

Impact of Cashless Payments Growth on the Shadow Economy

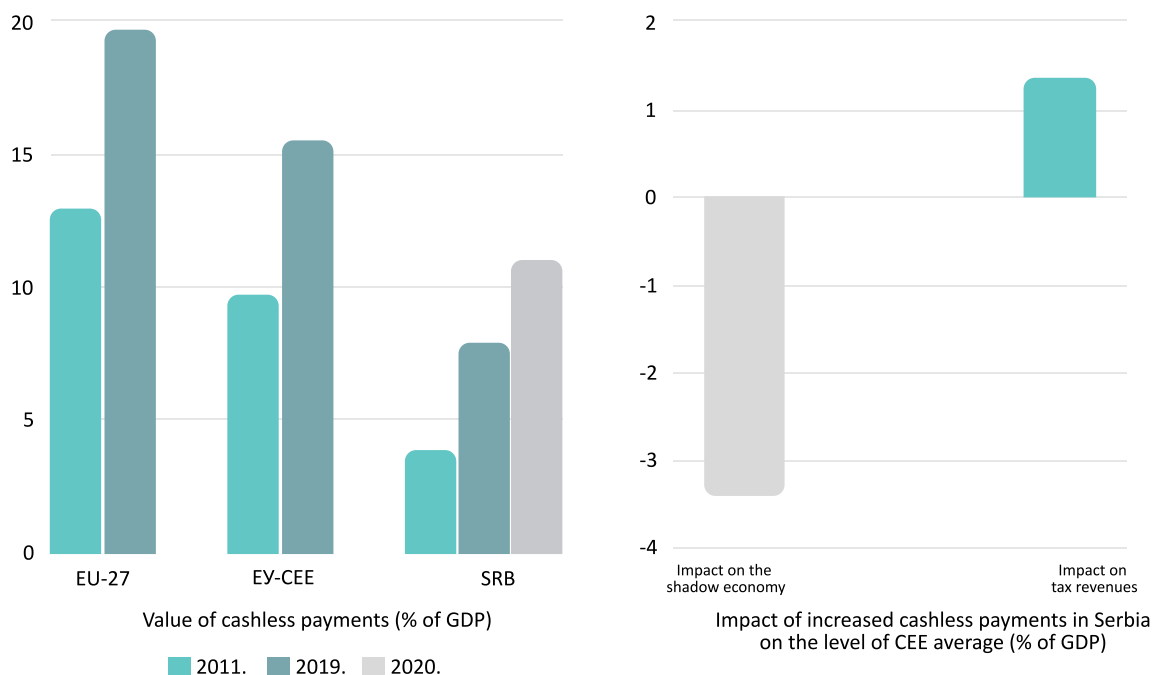
Methodology

The estimation of the impact of the development of cashless economy on the level of the shadow economy and on the level of tax revenues was carried out on the basis of the econometrically estimated elasticity of the shadow economy and the cashless economy for a set of 26 European countries, as well as on the basis of available data on the level of the shadow economy and the development of cashless payment methods in Serbia.

The analyses in the study are based on official, internationally comparable data on the level of the shadow economy and the development of cashless payments, as of 2019, which is the last year for which internationally comparable data were available for European countries at the time of the study. Considering that after 2019, there was a further strong development of cashless payments in Serbia and Europe, the data for the coming years may differ from those from 2019.

The study used standard indicators of the cashless payment methods development, which were applied in other similar studies published by central banks of European countries, and in papers published in renowned international scientific journals. The presented indicators do not include some of the newer payment methods (e.g., via QR code, etc.) since some of these methods have only been put in use relatively recently, and there are no comparable databases on their use for a wider set of countries and for the whole period of observation.

The Study on the impact of cashless payments on the shadow economy was prepared by professors of the Faculty of Economics of the University of Belgrade - Saša Randelović, Miloško Arsić and Svetozar Tanasković.



Results

While cash-based transactions may be easier to hide, cashless transactions are easier to track, which is why both theoretical and empirical studies suggest that switching to cashless payment methods discourages the shadow economy, which can positively affect the tax revenues of the state budget.

Serbia achieved strong growth in cashless payments in the previous decade, which in some segments was even higher than in comparable European countries, but, according to data as of 2019, Serbia still lagged behind the average of comparable European countries in terms of financial inclusion, development of retail infrastructure for cashless payments and the relative size of cashless transactions in the economy.

62 payment cards per 100 inhabitants were issued in Serbia in 2019, while the total value of transactions paid cashless amounted to about 8% of GDP.



from 2010 to 2019, the number of payment cards in Serbia per 100 inhabitants increased from 40 to 62

The results of the study "Impact of the Cashless Payments Development on the Shadow Economy and Public Finances in Serbia" show that the increase in the value of POS transactions by one percent is associated with a decrease in the shadow economy by 0.041%, while the increase in the value of POS transactions against ATM transactions by one percent is associated with a decrease in the shadow economy by 0.037%.

Starting from the gap in the cashless payments development in Serbia and Central and Eastern European (CEE) countries that existed in 2019, it is estimated that reaching the CEE average in terms of the cashless payments development in Serbia could reduce the shadow economy by about 3.4% of GDP, which could lead to tax revenue growth by up to 1.35% of GDP, i.e. by up to about 700 million euros per year.

Assuming that the development of cashless payments in Serbia in the coming period is in line with the dynamics achieved in CEE countries that have achieved the fastest shift in this regard, it is estimated that subject results can be achieved in 6-7 years.

It is necessary to apply a wide range of public policy measures to achieve the subject results – from regulatory, through financial to educational.



700.000.000€

expected increases in tax revenues if the level of the cashless economy in Serbia equates with the CEE countries



6 to 7 years

growth of cashless payments could reduce the shadow economy of Serbia by about 3.4% of GDP in the next six to seven years

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