

Tax wedge, labor market and the shadow economy – examples of Russia and Ukraine.

By Mateusz Walewski

According to various authors, by the beginning of this century Ukraine's shadow economy was estimated to be around 40-50% of the official economy, one of the highest levels in Europe. The estimates for Russia show similar results (around 40% of GDP). These figures suggest that in both countries around 30-40% of total employment is located outside the registered economy. This has negative yet important consequences both for public finances and related individuals. The former suffer from lower tax incomes, the latter lack access to important elements of the social security system.

In order to curb this growing problem both governments introduced a series of tax and social security payment reforms between 1998 and 2004. Among others, both countries introduced flat Personal Income Tax Rates, Russia since 2001 and Ukraine since 2004. They also simplified social security tax systems for the self-employed as well as small entrepreneurs, which significantly reduced their overall tax burden.

According to recent research¹, although both reforms could have positive fiscal outcomes, increasing budget incomes due to improved compliance from high wage earners could not seriously influence the actual size of shadow employment among those with lower earnings. Both tax reforms simply reduced the tax progression and complexity of systems for small entrepreneurs. They did not result in serious reductions of the tax wedge for low wage earners, meaning that they neither increased their motivation to find legal employment nor increased (at least directly) the number of "cheap" legal jobs offered on the market. This is an important observation considering that literature on the subject suggests that most of those engaged in shadow

employment are poorly educated blue-collar workers who also suffer the most serious social consequences of unregistered employment.

There are four arguments supporting this hypothesis. At first, the tax wedge is much more costly in terms of legal employment for those with low expected wages (mainly low-skilled). Those working in the shadow economy are not rewarded with higher net earnings compared to their counterparts performing similar legal jobs. This suggests that lack of employment opportunities and not tax avoidance is the main motivation to take unregistered jobs. Moreover, tax reductions in Ukraine resulted in a decrease of shadow employment among those who are educated. Finally, the social security system in both countries plays a discouraging role. Specifically, access to additional social security benefits resulting from legal employment is not enough to motivate unregistered workers to try to look for legal jobs.

Employment effect of tax wedge more pronounced on low-skilled

The ability to shift taxes on employees (in the form of reduced post-tax wages) depends on the elasticity of the labor supply. A less elastic labor supply allows wages to be decreased without a significant loss in hours worked. A perfectly inelastic supply of labor, meaning the number of persons ready to take a job will be the same regardless of wages prevailing on the market, allows for the shifting of payroll taxes to employees without employment costs. Some argue that blue-collar (low-skilled) workers have a higher elasticity of labor supply than white-collar (high-skilled) workers.

¹This e-brief is based on the results of one of the studies implemented in the frames of the European Commission 6th Framework Programme project ESCIRRU ([Economic and Social Consequences of Industrial Restructuring in Russia and Ukraine](#)) where CASE was a member of a consortium coordinated by DIW Berlin. The full results of this study have been published both by CASE ([CASE Network Studies and Analyses No. 398](#)) and by DIW (ESCIRRU Working Papers 008) in their related working papers series. The study entitled "Social security driven Tax wedge and its effects on employment and shadow employment" was co-authored by Marek Góra, Oleksandr Rohozynsky, Irina Sinitsina and Mateusz Walewski.

This indicates that tax-wedge decrease (increase) causes a larger employment gain (loss) for low-paid workers than for high-paid workers. The high elasticity of labor supply among low-paid workers can be attributed to general opportunity costs of working reinforced by existing systems of non-employment benefits, other sources of non-wage incomes or by a binding minimum wage.

If labor taxes were theoretically decreased in both countries by 10%, the number of employed with expected wages below the median would grow by 11% in Russia and by 24% in Ukraine. For those above the median, the respective changes would reach 4% in Russia and 11% in Ukraine. As a result, the total employment effects of the tax wedge cut have been estimated to be much higher in Ukraine than in Russia. The total employment result of the 10% tax cut increase would be 6% employment growth in Russia and as much as 15% employment growth in Ukraine.

Although quantitative results are only illustrative, they do shed some light on possible differences between the tax wedge influence on employment levels of unproductive, unskilled workers characterized by low and rigid wages, and highly productive skilled workers with high and flexible wages. The varying results between the two countries highlights the differences in the starting levels of both total and relative employment rates for various groups that make up the labor force in Russia and Ukraine.

Shadow employment does not lead to higher wages

Results of other studies performed by CASE concerning shadow employment (i.e. Poland) indicate that for less skilled and unregistered workers it is not a way to evade taxes. For most of those workers it is a necessity resulting from a lack of registered jobs. In studying Poland it has been shown that unregistered workers are much more similar, from the point of view of their socio-demographic characteristics, to unemployed and inactive workers than to those employed legally. It has also been shown that shadow employment for this groups of workers does not result in higher net wages.

Similar econometric exercises, relating net wages to the legality of employment have also been performed for Russia and Ukraine. It has been shown that in Russia work in shadow employment decreases the net wage by about 12% as compared to legal employment with similar characteristics. In Ukraine unregistered employment results in lowering net wages by 8%. Therefore, in the case of these two countries working in

the shadow economy should not be treated as a way to increase wages, because those taking unregistered jobs must accept lower incomes. Instead, it is a way to escape unemployment and poverty, not taxes.

Ukrainian tax reform reduced shadow employment among the educated

The results of the analysis conducted on Ukraine indicate that tax reform (introduced in 2004) as such had the expected negative influence on the probability of shadow income. More detailed analysis of equations coefficients indicates however, that this effect is much stronger for households headed by persons with at least an uncompleted tertiary education.

It seems that Ukraine's recent tax reform could lead to an overall improvement in tax compliance. It proves implicitly the existence of a statistically significant interdependence between the size of the tax wedge and shadow incomes, resulting in some reduction of shadow employment. On the other hand, the same analysis indicates that the reform has targeted mainly those groups who are expected to engage in the shadow economy less often, i.e. those with relatively high skills.

Loss of benefits not enough to deter shadow employment

According to the literature a country's shadow economy can be influenced by the social security net in two ways. If social security benefits, such as pensions, unemployment insurance, or health insurance, are linked to employment (for example, as in the continental social security system model), then workers within the shadow economy are not eligible for these benefits. If workers trust the social security system to deliver insurance when they need it, then larger amounts of possible benefits will stimulate workers to find official employment or put pressure on enterprises to hire them formally. Some evidence suggests that larger government social security expenditures are associated with a reduction in shadow employment.

Both theory and common sense would also suggest that one of most important deficiencies of unregistered employment is a lack of workers' rights resulting from Employment Protection Legislation (EPL). The results of the analysis indicate that engaging in shadow employment limits the access to some employment related social services such as: paid leave, access to preschool, sickness leave or maternity leave in both countries. Unregistered employees in Russia lose 2.3 of 3.6 services available to an average worker, while

shadow workers in Ukraine lose on average 1.1 of 3.2 services available.

First, the amount and quality of social benefits is very low and is not enough to encourage those employed in the shadow economy to legalize their work. Until the beginning of the 21st century most payments in CIS countries were not automatically indexed with inflation, but rather revised on irregular bases. As a result, by 2003-2004, welfare payments including pensions became merely symbolic. Additionally, part of existing benefits and services, due to their general coverage, are accessible regardless of shadow employment, often creating the free rider problem.

Also workers' opinion on EPL compliance and non-compliance is mixed. According to data obtained by the project implemented by a Russian National Industrial Security Program (NISIP) in 2003, 75% of the public sector workers and 64% of workers of large industrial companies admit that EPL non-compliance brings more losses than gains to workers. They tolerate it only because they are unable to change the situation. At the same time however, this opinion is shared by only 43% of those employed without a written contract and by 44% of employees of Small and Medium Enterprises (SMEs), where the EPL non-compliance is much more widespread.

The majority of workers cannot see any difference between registered and shadow employment. As the amount of most tax financed social security benefits is miserable, many workers prefer to agree to informal cash payments, not thinking about contributions that they would "probably" need later in their lives. This situation, accompanied by widespread EPL non-compliance to some extent equalizes the positions of the formally and informally employed from the viewpoint of their social security and labor rights protection.

Conclusions

The income tax and social security reforms introduced in Russia and Ukraine between 1999-2004 could not result in serious shadow employment reductions in either country, although they could increase general tax compliance and boost budget incomes. Four arguments back this thesis. First, the tax wedge was much more costly in terms of legal employment for those with lower skills. Moreover those working within the shadow economy were not rewarded with higher net earnings

suggesting that lack of employment opportunities and not tax avoidance was the main motivation behind the acceptance of unregistered jobs. Finally, although tax reductions in Ukraine reduced shadow employment among educated workers, inefficient social security systems in both Russia and Ukraine continue to play a discouraging role.

Any future policies designed to curb shadow employment in either of these two countries should aim to broaden general employment opportunities for unskilled workers. Such a successful action would most probably result in a serious decrease in shadow employment. At first it seems that reducing the size of the tax wedge for low-skilled (low-wage) workers could have significant effects on legal employment levels. On the other hand better targeting of social benefits and services, resulting in quality improvement and limiting free riding, could additionally reduce the incentive to participate in the shadow economy.

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