In late 2017, the National Alliance for Local Economic Development (NALED), with the support of German Development Cooperation, produced the study on shadow economy in Serbia. It included the estimation of the shadow economy scope, and selected the key characteristics of businesses taking part in such operations, as well as the factors contributing to whether a business operates legally or joins the "shadow zone". Below we provide the key findings and recommendations of the research conducted by Prof. PhD Gorana Krstić, Faculty of Economy, and Prof. PhD Branko Radulović, Faculty of Law in Belgrade, for the needs of NALED. The stated estimates involve only the part of shadow economy referring to the formal sector (registered businesses).

**FINDINGS**

The scope of shadow economy is currently at a lower level than it was five years ago. Among registered businesses, in terms of their turnover and payment of salaries, the shadow economy has been reduced from 21.2% in 2012 to 15.4% of GDP in 2017. The new survey method of estimation, based on the data about non-registered salaries and non-declared profit, the calculated shadow economy scope is approximately the same – 14.9% of GDP. The improvement of business environment and macroeconomic stability, the growth of registered GDP, the recovery of the labor market, as well as the improved performance of inspections, stricter penalty policy and more efficient collection of tax revenues – all contributed in reducing the shadow economy over the previous five-year period.

Shadow economy still acts as a major burden to businesses. Compared to other countries which implemented the new survey method, the shadow economy in Serbia (14.9% GDP) is lower than in Montenegro (24.5%) and Latvia (20.3%), with its level being closer to Estonia (15.4%) and Lithuania (16.5%). However, the share of non-registered businesses, which were not included in this estimations, is much higher in Serbia compared to the Baltic countries.

The payment of salaries in cash makes the major part of unfair competition. In terms of the shadow economy structure, informal employment, i.e. payment of salaries in cash, partially or entirely, account for a much larger share of shadow economy than non-declared profit. Out of 100 dinars...
in the shadow zone, approximately 62 refers to non-registered salaries, while 38 dinars account for non-declared profit.

One in three businesses are involved in shadow economy operations. In 2017, 16.9% registered businesses engaged in some form of shadow economy, compared to 2012 when these accounted for 28.4%. Observing the forms of informal operations, approximately one tenth of businesses (10.8%) have informally employed workers, while 6.9% perform payments in cash, even though they are VAT taxpayers. On the other hand, according to the view of businesses, the share of non-registered companies in their sector of work is 17.2%, so it can be concluded that nearly one in three businesses operate in the shadow zone.

A major contribution towards the reduced level of shadow economy was also provided by a larger shift of businesses into the formal zone. The panel data which encompassed the same businesses engaged in some form of shadow economy, compared to 2012 when these accounted for 28.4%. Observing the forms of informal operations, approximately one tenth of businesses (10.8%) have informally employed workers, while 6.9% perform payments in cash, even though they are VAT taxpayers. On the other hand, according to the view of businesses, the share of non-registered companies in their sector of work is 17.2%, so it can be concluded that nearly one in three businesses operate in the shadow zone.

The share of businesses engaged in shadow economy, compared to 2016.

Diagram 1: Transition of businesses between the formal and shadow economy, 2012-2017, simplified view

Viewed in absolute figures, there are more companies that moved to the formal zone than those that opted out of formal operations, thus making a positive net result.

Entrepreneurs show more tendencies to operate in shadow economy than companies. Among companies, those more prone to shadow economy are the ones which have no employees and those operating with related parties. The probability that companies with no employees will engage in shadow economy is four times higher than for the ones that employ workers.

The share of businesses with informal employees is nearly twice is less than five years ago.

More than a third of businesses (38%) have never been visited by line inspections. In 2016, the most common visits were those by the labor inspection, which paid visits to nearly 50% of all businesses. As for the other areas, 31% businesses state they have been visited by the market inspection, and 26% by the tax inspection. Approximately 5% of businesses visited by labor inspection were penalized, compared to 8% of those visited by market inspection. Among businesses fined by labor inspection, 19% found that the penalty was too strict, compared to 27% in case of market inspection and 37% in case of tax administration.
Doing business in the shadow zone is largely linked with the "survival strategy": The analysis showed that businesses operating at a loss were twice as likely to join the shadow zone that the ones operating successfully. Businesses with higher revenues, as well as the ones with stable sales revenues, less engage in shadow economy (non-registered workers, salaries or profit), compared to those whose revenues dropped compared to 2016.

Improved prevention and more efficient sanctions influenced the reduction of shadow economy. The expectations of businesses in terms of likelihood of detecting illegal work and the perception of sanction severity are now much higher than five years ago. According to the analysis results, the composite expected probability that sanctions would be imposed to a business operating in the shadow zone (probability of being detected, with an imposed and executed penalty) in 2017 was 24.1%, which is 2/3 higher compared 2012, when this amounted to 14.5%. Additionally, a significantly lower number of businesses now find that these businesses still continue their informal operations after the penalties (53% in 2017, compared to nearly 2/3 of businesses in 2012).

Who is requesting stricter sanctions?
The variable describing the views of respondents regarding the level of penalties is statistically very significant, indicating that the ones who find that penalties should be stricter are actually more intensely involved in the shadow economy activities – 5.9% more than the others. This means that such businesses are more commonly engaged in non-registering salaries and profit precisely because the existing penalties are low, so these should be made stricter.

Consciousness has an important role in joining the shadow economy. The view that the shadow zone operations are justified significantly influence whether a business joins the shadow economy, and to what extent. Even 80% of businesses in 2017 considered such operations unjustified, or mostly unjustified, while the share in 2012 was 72%. Only 3% of businesses in 2017 found that the shadow zone work was mostly justified, while in 2012, 8% found this work mostly or entirely justified.
Given that better economic position of companies may lead to reduced shadow economy, further improvement of the macro-economic and regulatory environment has a major impact in the transfer of businesses from the shadow to the formal zone.

With non-registered employees as the dominant form of shadow economy in Serbia, the focus of public policy measures should remain the countering of informal employment.

The limited resources for supervising business operations indicate the need for risk analysis and adequate targeting high-risk businesses (businesses with no employees or those operating with related parties).

The policies for reducing shadow economy should focus on raising the probability of detection and punishment of businesses engaging in shadow economy, as well as the enforcement of imposed penalties, through more efficient control of inspection and tax authorities. Further reform of the inspection system and introduction of a portal for exchanging information will certainly contribute towards reducing the shadow zone.

One of the state’s priorities in countering shadow economy should be the strengthening of tax culture. To Among other things, this can be achieved through media campaigns for raising awareness among citizens and businesses about the negative effects of shadow economy, better informing the citizens about the value of public services, and improving the quality of these services.

The view that the shadow zone operations are justified may reflect the perception of inadequate tax policy and excessive tax burden. The taxpayers’ dissatisfaction may be reduced with predictable tax policy, their higher engagement and better informing about the changes in tax regulations.

**Stricter penalties are better than the mild ones, the best are the ones being executed**

While the growing probability of being punished reduces the shadow economy by 11 percent, the growing probability that a discovered business will be punished and have to pay the fine, the shadow economy scope drops by 14 percent.

Given that shadow economy is not limited to one or two areas of work, it is important that the formulation of strategies and specific measures for formalizing shadow economy bring a focus on sector neutral measures. We once again remind that the performed analysis did not include the non-registered businesses, so the findings do not refer to sectors with a significant share of non-registered businesses.