



Fondacija za razvoj ekonomske nauke

Foundation for the Advancement of Economics

POLICY Brief

Policy Measures to Formalize the Shadow Economy and their Effects on Economic Growth in Serbia

Context – the importance of reducing the shadow economy

The shadow economy is one of the greatest challenges facing the Serbian economy; its consequences are manifest in tax evasion, market distortion, unfair competition, and inefficient resource allocation. In many transition countries, Serbia included, the shadow economy is a major obstacle to the development of a strong corporate sector and the creation of a functioning market economy. Although the shadow economy remains an important safety net for many individuals and households in Serbia, its adverse impact on employees, enterprises, and society as a whole far outweighs its advantages.

Aim of the research

The aim of the research is to provide an evaluation of the shadow economy based on the results of the survey on shadow economy among 1200 formally registered firms and other relevant macro-economic data and to develop a strategy and specific recommendations that would help formalization of the shadow economy in order to improve the competitiveness of the Serbian economy and contribute to economic growth.

Causes of the shadow economy

Among the relevant fiscal causes of the shadow are the relatively high fiscal burden on labour; complicated and costly tax procedures; complicated and opaque tax system; poorly-organised, under-staffed, and under-equipped tax administration; poor quality of public services; and high tolerance for the shadow economy. As for features of the labour market, several factors particularly significant for fostering and sustaining the shadow economy can be highlighted among a broader range of issues: these are: high fiscal burden on labour for lower wage earners; a social security system that virtually prevents people in formal employment from being entitled to social welfare benefits and other transfers; high minimum wage; and certain regulations governing statutory employment protection, working hours, unemployment benefits, and the pension system.

Other institutional and economic factors

There are many other institutional and economic factors that contribute to the large extent of the shadow economy. Owing to low productivity, the business models of many enterprises are such that they can only operate at a profit if they evade paying taxes. The economic crisis and pervasive liquidity issues have forced even the more productive businesses to shift a portion of their operations into the informal sector, and inefficient enforcement and market exit mechanisms incentivise businesses operating in the informal sector to remain there. Among the other causes are high administrative burdens on doing business; low quality of the regulatory environment; and legal insecurity. In addition to these regulatory causes, the decision to operate informally is also affected by widespread corruption and low tax morality. The most important financial factors are the large share of cash transactions in the total volume of payments; informal financing; and unregistered remittances of migrant workers.

Estimates of the extent of the shadow economy and tax gap

The extent of the shadow economy in Serbia was estimated using three methods: MIMIC, Household Tax Compliance, and the Survey on Conditions for Doing Business. The application of the MIMIC method found that the shadow economy across all sectors in Serbia stood at some 30 percent of GDP in 2010. Data for the same year resulted in an estimate of 23.6 percent of GDP for the shadow economy that could be identified on the basis of household income and consumption (the HTC method). According to the Survey on Conditions for Doing Business, the shadow economy in the sector of enterprises stood at some 21 percent of GDP for the two major types of informal activity (illicit trade and undeclared work). Based on these results, we can conclude that the total extent of the shadow economy in Serbia was 30 percent of GDP, and that it was for the most part accounted for by the trade in goods and undeclared work.

Table 1. Extent of the shadow economy according to various methods of estimation

	Year	% of GDP
Shadow economy according to the MIMIC method	2010	30.1
Shadow economy – HTC method	2010	23.6
Shadow economy – Survey	2012	21.0

The study also estimated the tax gap in the collection of VAT, personal income tax, and social security contributions. The VAT gap was estimated at 2.5 percent of GDP, while the gap in personal income tax and social security contributions was put at about five percent of GDP. We believe that the estimates of tax gaps for key forms of taxation are relatively reliable. By extrapolating these estimates we arrived at an approximate estimate of the total tax gap in Serbia, which we put at about 10 percent of GDP. A similar figure was also obtained using the HTC method, which indirectly supports the above estimate.

The shadow economy in the enterprise and entrepreneur sector

The Survey on Conditions for Doing Business asked respondents to state their views of whether their own enterprise was engaged in shadow economy, and found that 28 percent of all business entities in Serbia did so. These enterprises and entrepreneurs employed workers informally and/or made payments in cash although they were VAT-payers. The term ‘informal workers’ is used to describe workers employed without a contract or those who do have contracts but only part of their wage is officially declared, with the remainder paid in cash. The results of the Survey show that entrepreneurs, new start-ups, businesses in construction and those based in Central Serbia are more likely to engage in the shadow economy. Based on respondents’ views of the participation of their own enterprises in the shadow economy, as well as their estimates of the extent to which other entities in the same industry take part in informal activities, we estimated the upper and lower limit of the

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extent of the shadow economy in this sector. Thus the share of employees working without formal contracts ranged from 1.9 percent (lower limit) to 23.9 percent (upper limit) of the total number of employees. The share of employees with a portion of their wages undeclared ranged between 3.8 and 24.7 percent, while the share of cash transactions stood at between 11.3 and 21.6 percent of the total volume of payments.

Econometric analysis

Econometric analysis based on the Survey data identified specific factors that are statistically significant for an enterprise's decision of whether or not to engage in informal operation. The results obtained were in line with the findings of other studies, where entrepreneurs were seen to be more likely to take part in the shadow economy than other business entities. Moreover, business entities in the construction sector were almost twice as likely to operate informally as those in services, while entities in the trade sector were nearly two times less likely to do so. Finally, the attitude the business entity has toward the shadow economy was a major and statistically significant factor determining that entity's participation in it.

As many as 85.3 percent of the business entities surveyed stated that such (unfair) competition was present in their industry

The findings of the Survey have shown that competition from entities operating at least partly in the informal sector was extremely widespread. As many as 85.3 percent of the business entities surveyed stated that such (unfair) competition was present in their industry. Construction and transportation again led the field, whilst the presence of competition was also determined to a large degree by the likelihood of detection. This shows that most problems appear in industries with greater regulatory obstacles to formalization and greater difficulties in detecting informally employed workers. Since such an environment is conducive to greater operating savings, the pressure of competition coming from the informal sector is thus also greater.

Effects of formalising the shadow economy

The potentially increased public revenue that could be generated by the reduction of the shadow economy in Serbia has been estimated at between 0.8 and 1.1 of GDP in the medium term or some 2 percent of GDP in the long term

Effects of formalising the shadow economy. Although the estimated extent of the shadow economy in Serbia is significant, comparative data show that it is only about 15 percent greater in Serbia relative to the averages of Central and Eastern European countries. This leads to the conclusion that the tax gap in Serbia is greater by approximately the same percentage than in these other countries. The optimal aim in reducing the extent of the shadow economy and the tax gap in Serbia could thus be to reduce them to the Central and Eastern European averages over the medium term, while the long-term goal could be to bring them down to the levels seen in developed Western European countries. The potentially increased public revenue that could be generated by the reduction of the shadow economy in Serbia has been estimated at between 0.8 and 1.1 of GDP in the medium term (up to three years), or some 2 percent of GDP in the long term (between seven and ten years).

These estimates are the upper limit of potential additional public revenue that could be generated through the reduction of the shadow economy, since the level of institutional conditions for tackling the shadow economy, as well as tax morality, are far higher in Western European countries in Serbia – a consequence of their long traditions of combating the shadow economy. The fiscal effects mentioned can be achieved in Serbia only assuming all relevant measures necessary to tackle the shadow economy are applied in a comprehensive, non-selective and consistent manner. From the fiscal policy standpoint, one must keep in mind the fact that a reduction in the extent of the shadow economy will not make room for any tax cuts or greater public expenditure. Taxing the shadow economy should contribute to a drop in the fiscal deficit and compensate for the decline in tax revenues due to the expected restructuring of the economy towards less-taxable activities such as exports and investment.

The effect of the shadow economy on registered GDP is statistically highly significant and has the expected negative sign

The findings of the MIMIC method applied to Serbia and the other ten Central and Eastern European countries show that the effect of the shadow economy on registered GDP is statistically highly significant and has the expected negative sign: if GDP per capita falls by one percentage point, the shadow economy will increase by between 0.6 and 0.7 percentage points, depending on the model used. This means that any future decline in the GDP will increase pressure on the shadow economy, since business entities will endeavour to compensate for fewer opportunities to operate in the formal sector by shifting into the shadow economy. This finding underlines the importance of preserving macroeconomic stability and creating conditions for growth in the future, which will serve as a major component of a successful strategy for formalising the shadow economy.

Recommendations for formalising the shadow economy

Recommendations for formalising the shadow economy. Policies designed to reduce the shadow economy can be divided into several components: general reforms that address the shadow economy by building a favourable environment for doing business in the formal sector; incentives directly aimed at the shadow economy; and building administrative capacity of the state. A proposed set of preventive measures and incentives aimed at formalising the shadow economy, which cover tax policy; labour market institutions; financial sector and business environment, is presented in the Table 2.

Table 2. Recommendations for Formalizing the Shadow Economy

Measure	Expected outcome
Tax policy	
Reduce fiscal burden on labour (see section on features of labour market)	Lower extent of shadow economy in employment and medium-term increase in rate of registered employment
Remove tax breaks for corporate income tax and harmonise taxation of property of both individuals and legal entities	Less distortion generated by tax system and legal tax avoidance. Slight increase in public revenues
Reduce and simplify tax procedures	Lower costs of administering taxes and greater readiness of taxpayers to pay taxes
Increase number of Tax Administration staff engaged in audits, improve their qualifications, and improve methodology used in selecting entities to be audited	Greater cost of tax evasion and, consequently, less evasion
Improve consistency of implementation of statutory penalties for tax evasion	Greater costs of tax evasion and, consequently, less evasion
Ban sale of new industrial products at flea markets, farmers' markets, and roadside stalls	Reduction in volume of shadow economy in trade in goods
Register unregistered buildings for tax purposes	Fewer untaxed buildings
Reassign Tax Administration staff from administrative tasks to uncovering visible tax evasion (online, at catering establishments, etc.)	Reduction in volume of shadow economy in trade in goods/services
Broaden application of statutory provisions on cross-checking property and income	Less evasion of income tax
Improve co-ordination between Tax Administration and other government bodies (Police, social security funds, Cadastre, local tax authorities, Business Registries Agency, Central Securities Depository, etc.), particularly on exchange of information	Greater probability of detecting unreported income and property
Improve activity by government in collecting taxes on reported income	Less tax reported and not collected
Credible commitment by state to abandoning practice of writing off interest on back taxes	Greater readiness of taxpayers to settle tax liabilities on time
Educate the public about the importance and value of services provided by the government, as well as about the drawbacks of the shadow economy, through the public education system and the media	Greater tax morality
Invest effort into systematically improving the quality of public services (education, healthcare, administrative procedures, etc.)	Greater readiness of taxpayers to pay taxes

Labour market institutions	
Lower fiscal burden on less-paid work through increase of tax-exempt personal census to level of minimum wage	Greater formal employment of lower-qualified workers, particularly in labour-intensive sectors
Remove minimum base for social insurance contributions	Greater formal employment of part-time workers, particularly those earning less
Introduce more favourable tax treatment for <i>mini</i> and <i>midi jobs</i>	Greater formal employment of part-time workers, particularly those earning less
Introduce more favourable tax treatment for seasonal workers in agriculture, catering, tourism and construction	Greater registered employment in seasonal jobs
Consider introduction of contribution rates differing by sector or progressive social security contributions	Based on findings of study
Reduce minimum wage to around or under 40 percent of average wage from current level of 50 percent	Increase in formal employment of minimum wage earners
Reduce increased hourly rates for overtime work	Increase in formal hours worked by employees
Link severance payments to years of service with last employer rather than total years of service	Increase in formal employment of older workforce
Extend maximum duration of fixed-term contracts to three years	Increase in formal employment of younger workforce
Increase retirement age threshold, introduce actuarial adjustment of pensions to reflect expected use of retirement payments	Increase in formal employment of older workforce
Introduce in-work benefits	Greater activity and formal employment of beneficiaries of social welfare payments and other transfers
Support for formal self-employment through grants and start-up loans	Shift from informal employment into formal self-employment
Introduce micro-lending facilities	Shift from informal employment into formal self-employment; increase in self-employment
Increase powers of Labour Inspectorate and Market Inspection, including entitling inspectors to audit unregistered businesses and impose penalties	Less informal employment with both formal and informal businesses
Introduce risk assessment and risk management system in inspection oversight	Less informal employment with both formal and informal businesses
Financial sector	
Curb transactions in cash and incentivise cashless payments (incentives vs. repressive measures)	Less concealment of portions of income generated in cash; substantial decrease in informal cash payments
Reduce extent of informal finance	Less uncertainty, efficient allocation of funds, greater employment and more fiscal revenue from formal activity. Greater supply of finance would affect its cost and availability.
Formalise remittances from abroad transferred through informal channels	Greater competition and lower costs of formal money transfers would stimulate migrant interest in transferring remittances through formal channels. This should foster domestic saving and new investment

Business environment	
Resolve issue of 'phoenix companies' (and consider establishing registry of bans imposed on business owners and managers in criminal or other proceedings)	Tax evasion and non-payment of commercial liabilities prevented
Introduce SME Test and Standard Cost Model	Undue increases of administrative costs and obstacles to doing business in formal sector prevented
Simplify regulatory (administrative) requirements	Lower administrative burden; constraints to business operations removed
Improve regulatory framework to enable relevant stakeholders to take part in the consultation process	Private sector participates in consultation and law drafting process; constraints to doing business and incentives for shadow economy reduced
Adopt byelaws in a timely fashion	Legal insecurity removed
Reduce unfair competition	Lower share of shadow economy in trade in goods
Establish an e-portal for licences, permits, approvals, and consents	Lower start-up costs
Remove barriers to entry into particular sectors	Lower start-up costs and fewer barriers to entry
Establish a publicly-accessible electronic legislation registry	Lower costs of doing business
Improve construction permitting process	Easier start-ups; less employment of workers and enterprises from informal sector
'Legalise' unpermitted buildings	Making assets tradable, fungible and wholly available for legal transactions
Outreach	Less tax evasion; or more incentives provided for shifting from shadow to formal economy

