19% and cancelled the dividend tax rate of 15%. The combined statutory corporate income tax rate and dividend tax rate dropped from 36.3% in 2003 to 19% in 2004. Thus, Slovakia had one of the lowest composite taxation of capital income faced by a private investor in the EU and OECD countries.

- Increasing the indirect consumption taxes. In the old system there were two VAT rates: standard rate of 20% and reduced rate of 14%. The tax reform unified both and introduced a single VAT rate of 19%. The tax reform included an increase in the excise tax rates on mineral oils, tobacco, and tobacco products, spirits and beer.

- Radical simplification of the tax code. The old system included 90 exceptions, 19 sources of untaxed income, 66 tax-exempt items, and 37 items with specific tax rates. The reform virtually abolished all of them, making the tax system much simpler and transparent, and eliminated speculation aimed at paying lower tax rates. The reform also cancelled three minor taxes – gift tax, inheritance tax and real estate transfer tax.

- Increasing the basic personal allowance deductible from the tax base from €968 to €2021 per taxpayer in 2004. As a consequence, everybody with wage below approximately half the average wage in the economy did not pay any income tax at all. Others pay a uniform tax of 19% on the difference between their income and the tax-free income.

- Introducing tax bonuses for children deductible directly from the tax. As a result, working parents pay lower taxes or, with too low income, they get money back from the state – principle of "negative tax".

Slovak labor market reform from 2003 introduced more flexible Labor Code (Source: Goliaš, 2007):

- The Code ordered to option between taking a notice period and taking compensation after termination of contract. It was not possible to take both the notice period and the compensation. The Code ordered 2-month notice period and 2-month compensation for employees who have been working with their employer for less than 5 years; and 3-month notice period and 3-month compensation for employees who have been working with their employer for over 5 years. These were the minimum limits valid if not agreed otherwise in a collective agreement. Thus, a <u>termination of contract cost 2-month wages in case of employment lasting under 5 years and 3-month wages in case of employment over 5 years</u>.

- Increasing overtime limit from 150 hours to 400 hours yearly for one employer and with worker consent. Exceptions were possible for agricultural seasonal work.

- Practically indefinite extension of the fixed-term contracts

- Flexible termination of fixed-term and part-time contracts

- Weaker Labor Unions: They lost veto power in organizational changes including firing the employees and introducing flexible work time.

Besides these measures there are two other frequently used forms of flexible employment in Slovakia:

- Working „agreements“: Concluded only for a limited time (1) per week for regular employment or (2) per year for irregular employment. These agreements offer flexible entry/exit and until 2012 they were also freed from social security contributions.

- Agency work: Specialized agencies employ workers who are then hired by real producers. The agencies organize workers among many producers to minimize costs related to closing the job (such as severance payment, etc.).

Here is also a **more complex list of the best measures adopted in Slovakia**. The measures are categorized into three different groups as proposed by Schneider (2010).

<u>Negative enforcement</u> includes controls (e.g. onsite visits, tax audits), penalties (monetary, loss of state subsidies, up to forced closing of business), and new regulations (e.g. identification cards for construction workers, forced use of electronic payments, limits on cash transactions). The disadvantage is that the negative measures are unpopular and might reduce economic activity.

List of measures:

- 1994: Compulsory cash machines (disadvantage: before daily closing, it was still possible to remove data from the operational memory)

- 2011-2012: Compulsory cash machines with fiscal memory that records identification information about the user and the machine as well as all performed transactions. It is impossible to erase recorded information. The fiscal memory is not available to the user (it is sealed by the Ministry of Finance) and it must be possible to read it from the PC. Penalties if fiscal memory is missing: €330-3,300 after the first control and €660-6,600 after the second control. Remaining problem: unrecorded transactions.

- 2012: Ban for cash transactions over €5,000

- Penalties €2-200 thousand for employing unregistered workers (depending on their number). Current proposal: Increasing lower band to €5 thousand.

- Tax audits resulting in arrests and imprisonments (e.g. in 2013 a businessman who avoided paying VAT was sentenced to 11-year prison).

<u>Positive indirect enforcement</u> proved to be most powerful:

List of measures:

Structural incentives (e.g. simplifying the tax and social benefit systems):

- 2003: Labor market reform (see above)

- 2003-2004: Flat-tax reform (see above)

- 2004: Social benefits reform: Activation benefits for unemployed (part of social benefit is payable only upon providing limited work for public purposes)

- 2005: Pension reform: Linking contributions to pension benefits

Increasing transparency and fight against corruption:

- 1998-2002: Privatization of banks, telecom, energy (transparent international tenders)
- 2000: Freedom of Information Act (focus on public sector contracts, no “trade secret” objection)
- 2003: Online business registry (user-friendly, searchable)
- 2004: Specialized Court and Prosecutor’s Office (focus on big corruption cases)
- 2007: Online Land Registry
- 2011: Publishing all property contracts and invoices of public institutions on internet. The contracts are not valid unless they are published. This measure means a shift from on-demand (i.e. based on information demanded by citizens) to automatic transparency. It allowed for creation of searchable portals displaying and comparing relevant information such as who were the biggest suppliers to the state, at what prices, etc.
- 2011: Wider use of mandatory electronic auctions when public sector institutions purchase goods. According to the Transparency International Slovakia this measure led to rise of bids in public tenders and to 6-15% savings.
- 2011: Wider use of competition methods in public procurement
- 2012: Publishing court rulings on internet, public selection of judges

<u>Positive direct enforcement</u> include for example introduction of vouchers or reduced value added tax (VAT) for household services, marketing campaigns, and incentives for electronic payment systems.

List of measures:

- Since 2002: Privatized banks are supporting electronic payments (internet banking, credit/debit cards, etc.)
- 2013: Lottery with cash machines‘ bills (inspired by Taiwan)

3.4. Recommendations

The World Bank (2012) emphasizes, that the fight against shadow economy is not all about enforcing laws and punishing offenders, but also about making the formal sector more attractive and changing social norms for paying taxes. Building trust in government is a key factor in convincing citizens paying taxes is useful. According to the World Bank (2012), “a good starting point is building good and trustworthy relationships between tax officials and taxpayers. (…) Improved and sustainable high levels of tax morale can only be achieved through a successful liaison of three factors: **corruption control, the quality of institutions**, and the degree of **citizens’ participation.”**

States should also apply friendlier tax system coupled with a viable social and employment protection schemes. Here are key recommendations of the World Bank (2012):

- Apply tax incentives for low-wage earners
- „Smooth“ marginal effective tax rates (e.g. by introducing a flat tax)
- Remove minor taxes (e.g. heritage, gift taxes) and minimize exemptions and loopholes
- Shift taxes away from taxing labor earnings to value added tax or progressive real estate taxes
- Integrate collection and auditing of taxes and social insurance contributions
- Automate administrative processes and interactions between the tax authorities and taxpayers (e.g. electronic payments)
- Design smart safety nets that reward formal work; **any additional formal wage should increase net income, including benefits;** the withdrawal of benefits has to be gradual
- Adopt the “flexicurity” approach of protecting people rather than protecting jobs; balance the protection afforded to workers and consumers and the flexibility afforded to employers
- Keep low ratio of minimum/average wages
- Tie social insurance benefits closely to contributions (plans with primarily redistributive objective should be shifted to general taxation)
- Provide free health insurance only to the poor people, based on a means-testing (alternative is a narrower definition of health coverage package)

Additionally, we propose several more specific recommendations:

- Contact Friedrich Schneider from the Johannes Kepler University in Linz, Austria and compute the actual size of the shadow economy in Moldova (most recent data is from 2006).
- Initiate cooperation with the OECD and the World Bank in order to compute structural incentives indicators for Moldova. The indicators should include productivity of social insurance,

Employment Protection Legislation (EPL) index, tax wedge, formalization tax rate, and marginal effective tax rate. Where applicable, the indicators should be computed for different types of families (e.g. single/couple, number of children), different types of income (e.g. employment, self-employment) and different income levels. Based on the results, Moldova should introduce measures aimed at improving these indicators.

- **Reducing tax burden (including social insurance contributions) for low-earners is top priority measure especially in countries with low formal income (i.e. where the risk of absolute poverty is higher).** Introduce measures aiming at decreasing the tax wedge as well as the formalization tax rates for low-earners. Take inspiration from the Hartz IV reform in Germany where monthly wages less than €400 are not subject to social insurance contributions and for monthly incomes between €401 and €800, the contribution rate rises gradually to the full share.

- Make sure that it pays-off to work instead of taking social benefits. Social benefits should gradually decline as the working income rises. People working legally should have substantially higher net income than nonworking people living out only of social benefits.

- Keep your tax system as simple as possible (remove exemptions and special tax rates) – take inspiration from the Slovak tax reform from 2003/04.

- Keep low costs of dismissing employees (low severance payment and notice period) and support flexible forms of employment (e.g. flexible extension and termination of part-time and fixed-term labor contracts) – take inspiration from the Slovak Labor market reform from 2003. This helps to create more legal jobs especially in seasonally sensitive sectors such as agriculture which creates around 16% of Moldovan GDP and employs more than 27% of employees (Mundi, 2013).

- Build ethical and professional tax authority that is immune to bribing in tax collection/audit. Consider at least partial decentralization of income tax collection. Local municipalities have some information about the real income of taxpayers, which the central government does not have. They can recognize better than the central government who works in the shadow economy, to whom undeclared work serves as a sort of safety net and who is just a free rider.

- Systematically reduce bureaucracy and support competitive environment; competitive banking industry would support and allow for spreading the electronic payments.

- Apply mandatory use of cash machines with fiscal memories.

- After reforming structural incentives, focus on repression measures more intensively (e.g. on-site visits and penalties for employing unregistered workers and/or un-declaring income, tax audits resulting in arrests and imprisonments, ban for cash transactions over certain threshold).

- Build social capital, trust to politicians and government institutions. This is a long lasting process that requires increasing transparency in public spending, fighting corruption, and improving the quality of institutions and public benefits. As Jurzyca (2012) suggests: *"Convince people that they should pay taxes. That it is moral, fair, that paying taxes is not a shame. Tax evasion should not* *be national sport. It is not truth, that nobody pays taxes. See prisoner's dilemma: if everybody believes that inflation will increase, it will increase, if everybody believes, that nobody pays taxes, almost nobody will pay them, if everybody believes, that all people are in shadow economy, almost all of them will enter it. The message is backed by emotions rather than numbers; it is to build a spirit of a society."*

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