

# Reducing the Shadow Economy in Albania through Electronic Payments



DATE: 10/2019



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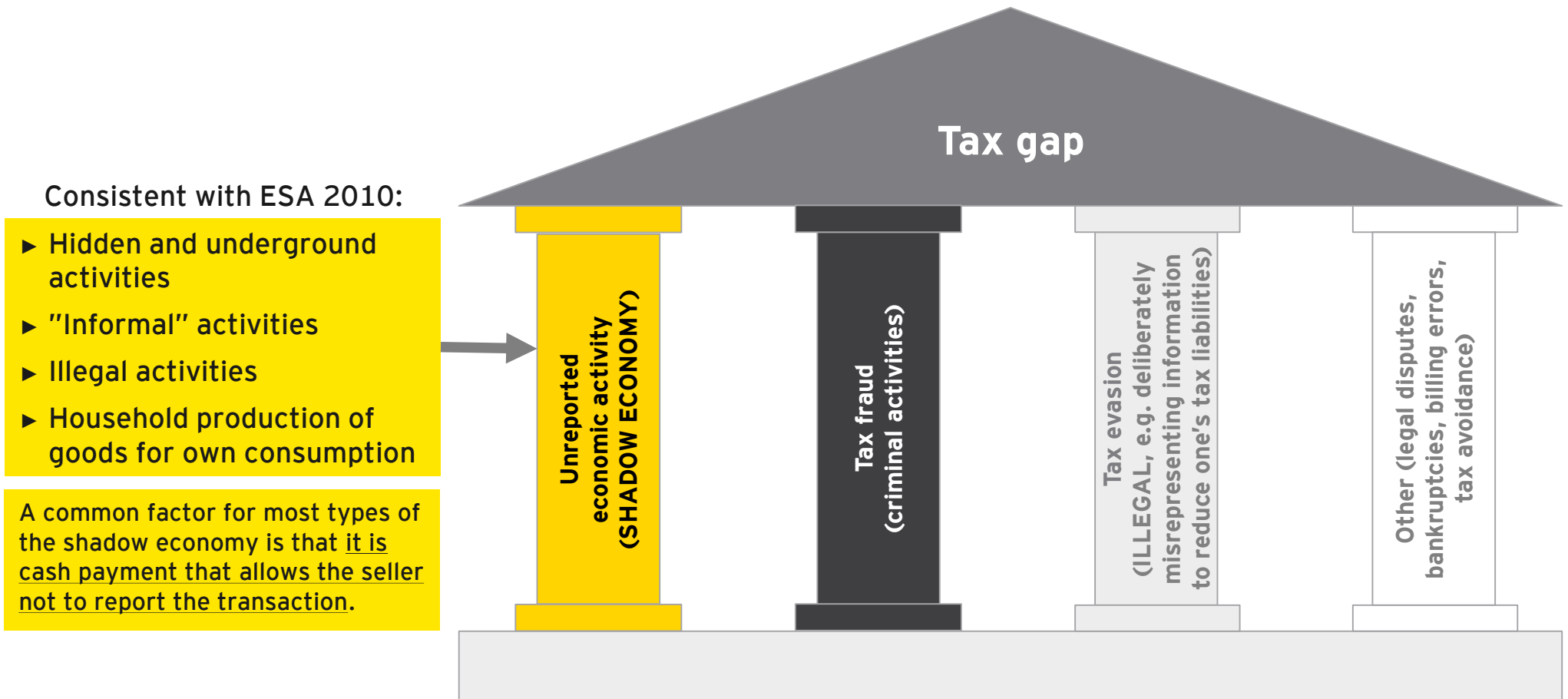
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# Introduction

- ▶ EY conducted independent in-depth "shadow economy studies" in 33 countries around the world, which were commissioned by Mastercard.
- ▶ In the study for Albania we:
  - (1) estimate the size and structure of the shadow economy in Albania;
  - (2) distinguish the part of the shadow economy that can be addressed through promotion of electronic payments;
  - (3) present the analysis of financial inclusion and electronic payments;
  - (4) discuss various measures and calculate their impact on shadow economy contraction and increase in government revenues
- ▶ Final products of the study will include:
  - (a) a comprehensive report for Albania;
  - (b) technical appendices explaining the applied methodology and utilized data sources.

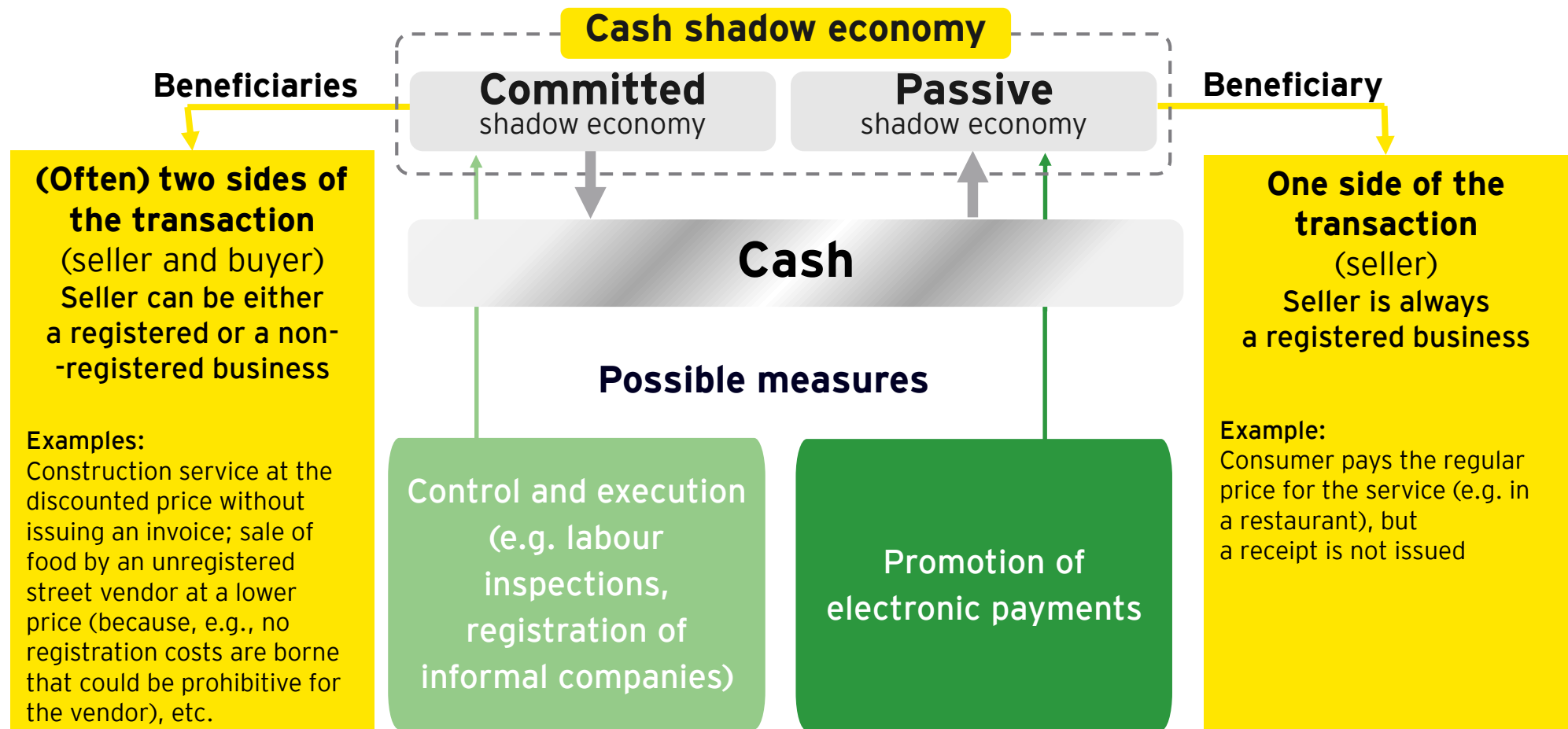
# Tax gap and the shadow economy

- ▶ **Tax gap** is the difference between the value of taxes that theoretically should be collected and the value of actually collected taxes.
- ▶ **Shadow economy** comprises various kinds of unreported economic activity and is responsible for a part (often significant, though) of the total tax gap.



# Committed and passive components of the cash shadow economy (1/2)

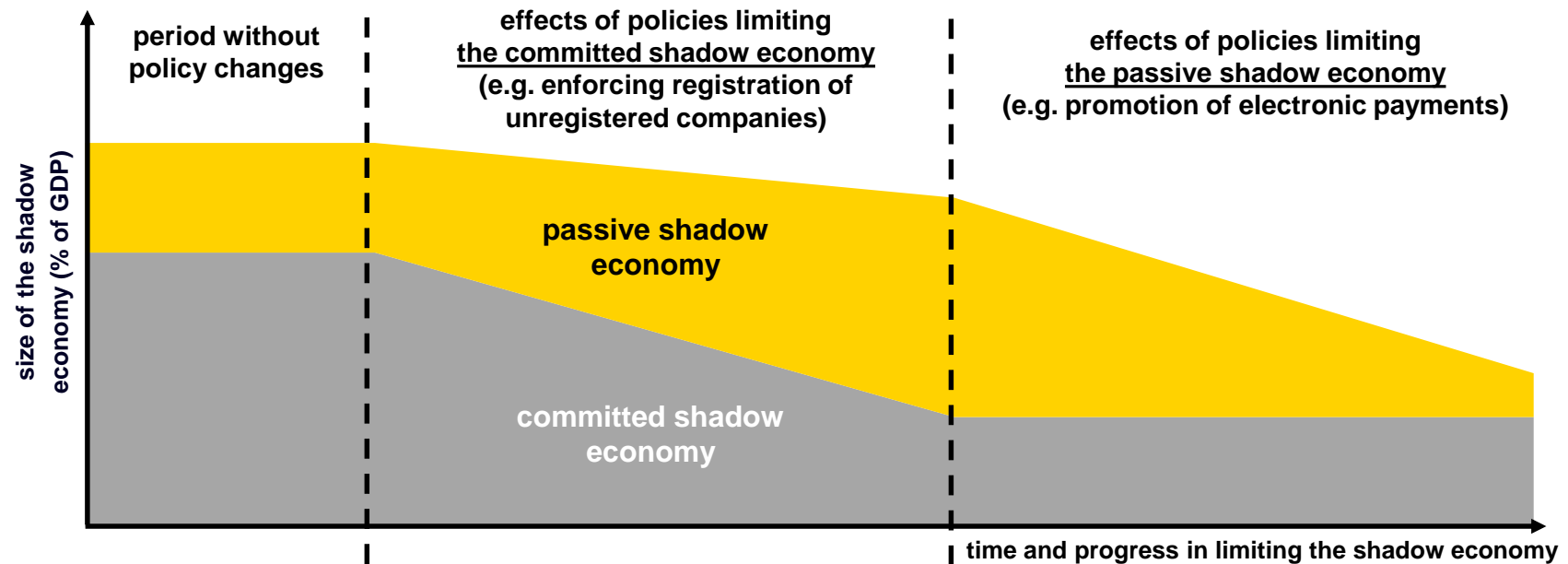
- ▶ "Passive shadow economy"—where cash is a cause of the shadow economy.
- ▶ "Committed shadow economy"—where cash is a consequence of the shadow economy.



# Committed and passive components of the cash shadow economy (2/2)

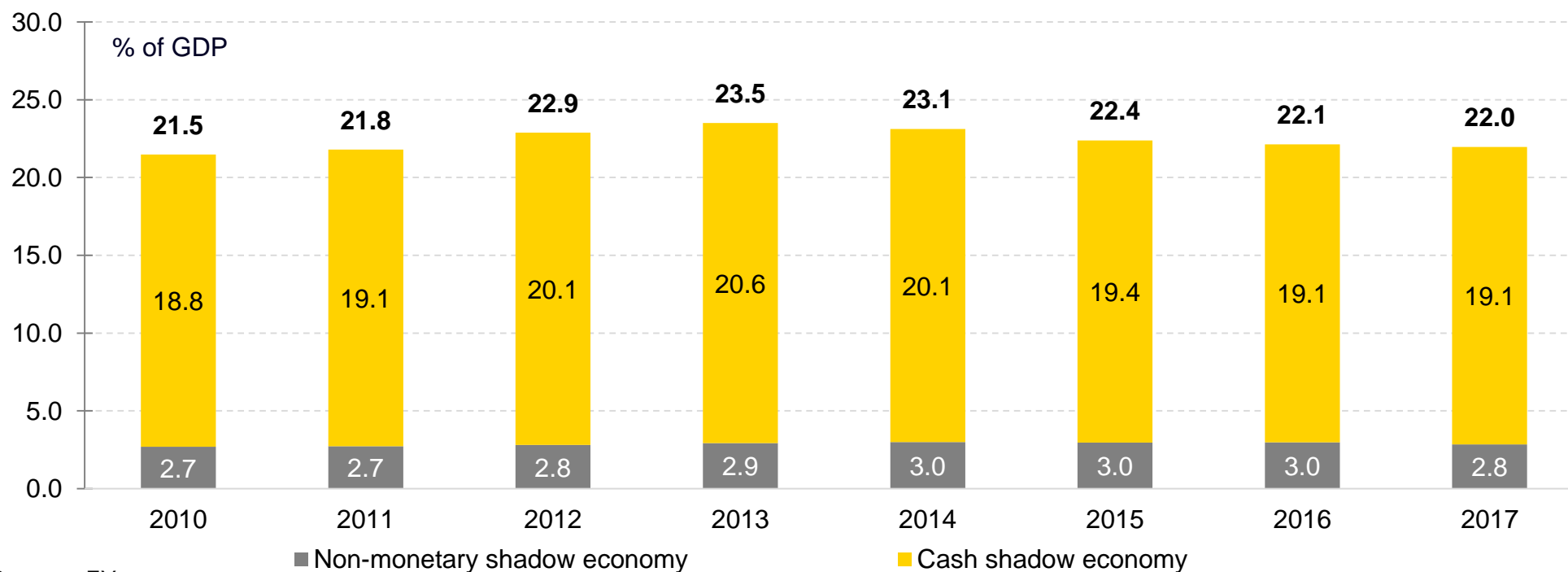
- ▶ Contraction of the committed shadow economy may partly be reversed due to an accompanying increase in its passive component, since newly registered companies may not report their whole income, especially when received in the form of cash payments.
- ▶ Therefore, the more companies are registered, the more effective and needed become policies aimed at limiting the passive shadow economy, e.g. through promotion of electronic payments.

## Potential approach to limiting the shadow economy



## Estimated size of the shadow economy in Albania (% of GDP)

- ▶ The share of unregistered (informal) employment in the total employment of almost 40% for Albania in 2017 does not imply the same share of the shadow economy in GDP
- ▶ According to EY estimates, the total level of the shadow economy in Albania amounted to 22.0% of GDP<sup>1</sup> (ALL 341.1bn) in 2017, of which:
  - ▶ 19.1% of GDP (ALL 297.0bn) was related to cash payments (cash shadow economy)
  - ▶ 2.8% of GDP (ALL 44.2bn) can be attributed to the non-monetary production (household production of goods for own final use) (non-monetary shadow economy)<sup>2</sup>



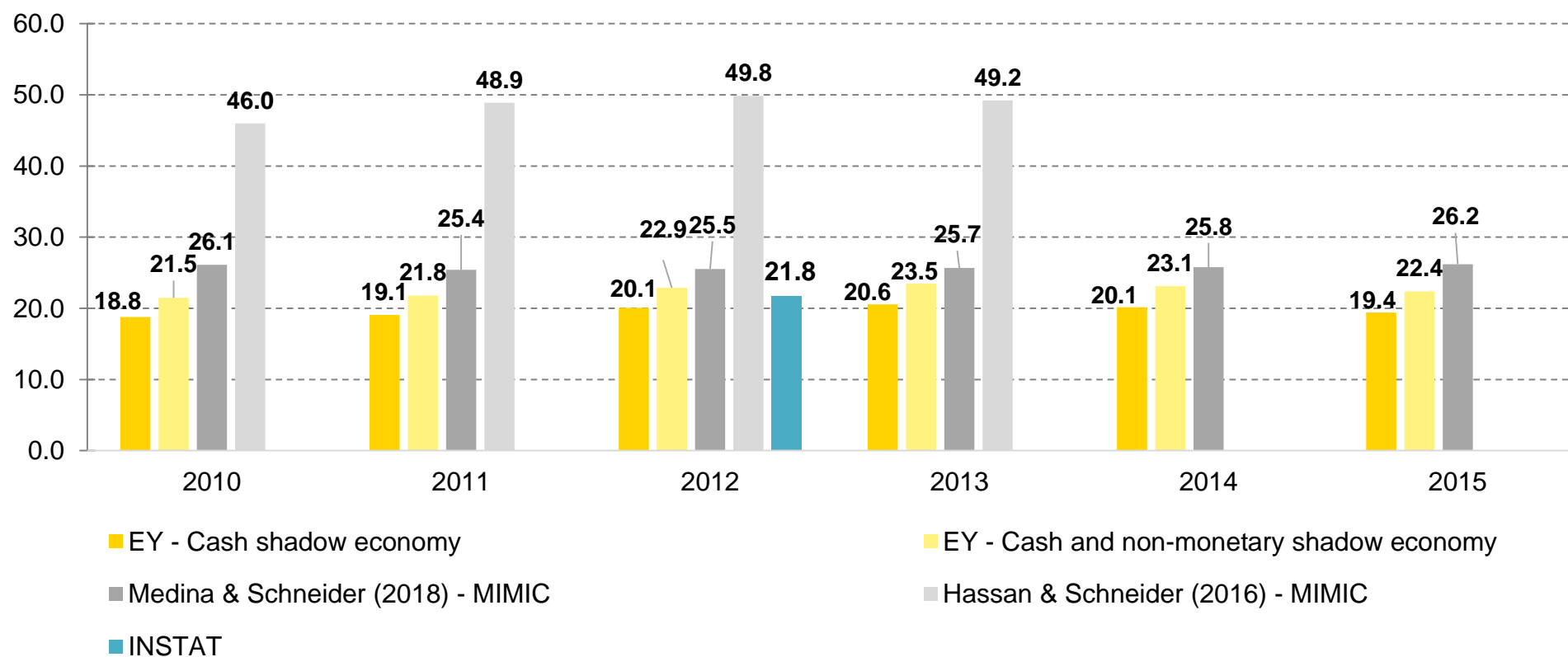
Source: EY.

<sup>1</sup> We present our shadow economy estimates as % of the official GDP figures of the Institute of Statistics (INSTAT) that already include non-observed economy estimates (which are slightly different than the EY non-observed economy estimates).

<sup>2</sup> The non-monetary shadow economy (household production of goods for own final use) estimates were obtained by EY with the use of, i.a., the methodological report on national accounts in Albania (see <http://www.instat.gov.al/media/2254/part-a-gni-compilation-albania.pdf>; accessed 25.04.2019).

# Comparison of various estimates of the shadow economy size in Albania

Estimates of the shadow economy in Albania (% of GDP)

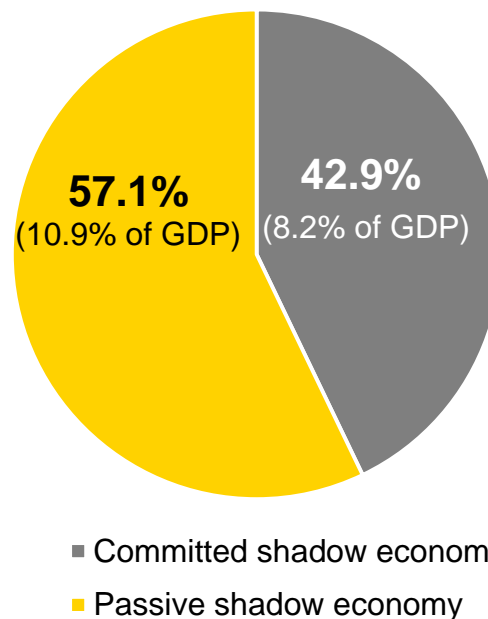


Source: Hassan, Mai & Schneider, Friedrich, 2016. "Size and Development of the Shadow Economies of 157 Countries Worldwide: Updated and New Measures from 1999 to 2013," IZA Discussion Papers 10281, Institute for the Study of Labor (IZA). Medina, Leandro & Schneider, Friedrich, 2018. "Shadow Economies Around the World: What Did We Learn Over the Last 20 Years?", *IMF Working Paper* No. 18/17. DANE (<http://www.dane.gov.co/files/investigaciones/boletines/pib/cuentas-nal-anales/cuentas-nal-anales-base-2015.pdf>)

# Estimated passive and committed components of the cash shadow economy in Albania in 2017

- ▶ The passive component (which can be reduced through the promotion of electronic payments) accounted for 57.1% of the cash shadow economy (10.9% of GDP, ALL 164.5bn), while the committed component for 42.9% of the cash shadow economy (8.2% of GDP, ALL 148.1bn) in Albania in 2017.
- ▶ Reduction of the committed shadow economy may further increase the importance of measures addressing the problem of the passive shadow economy.

## Cash shadow economy in 2017



Source: EY.



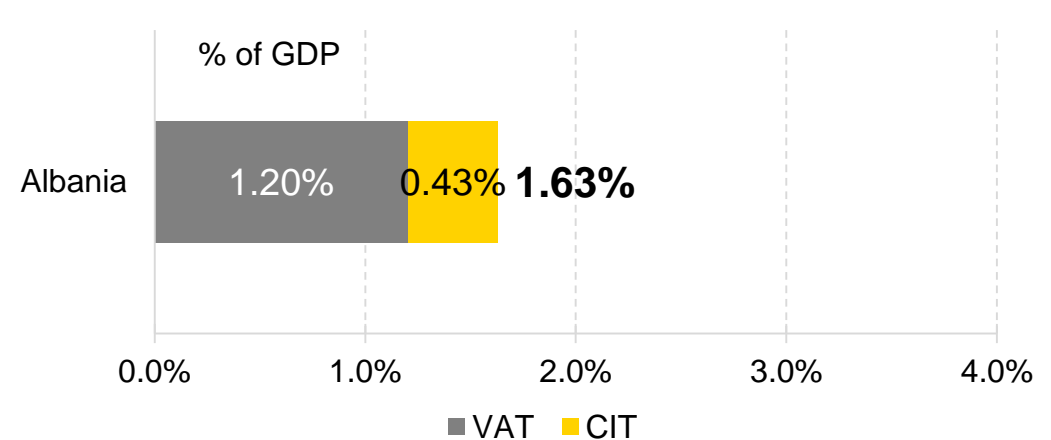
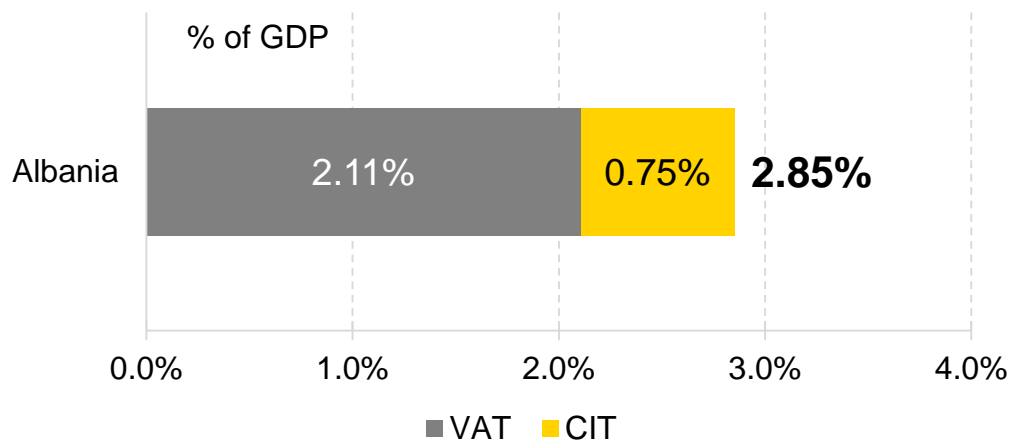
# Estimated lost VAT and CIT revenues due to the existence of the cash shadow economy in Albania in 2017

- ▶ Estimated VAT and CIT losses due to the existence of the cash shadow economy in Albania in 2017 amounted to 2.85% of GDP (ALL 44.3bn), out of which 1.63% of GDP (ALL 25.3bn) was related to the passive shadow economy.
- ▶ VAT losses amounted to 2.11% of GDP (24.2% of total collected VAT revenues) and lost CIT revenues were estimated at 0.75% of GDP (35.7% of total collected CIT revenues).

Estimated lost VAT and CIT revenues in Albania in 2017 due to the existence of:

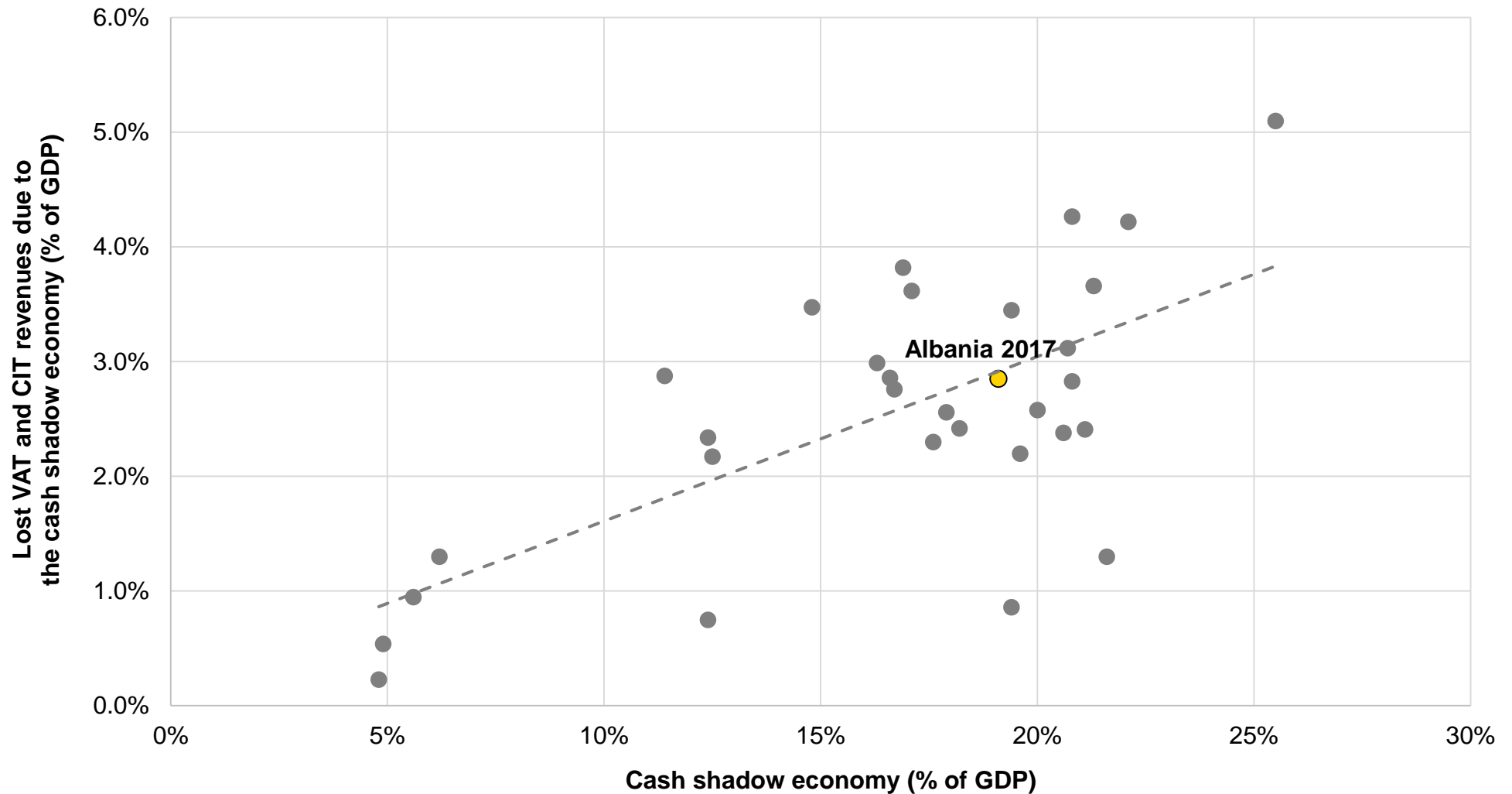
**A** Total cash shadow economy

**B** Passive component of the cash shadow economy



Source: EY.

# EY cash shadow economy estimates and related lost government revenues for different countries (% of GDP)

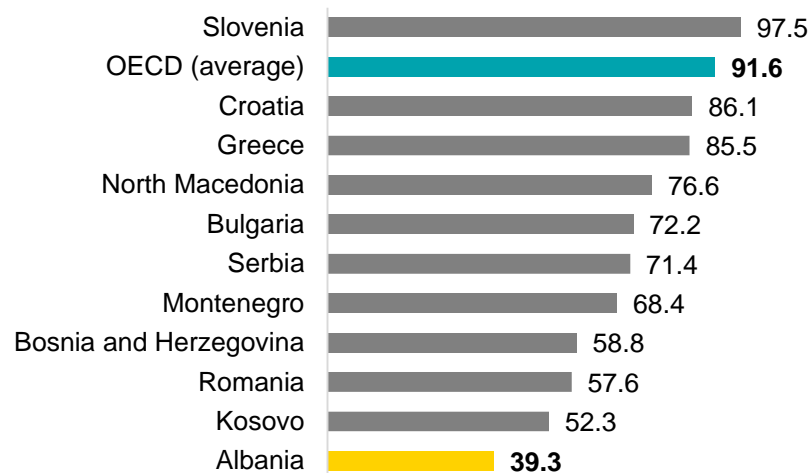


Source: EY.

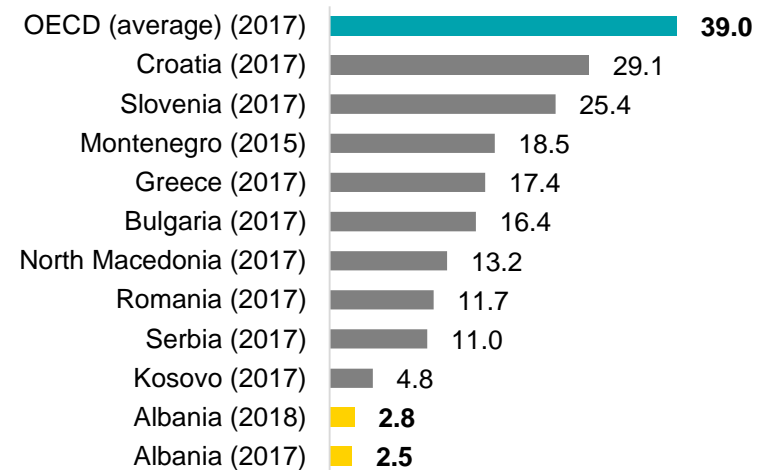
# Accounts and card payments value

- ▶ In Albania, only 39.3% of aged 15+ had an account at a financial institution in 2017 (the lowest share in the Balkan region).
- ▶ For cards issued in Albania, the value share of payments in household final consumption expenditure amounted to only 2.8% in 2018 (also the lowest share in the Balkan region). Moreover, only 22.2% of that value was related to expenditure in Albania, while the rest was spent abroad. In addition, according to EY estimates, the value of card spending on the territory of Albania was almost 50% higher for cards issued abroad than for domestically issued cards, which is likely due to relatively high popularity of card payments among tourists.

**A** Account at a financial institution, 2017  
(% age 15+)



**B** Card payments value (% of household final consumption expenditure)



Note: Whenever the data was available, we used data on payments done with domestic cards domestically and abroad (it was the case for Albania).

Source: Mastercard, central banks, World Bank (Global Payments System Survey), Bank for International Settlements, statistical offices.

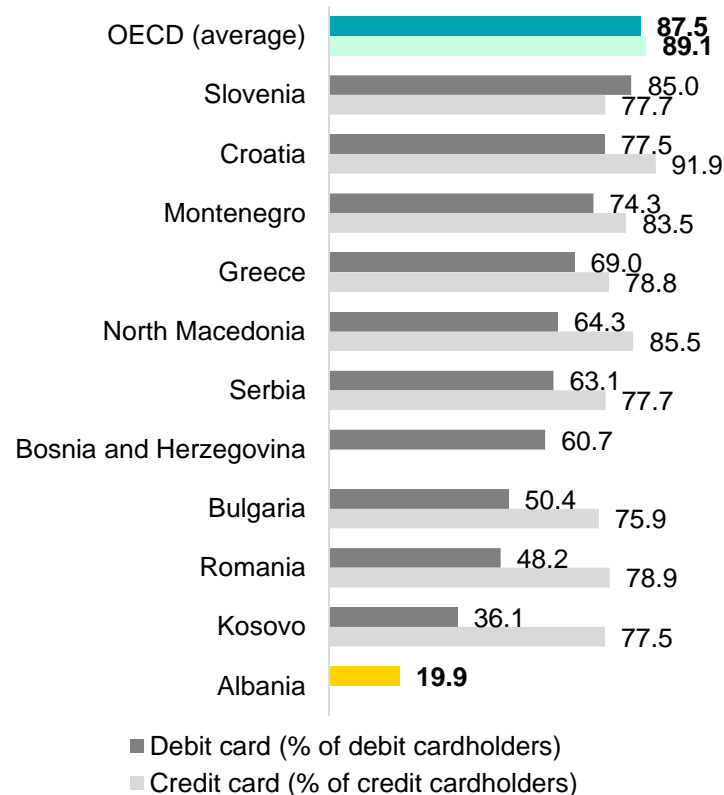
# Payment cards and POS terminals

- ▶ The very low value of card payments in Albania is related to a very small number of payment cards, their low usage, as well as very low number of POS terminals.
- ▶ There is a lot of room for the development of electronic payments infrastructure in Albania.

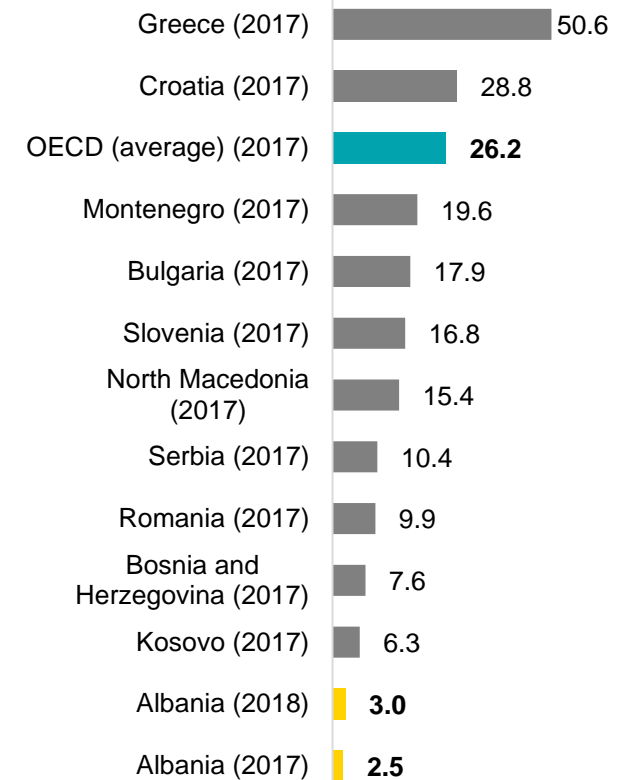
## A Payment cards per capita



## B Used debit/credit card for payments in the past year, 2017 (% cardholders age 15+)



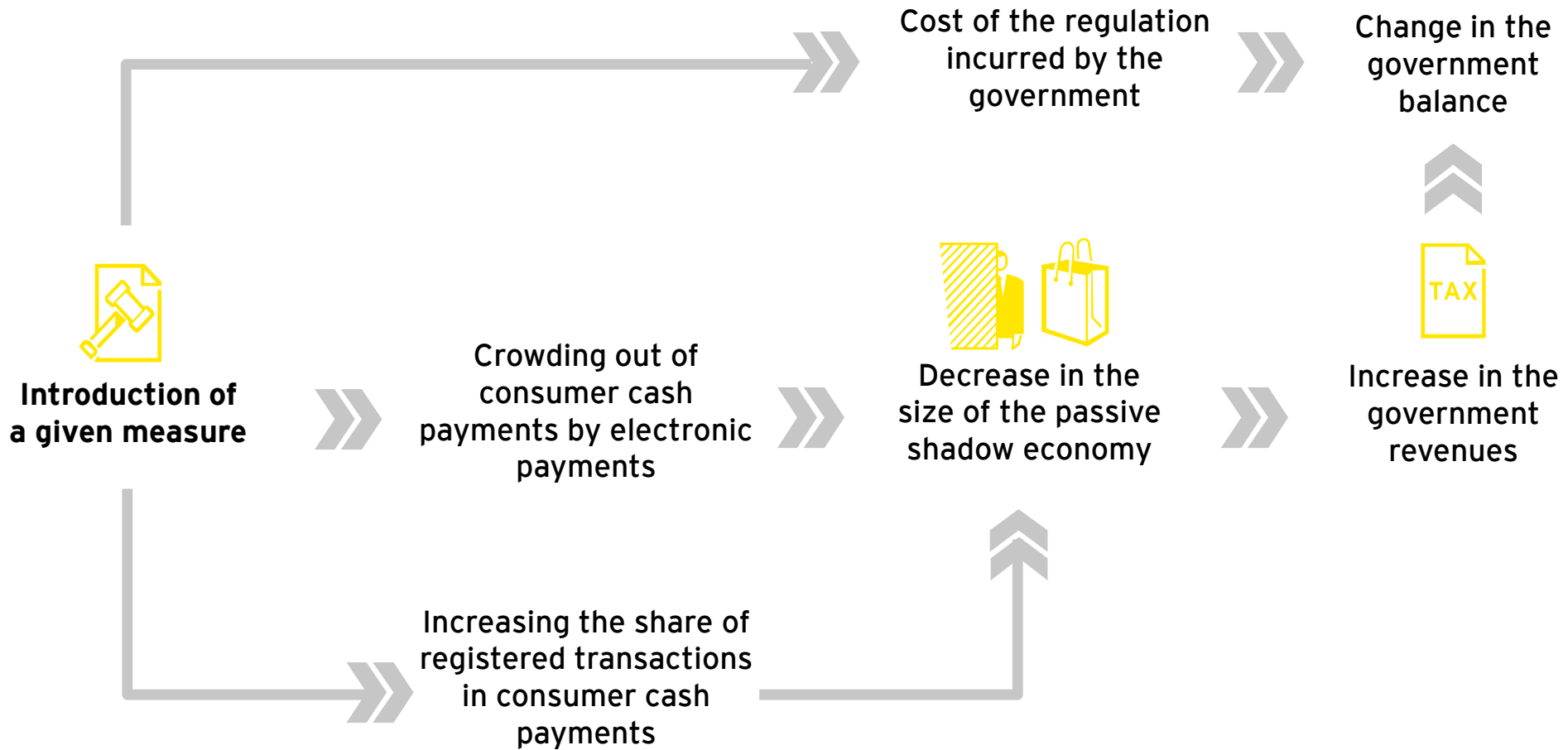
## C POS terminals per 1000 inhabitants



Notes: (A and C) OECD average was calculated excluding Luxembourg (which was an outlier).

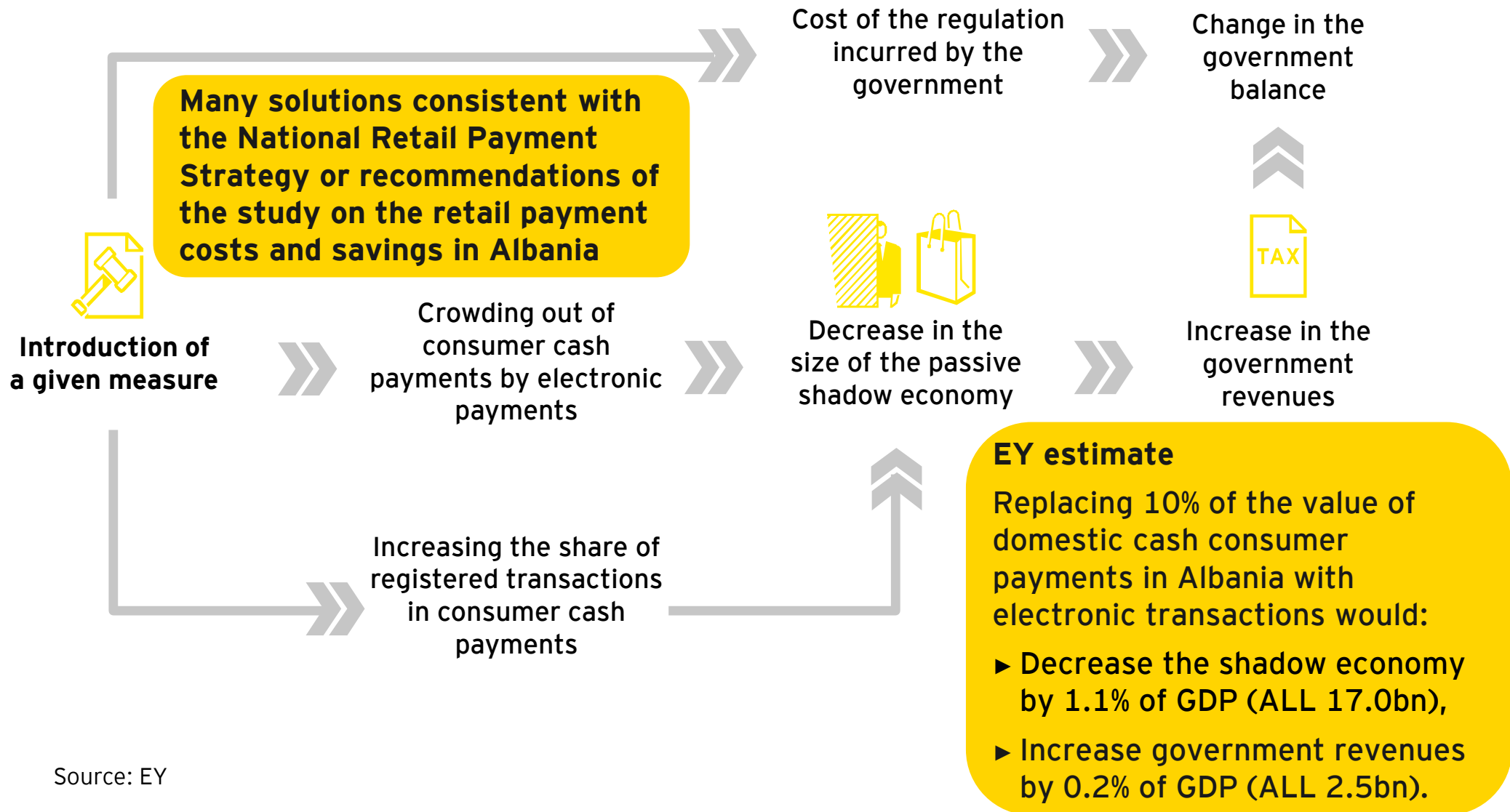
Source: (A and C) Mastercard, central banks, World Bank (GPSS), Bank for International Settlements, statistical offices, (B) World Bank (Global Findex).

# Our general approach to the impact assessment of regulations that reduce the passive shadow economy



Source: EY

# Our general approach to the impact assessment of regulations that reduce the passive shadow economy



Source: EY

## **Wide range of potential measures may be considered in order to reduce the passive shadow economy**

- ▶ **Obligation to operate POS terminals/accept electronic payments** (examples of countries that introduced the regulation: Algeria, Argentina, South Korea, Greece);
- ▶ **Tax incentives for consumers** (South Korea, Uruguay, Argentina, Brazil–Sao Paulo, Colombia, Bulgaria, North Macedonia (for submitted cash receipts));
- ▶ **Tax incentives for merchants** (South Korea, India);
- ▶ **Obligation to make an electronic payment of social security benefits (e.g. pensions) / wages and salaries** (social security benefits: Denmark, Sweden, Uruguay, Tanzania; wages and salaries: Croatia, Slovenia, United Arab Emirates, Saudi Arabia);
- ▶ **Threshold for (B2B / C2B) cash payments** (Albania, Bulgaria, Slovakia, Czech Republic—currently at relatively high levels, though);
- ▶ **Receipt (card) lotteries** (Albania, Poland, Slovakia, Croatia, Bulgaria, Serbia, Taiwan, Brazil)
- ▶ **Obligation to operate cash registers**, including increasing popularity of connecting online cash registers with tax authorities' servers (Albania, Argentina, Croatia, Serbia, Slovakia, Hungary, Poland, Tanzania);
- ▶ **Tax levied on ATM withdrawals** (Ireland, Hungary);
- ▶ **E-government (G2C, G2E, G2B) development** can also contribute to the contraction of the shadow economy, though indirectly.

# Improvement in the electronic payments acceptance = ensuring the right of consumers to pay electronically (should they wish to do so)

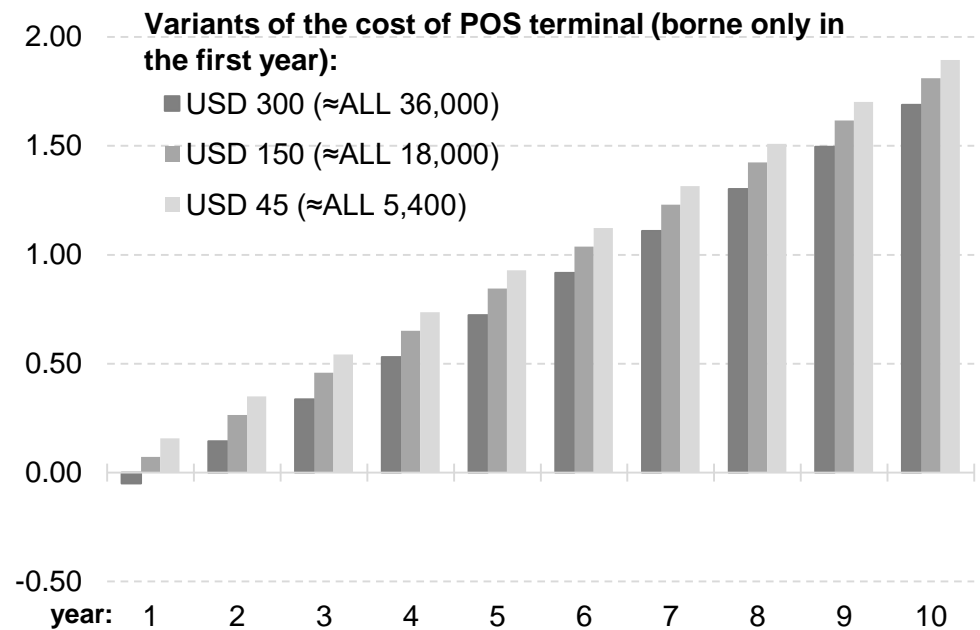
► Improvement in the acceptance network infrastructure increases the popularity of electronic payments and reduces cash payments, which in turn leads to a contraction of the shadow economy.

Effects of reaching the best international benchmark in terms of covering merchants with electronic payments accepting devices

**A** Passive shadow economy and government revenues for top 10 sectors (with the highest effects) and all passive shadow economy sectors (% of GDP)

	Change in the passive shadow economy level	Change in government revenues
Other retail	-0.498	0.074
Food stores and warehouse	-0.333	0.050
Other services	-0.159	0.024
Clothing stores	-0.101	0.015
Professional services	-0.038	0.006
Restaurants and bars	-0.030	0.005
Other transport	-0.026	0.004
Interior furnishings	-0.022	0.003
Health care	-0.020	0.003
Sporting and toy stores	-0.015	0.002
<b>All passive shadow economy sectors<sup>1</sup></b>	<b>-1.294</b>	<b>0.193</b>

**B** Net government revenues over time for all passive shadow economy sectors (% of GDP)



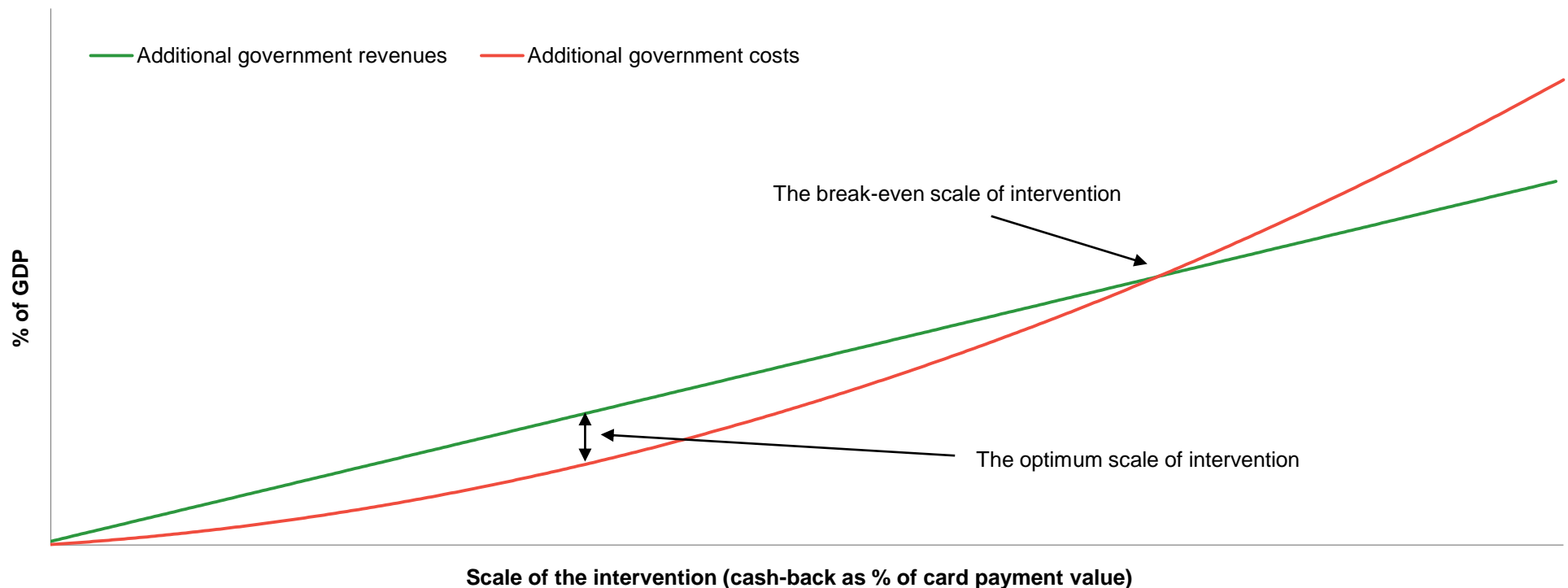
<sup>1</sup> We do not consider the regulation for sectors for which the passive shadow economy transactions are much less likely: airline, auto rental, utilities, purchase of new vehicles, etc.  
Source: Mastercard (costs of POS terminals and data for estimation of the current number of POS terminals by sectors), EY (calculations).



# Tax incentives for consumers (short-term approach) (1/2)

- ▶ Consumer card payments are awarded with a cash-back, which leads to a decrease in the volume of cash payments made by consumers and a reduction in the size of the passive shadow economy.
- ▶ Here we assume that: (1) the government finances cash-back rewards, (2) all card payments are rewarded irrespective of their value and (3) consumers are awarded with cash-back immediately at the moment of transaction (as in Uruguay): customers choosing cards pay less than customers choosing cash.

## Cost-benefit analysis (illustrative example)

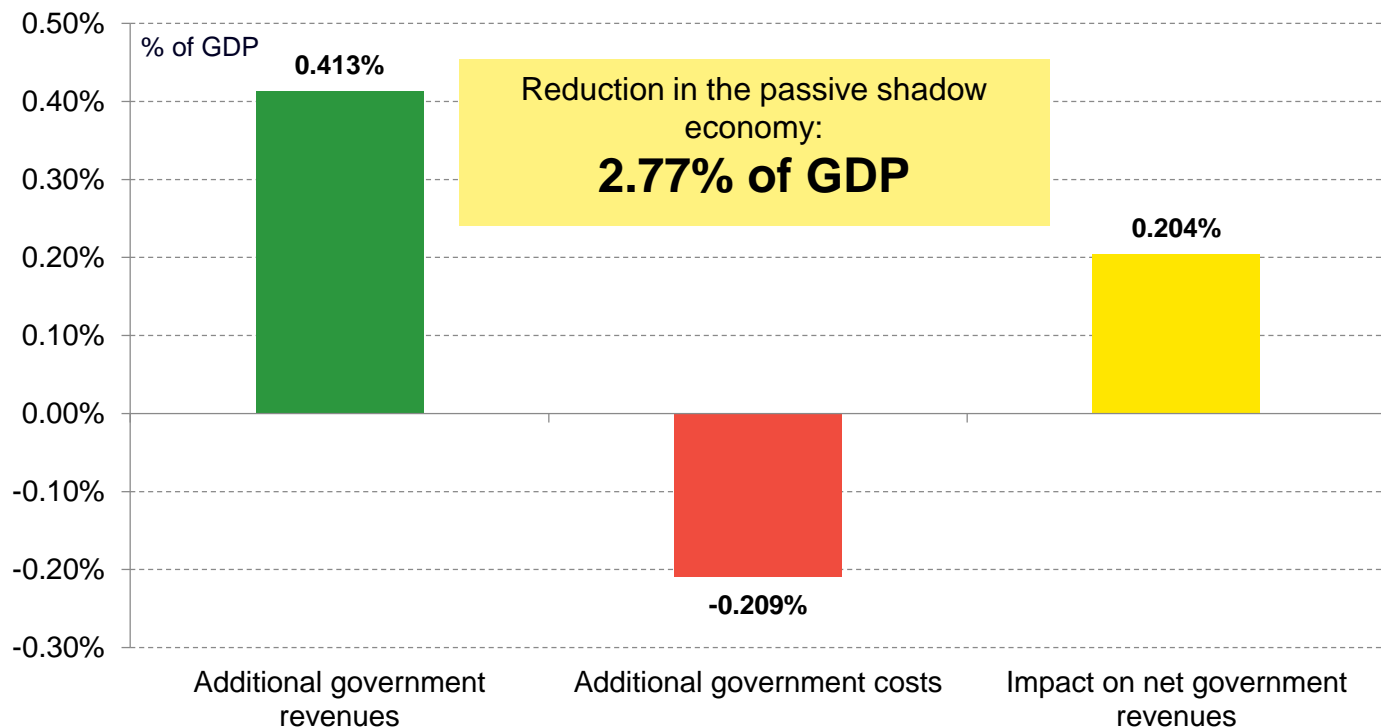


Source: EY.

## Tax incentives for consumers (short-term approach) (2/2)

- ▶ The estimated results illustrate the effects for just one variant of this regulation, which is additionally considered in the short term only. In this context, it should be emphasized that:
  - ▶ different variants of this regulation are possible (controlling costs more efficiently, e.g. through the income tax deduction mechanism—the example of South Korea or Bulgaria);
  - ▶ in the longer term the net effects for the government balance may significantly improve

### The impact of the optimum cash-back for card payments on government revenues in Albania (optimum cash-back: 1.33% of card payment value)



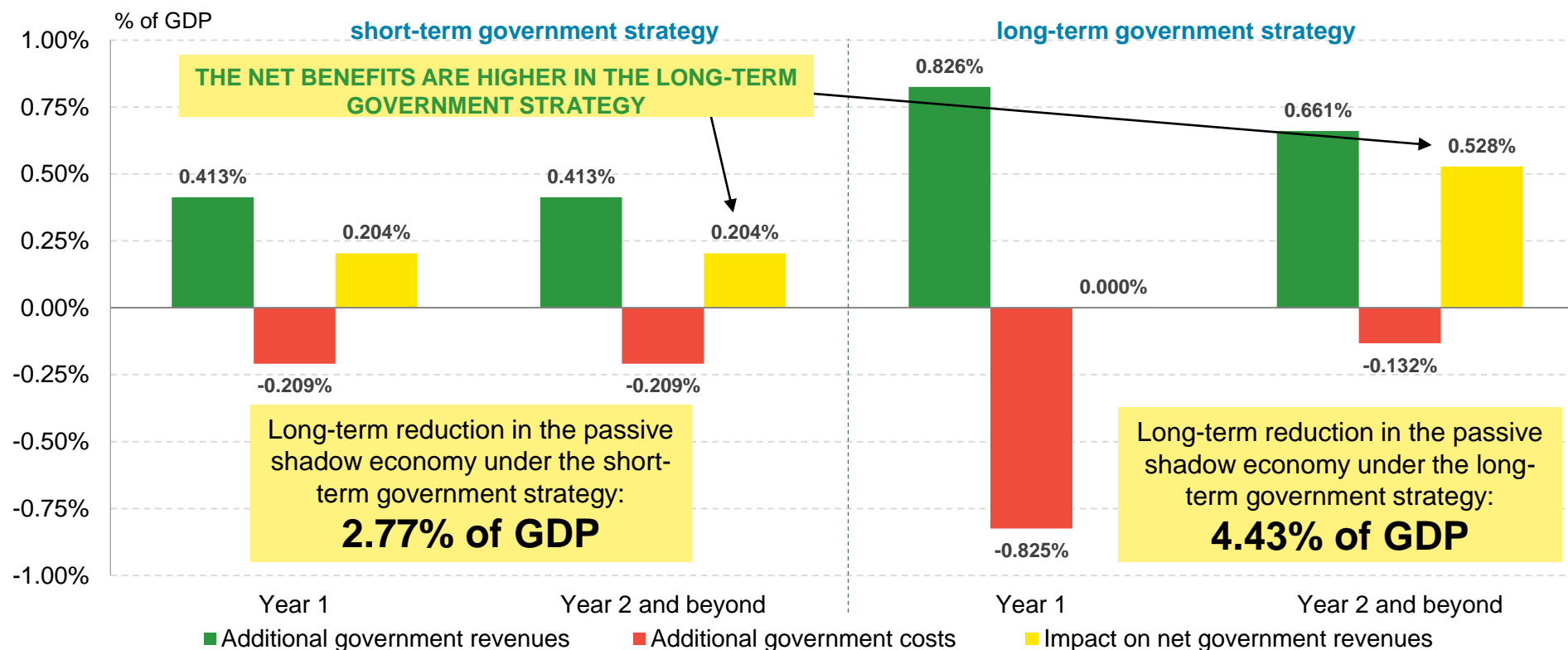
Source: EY.

## Short-term costs vs. long-term benefits and sectorial approach

- ▶ After many consumers have shifted from cash to electronic payments as a result of the cash-back incentive, their payment habits may often change permanently.
- ▶ Therefore, if the government reduces the level of the tax incentive, or even withdraws from the regulation completely, a significant proportion of consumers may not be willing to shift back to cash payments.
- ▶ Consequently, the costs of the regulation may be reduced (or eliminated) over time with a limited impact on the achieved benefits. Therefore, net effects of the regulation on the government balance may increase over time.
- ▶ A similar conclusion can be drawn for many other measures (e.g. one-off cost of co-financing the purchase of POS terminals by the government vs. long-term benefits from improved payment infrastructure).
- ▶ In addition, a tax incentive can be awarded to (or increased for) electronic expenditure in selected sectors only (with a particularly high share of unreported transactions). A similar “sectorial approach” may apply to other measures (e.g. obligation to operate POS terminals in hotels, restaurants).

# Tax incentives for consumers in the longer run

The impact of cash-back on government revenues in Albania under the short-term and long-term government strategies: illustrative examples



## Considered amount of cash back under different government strategies (% of card payment value)

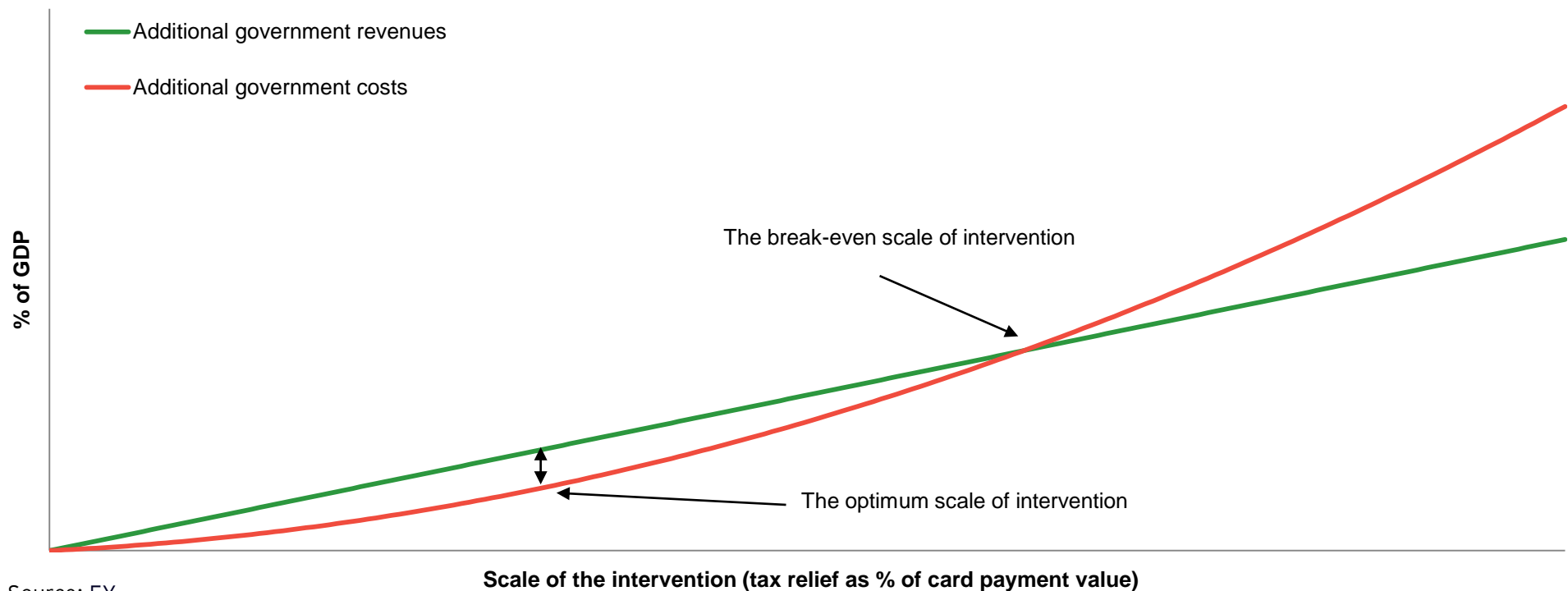
Government strategy	Year 1	Year 2	Years beyond
<i>short-term</i>	1.33	1.33	1.33
<i>long-term</i>	2.66	0.53	0.53

Source: EY.

## Tax incentives for merchants (1/2)

- ▶ Reduction in the merchants' costs related to the acceptance of card payments is proportional to their overall value. As a result, the merchants' propensity to accept card payments increases, resulting in reduced cash transactions and contraction of the passive shadow economy.
- ▶ However, there is a risk that this measure would mostly influence those merchants that already registered cash payments, while the tax relief would be too small to change the behaviour of many merchants who benefit from not reporting cash transactions. The effectiveness of this measure would thus be reduced accordingly.

### Cost-benefit analysis (illustrative example)

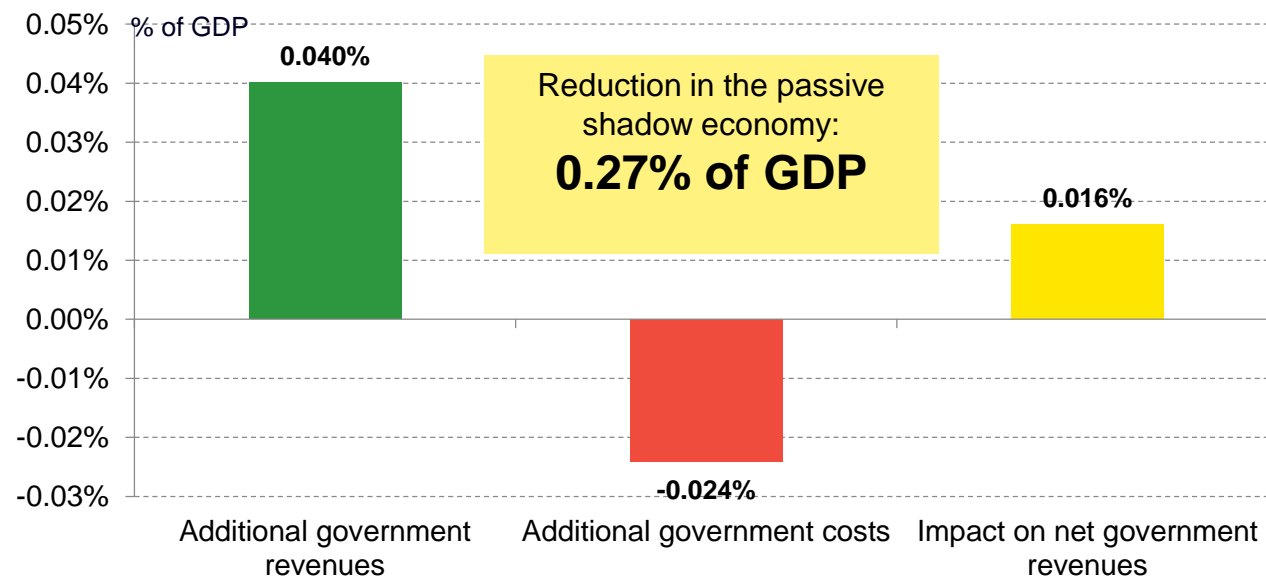


Source: EY.

## Tax incentives for merchants (2/2)

- ▶ In Albania, introduction of an optimum tax incentive for merchants would bring net benefits for government and reduction in the passive shadow economy. In both cases, however, the effects are rather low when compared to optimum cash-back for consumer card payments.
- ▶ Costs generated by this regulation may be short-term, while benefits should be long-term, since the improved electronic payment infrastructure should prevail even after the tax relief for merchants has been abolished.
- ▶ We assume that the tax incentive would be available for all the merchants that accept card payments, including those that already possess and use POS terminals. Net government revenues would be higher if the incentive applied only to selected merchants, e.g., with newly installed POS terminals, in selected sectors or types of businesses (e.g. with relatively low revenues), etc.

### The impact of the optimum tax incentives for merchants on government revenues in Albania (optimum cash-back: 0.87% of card payment value)

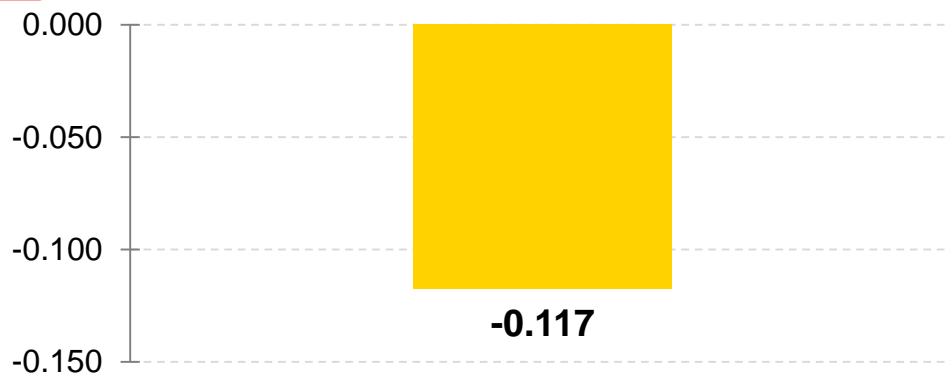


Source: EY.

## Contactless cards and POS terminals

- ▶ Using the contactless technology one can pay with a card (or other device) by holding it within a few centimeters of a POS terminal enabled with the near field communication (NFC) function. Convenience and speed of such transactions encourage people to use electronic payments more often, resulting in reduced cash transactions and contraction of the passive shadow economy.
- ▶ We consider the impact of the scenario in which all current payment cards and POS terminals in Albania would be substituted with ones that enable contactless payments. Since the overall number of cards and POS terminals per capita in Albania is very low, such substitution would generate relatively low effects. The effects would be much stronger once the electronic payment infrastructure in Albania is better developed.
- ▶ Presented effects should be deemed conservative, since we do not account for the fact that contactless payments relatively often crowd out cash payments of lower value among which the passive shadow economy transactions are more prevalent.

**A** Change in the passive shadow economy (% of GDP)



**B** Change in government revenues (% of GDP)

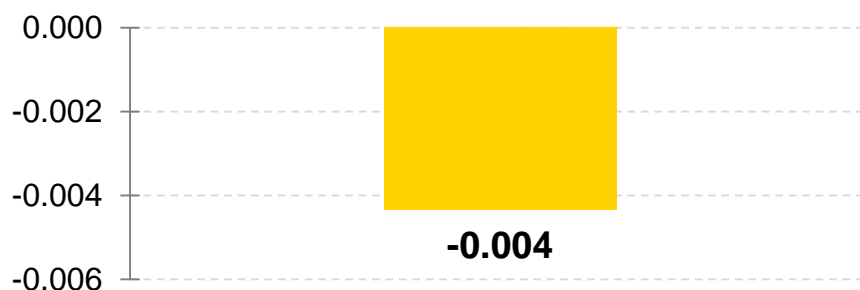


Source: EY

# Obligation to make an electronic payment of wages and salaries

- ▶ Legal obligation to make a payment of wages and salaries for all the registered employees via banking transfers or with pre-paid cards would lead to a decrease in the volume of cash payments made by consumers, which in turn would result in a contraction of the passive shadow economy and an increase in government revenues.
- ▶ In Albania, salaries in the public sector are generally paid through bank accounts, both at the central and municipal level. Although transferring wages directly into bank accounts is not obligatory for private employers, there are statutory incentives to do so. According to the Income Tax Law, wages and salaries paid outside the banking system cannot be recognized as expenses for the purpose of calculating the taxable profit. Yet, according to our estimates, there are still some registered employees who receive wages in cash and can start receiving them electronically.
- ▶ The presented estimates should be deemed conservative.<sup>1</sup> A negligible estimated impact of this regulation is due to the underdeveloped electronic payment infrastructure and low number of registered employees who still obtain wages in cash. The effect of the regulation could be larger if it was introduced after the development of electronic payments infrastructure.

**A** Change in the passive shadow economy (% of GDP)



**B** Change in government revenues (% of GDP)



Source: EY

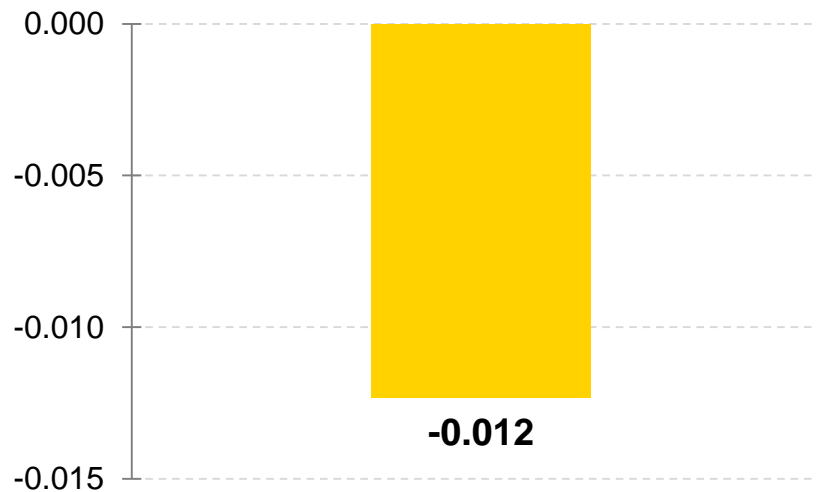
<sup>1</sup>This is due to the fact that our calculations accounted for the impact of the regulation on the employees that receive wages in cash only, while there are also some employees who receive just part of their wages in cash. Accounting for the impact of the regulation on the latter would increase the presented effects, respectively (however, there is no sufficient data available that would allow us to present such calculations).



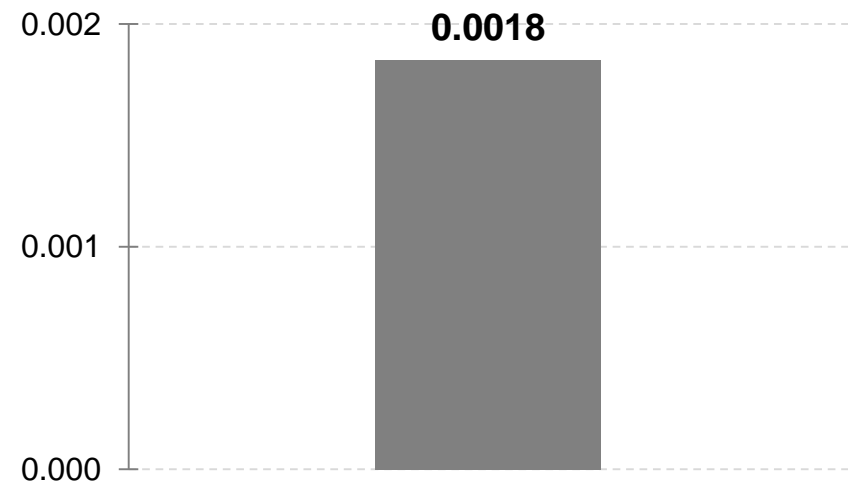
# Obligation to make an electronic payment of social security benefits

- ▶ Legal obligation to make a payment of social security benefits via banking transfers (or with pre-paid cards) would lead to a decrease in the volume of cash payments made by consumers, which in turn would result in a contraction of the passive shadow economy and an increase in government revenues.
- ▶ The presented estimates should be deemed conservative.<sup>1</sup> A negligible estimated impact of this regulation is due to the underdeveloped electronic payment infrastructure in Albania. The effect of the regulation could be larger if it was introduced after the development of electronic payments infrastructure.

**A** Change in the passive shadow economy (% of GDP)



**B** Change in government revenues (% of GDP)



Source: EY

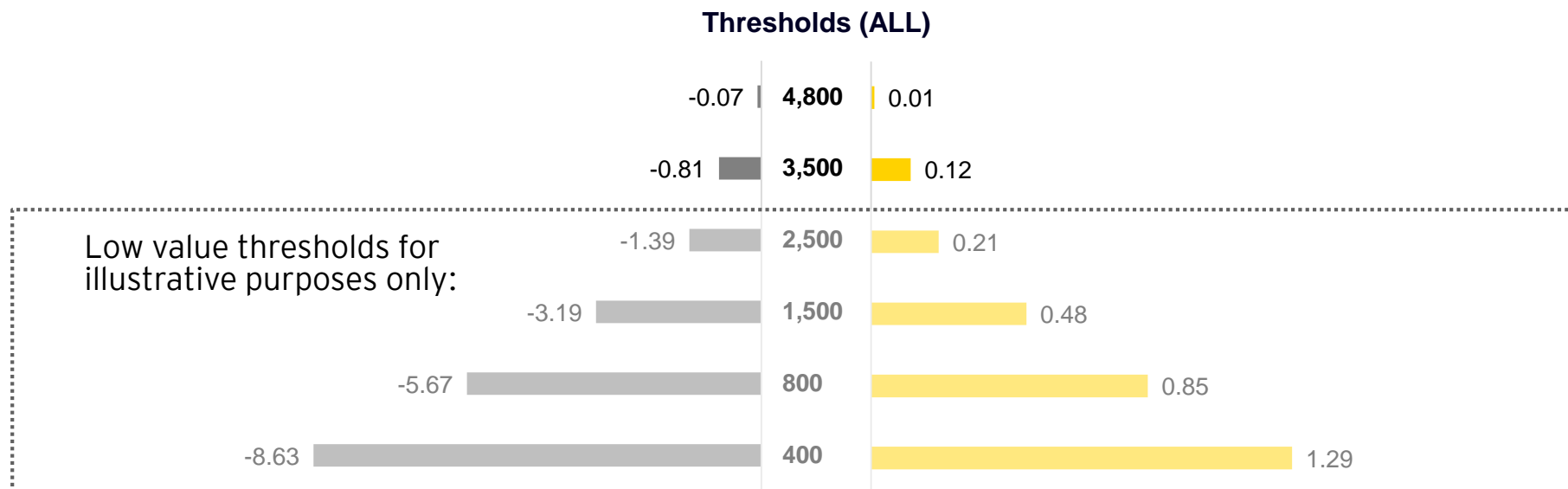
<sup>1</sup>This is caused by the fact that, due to data availability, our calculations accounted for the impact of the regulation on the people that receive government transfers in cash only, while there are also some people who receive just part of transfers in cash (or one type of transfers in cash and another electronically). Accounting for the impact of the regulation on the latter would increase the presented effects, respectively.

## Threshold for C2B cash payments (1/2)

- ▶ Cash payments above the established threshold are no longer allowed. Crowding out cash payments leads to contraction of the passive shadow economy. The contraction of the non-observed economy in response to a drop in the level of the threshold is more than proportionate, which reflects the distribution of consumer cash payments cumulating around the lower value transactions.
- ▶ While introduction of low thresholds for consumer cash payments would generate a relatively high change in the passive shadow economy and government revenues, such a regulation may seem unacceptable and hardly feasible to implement (it is presented only as an illustrative example).

### A Change in the passive shadow economy in Albania (% of GDP)

### B Change in government revenues in Albania (% of GDP)



Source: EY.

## Threshold for C2B cash payments (2/2)

- ▶ On the one hand, high thresholds may have only limited direct impact on the passive shadow economy, since most transactions of this kind are of a low value. On the other hand, even high thresholds should promote the development of electronic payments acceptance network, which should increase electronic payments also of a lower value, thereby reducing the passive shadow economy. High thresholds (incl. B2B) may also hinder criminal activities (e.g. money laundering).
- ▶ In Albania, it was specified by the law in 2013 that when the value of transaction between taxpayers is higher than ALL 150,000, it cannot be performed in cash; only payments through credit/debit card or electronic money institutions (licensed by the Bank of Albania) are allowed. The regulation is intended to serve mainly as an anti-money laundering measure.
- ▶ Many countries have introduced various limits on cash payments, although they are usually set at a high level<sup>1</sup>. For example, since April 2018 cash payments are not allowed in Uruguay for purchases of goods and services involving values above 10,000 Indexed Units (approx. UYU 170,000 or ALL 525,000 as of June 2019)<sup>2</sup>.
- ▶ It seems reasonable to first introduce high thresholds and subsequently lower their value. This has already been observed in some countries, for example:
  - ▶ In Bulgaria, payments exceeding the threshold of BGN 10,000 (approx. ALL 625,000) must be paid electronically as of 1 January 2016 (previous limit: BGN 15,000)<sup>3</sup>.
  - ▶ In Poland, the B2B limit was lowered from EUR 15,000 (approx. ALL 1,850,000) to PLN 15,000 (approx. ALL 430,000) in January 2017<sup>4</sup>. Under the new law, non-electronic payment for a transaction above the limit results in a situation where such cash expense cannot be treated as a tax deductible cost.

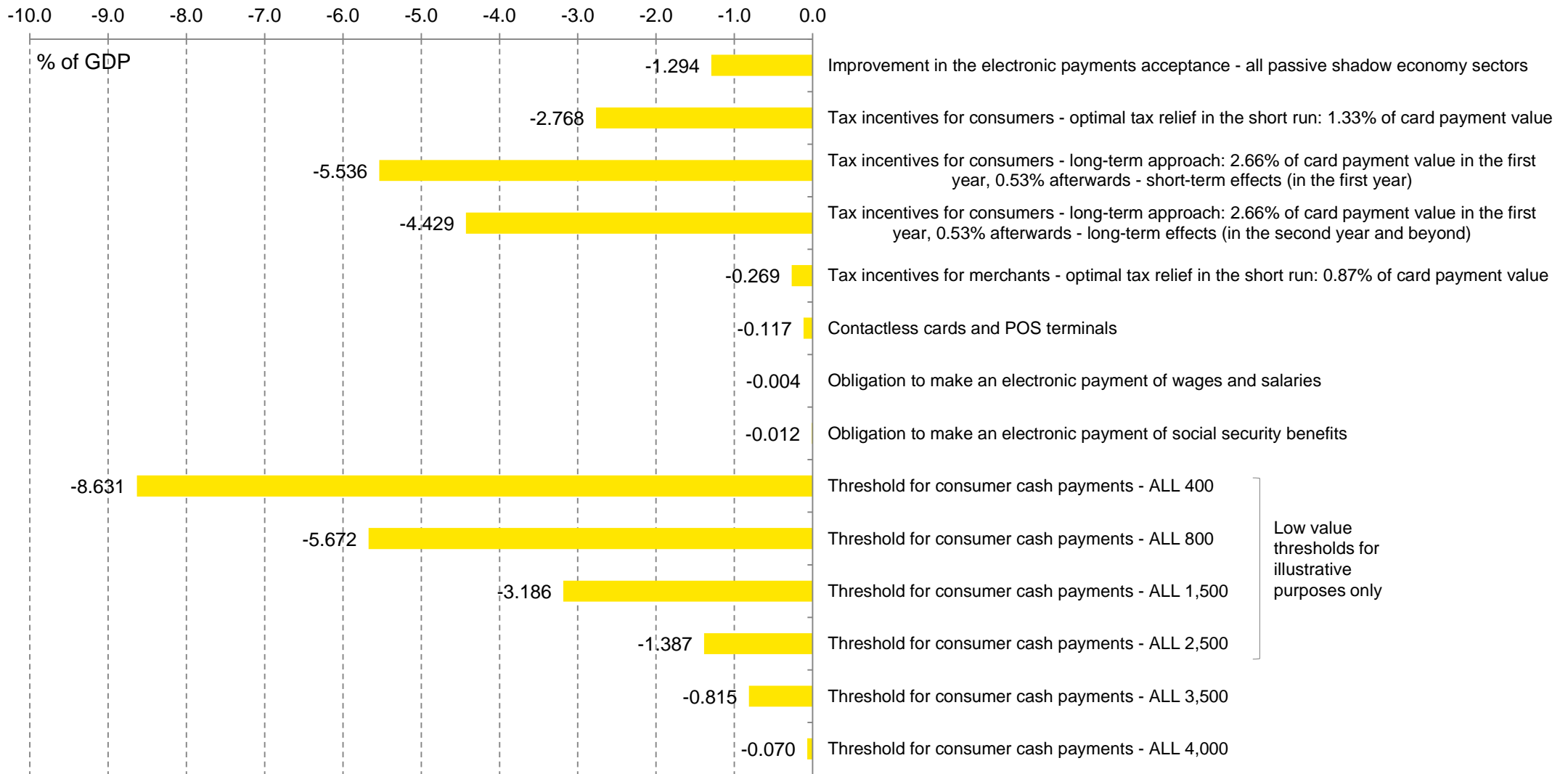
<sup>1</sup> See, for example: <https://www.evz.de/en/consumer-topics/buying-goods-and-services/shopping-in-the-eu/cash-payment-limitations/>  
[https://www.europe-consommateurs.eu/fileadmin/user\\_upload/eu-consommateurs/PDFs/PDF\\_EN/Limit\\_for\\_cash\\_payments\\_in\\_EU.pdf](https://www.europe-consommateurs.eu/fileadmin/user_upload/eu-consommateurs/PDFs/PDF_EN/Limit_for_cash_payments_in_EU.pdf)

<sup>2</sup> See: <https://www.dca.com.uy/2018/04/03/ya-rigen-las-restricciones-para-pago-en-efectivo/>

<sup>3</sup> See: <https://www.tpa-group.ro/en/rpublications-newsnewsletterbulgaria-tax-changes-2016/>

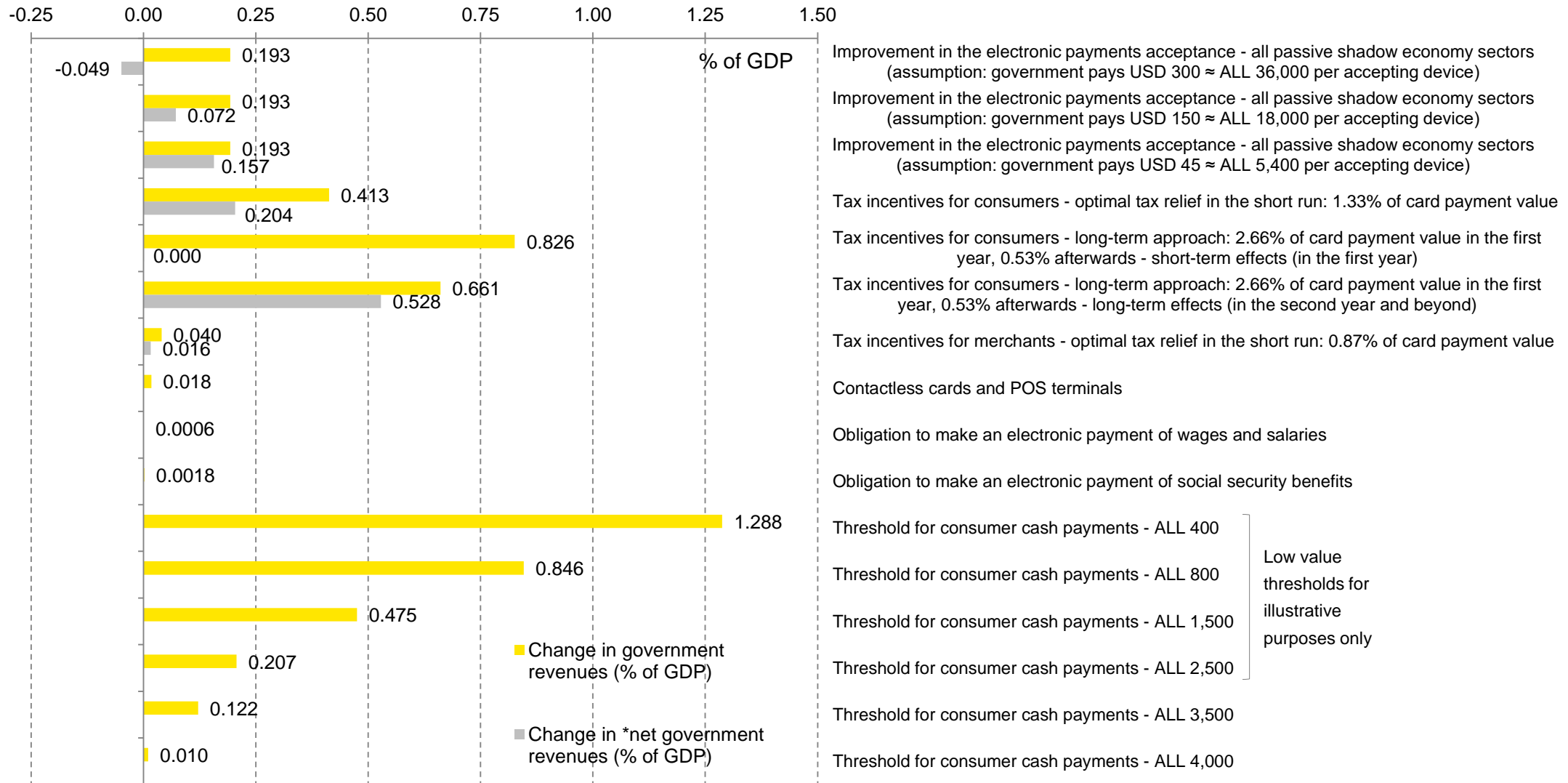
<sup>4</sup> See: <https://www.tmf-group.com/en/news-insights/articles/2016/october/poland-cash-payment-changes/>

# Summary: change in the passive shadow economy (% of GDP)



Source: EY. Note: Long-term effects of the tax incentive for consumers are presented as an illustrative example, based on additional assumptions

# Summary: change in the (net) general government revenues



\*Net government revenues = government revenues - government costs. Many costs to the government are incurred in the short term only (e.g. purchase of new POS terminals), while the generated benefits are long-term, since they stem from the permanently reduced level of the passive shadow economy. Consequently, the net impact of the considered solutions on the government balance should be much more favourable in the longer term than the effects presented in the chart, which are mostly of short-term nature.

Source: EY. Note: Long-term effects of the tax incentive for consumers are presented as an illustrative example, based on additional assumptions

The background is a dark grey gradient with a pattern of semi-transparent squares in various colors: teal, red, yellow, and light grey. The squares are scattered across the frame, with some appearing in clusters and others in isolation. The overall effect is a modern, digital aesthetic.

THANK YOU

## Factors to be considered in designing the solutions for Albania (1/2)

- ▶ In light of the low number of consumer accounts at financial institutions in Albania and common mentioning of insufficient funds/high costs of financial services as related reasons, it is important to continue and develop various programmes supporting (1) affordability, possession and usage of such accounts (which should be linked with payment cards or other means of electronic payments) as well as (2) financial knowledge. Such actions should be conducted by the country authorities, with a potential consultation of international organizations that are familiar with best implementations of such programmes in other countries. In particular, the authorities may consider introducing financial accounts that offer basic features free of charge or at a reasonable cost (such program already works, e.g., in all member states of the European Union).
- ▶ Since the number of POS terminals is very low in Albania, it seems reasonable to focus also on policies that stimulate development of electronic payments acceptance network. They may include obligation to accept electronic payments for selected businesses and/or government programs supporting the possession of POS terminals (or other devices that accept electronic payments) by merchants. A more developed payments acceptance infrastructure would also influence the effectiveness of the incentive mechanisms aimed at stimulating consumer electronic payments, since otherwise consumers would have a limited ability to shift to cashless transactions.
- ▶ Costs of financial services in Albania are currently perceived as too high by many financially excluded. To encourage the use of electronic payments by consumers, policymakers may consider introducing (temporary) incentives for such transactions. The design of consumer incentives should take into account rather long- than short-term effects as well as best international practices in this area. An exemplary long-term strategy that is likely to pay off may consist of (1) introducing tax incentives on electronic payments for a relatively short period of time in order to change payment habits of consumers and (2) reducing (or eliminating) the tax relief after that period.

## Factors to be considered in designing the solutions for Albania (2/2)

- ▶ While supporting the growth in the number of payment cards and POS terminals, it is worth to ensure that they enable the use of the contactless technology. It additionally encourages electronic payments, especially the ones that substitute cash payments of lower value among which the passive shadow economy transactions are relatively common.
- ▶ Once it becomes relatively easy and popular to pay electronically at points of sales (instead of withdrawing cash from banks/ATMs to pay in cash), it may be useful to ensure that more people obtain their income (including private sector wages and social security benefits) in an electronic form.
- ▶ Solutions promoting B2G and C2G transactions in an electronic form, while not addressing unreported payments directly, should reduce the shadow economy indirectly (by promoting the usage of electronic payments also in different situations).
- ▶ While introducing any measures for small enterprises, one has to be careful not to discourage their registration and operation in the formal economy. All the listed measures will be the more effective, the more (currently informal) companies become registered, which emphasizes the need to reduce the committed component of the shadow economy in Albania.



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