

ANNEX 3. Value added tax gap in Lithuania and methods of its reduction

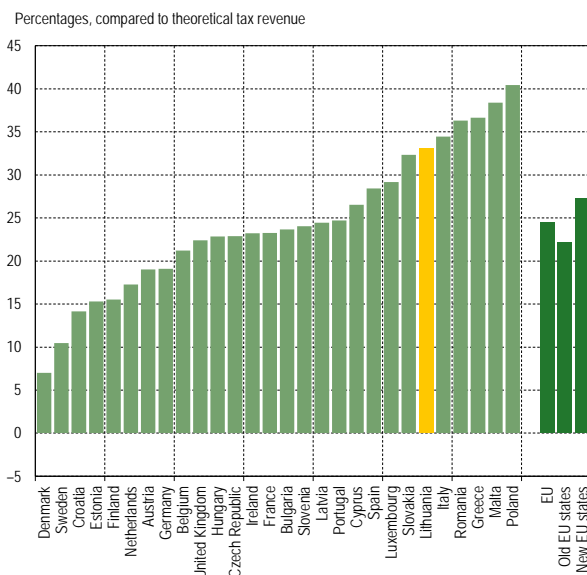
VAT taxable base is wide and relatively stable, therefore, this tax is one of the most important sources of general government revenue in the EU countries. Lithuania stands out from other EU countries not only by a large share of VAT revenue, compared to total budget revenue, but also by a large VAT gap. It shows what amount of income from VAT is not received due to reduced rates, exemptions and law violations. The gap related to non-compliance with the laws in Lithuania is one of the largest in the EU and it declined only slightly in recent years. The gap related to reduced rates and exemptions is relatively small; however, the justification for some reduced rates is worth discussing.

1. VAT gap sources

The VAT gap is the difference between theoretical and actually collected income. Theoretical VAT income may be calculated by multiplying a theoretical tax base, for example, the final household and government consumption, by the standard tax rate (21% in Lithuania). According to the European Commission's assessment, the VAT gap comprised 33% in Lithuania in 2015. It was larger only in five other EU states: Italy, Romania, Greece, Malta and Poland (see Chart A). The VAT gap in Latvia and Estonia was notably smaller than in Lithuania and stood at 24% and 15%, respectively. The average VAT gap of the EU states was 25%, whereas the gap in new member states was larger than in the old ones and stood at 27%.

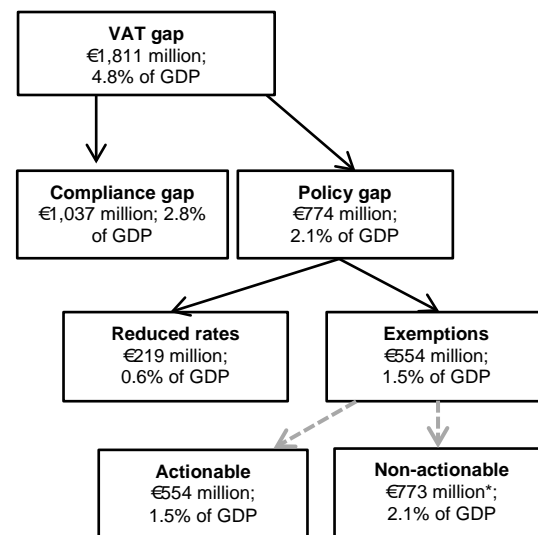
The VAT gap is determined by two causes: the decision not to tax certain goods and services or to tax them by applying a reduced rate, as well as the tax payer behaviour that does not comply with the laws. The decline in VAT revenue is called the policy gap, when it is determined by the first cause and the compliance gap, when it is determined by the second cause. The policy gap consists of the gaps caused by reduced rates and exemptions (see Chart B).

Chart A. VAT gap in the EU states in 2015



Sources: European Commission and Bank of Lithuania calculations.

Chart B. Breakdown of the VAT gap in Lithuania in 2015



Sources: European Commission and Bank of Lithuania calculations.
* This amount is not included in the sums indicated in upper rectangles.

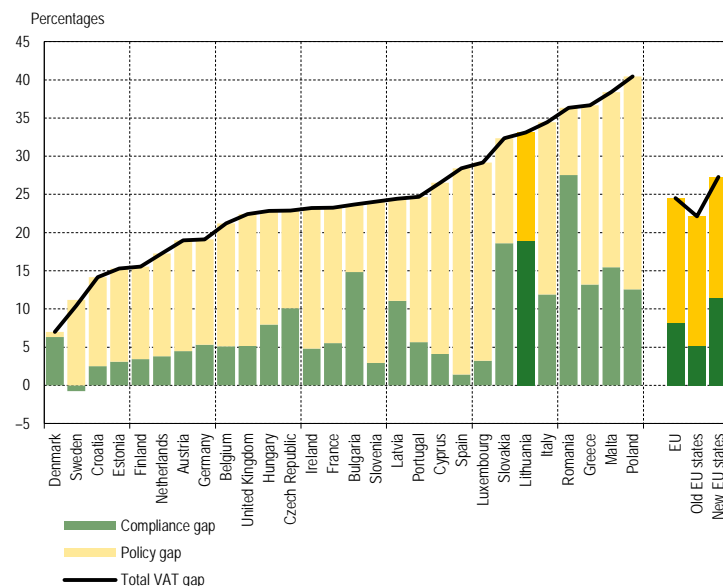
The policy gap accounts for a smaller share of the VAT gap in Lithuania. It amounted to €774 million or 2.1% of GDP in 2015. Compared to other EU states, reduced rates were applied to a relatively small number of goods and services in Lithuania. The reduced rate of 9% was applied to central heating, books, publications, passenger transportation and accommodation services, whereas the rate of 5% was applied to reimbursable medicines and prescription-only non-reimbursable medicines. Moreover, the VAT taxation exemptions were applied in Lithuania to a number of services that are important to society, for example, health, social, education, culture and sports services. Financial, insurance, gambling and other services and, in some cases, real estate services were untaxed. Exemptions to be applied by the EU states are established in the VAT Directive¹⁵, therefore, the policy gap related to them may not be eliminated or significantly reduced.

A part of the exemption gap cannot be eliminated at all, since it is impossible to tax certain services in principle. For example, countries usually raise the objective of providing primary education services for free, thus their taxation would contradict this objective. Certain services, such as national defence or ensuring of competition, are not provided to each resident individually, but jointly for all residents, therefore, it is impossible to tax them. The VAT gap calculation methodology applied by the European Commission assumes that the non-actionable exemption gap consists of the lost VAT revenue for imputed rents and the provision of public and financial services. This revenue amounts to €773 million or 2.1% of GDP in Lithuania.

¹⁵ Directive 2006/112/EC on the common system of value added tax.

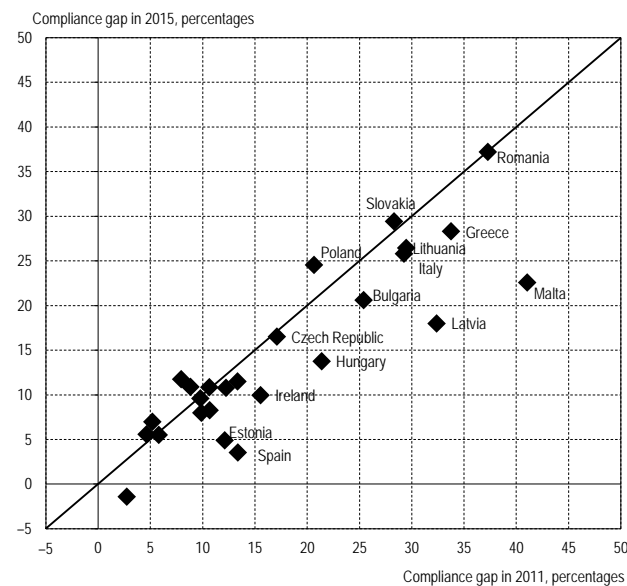
The compliance gap accounts for a larger share of the VAT gap in Lithuania: it amounted to €1,037 million or 2.8% of GDP in Lithuania in 2015. The importance of this gap is similar in most other new EU states, whereas the policy gap is more important in old EU states (see Chart C). The compliance gap results from fraud schemes, tax evasion and avoidance, fraudulent bankruptcies, unintentional errors in VAT reports, etc. On the other hand, the compliance gap in Lithuania is not only one of the largest in the EU, but also it does not decline significantly (see Chart D). It scaled back by 10% over four years (from 29.5% to 26.4%) – this is the third smallest decrease, compared to other EU states. The compliance gap of ten EU states (mostly new ones) exceeded 20% in 2011. In more than a half of these states the compliance gap was reduced significantly – by 16–45%.

Chart C. VAT gap in the EU states in 2015 according to cause



Sources: European Commission and Bank of Lithuania calculations.

Chart D. Change of the VAT gap in the EU states in 2011–2015



Sources: European Commission and Bank of Lithuania calculations.

2. Measures for compliance gap reduction in the EU states

EU states applied a number of measures to facilitate the reduction of the compliance gap. Each year, the European Commission analyses and reports on the VAT gap developments in the EU states. In this annex, three frequently applied gap reduction methods were selected from the European Commission's reports published in 2015–2017 (European Commission 2015, 2016b, 2017). Their selection process focused on those countries that achieved the largest reduction of the VAT gap and the new EU states. Three measures whose application could have significantly reduced the VAT gap in recent years are the VAT reverse charge mechanism, a register of high tax evasion risk entities and the application of information technologies in invoicing and in cash registers.

EU states applied the VAT reverse charge mechanism quite actively. When applying the usual taxation, the seller issues an invoice with the price of a product or service exclusive of VAT and the VAT amount. The buyer pays to the seller both the amount exclusive of VAT and the VAT. Then the seller pays the received VAT to the state or pays only a part of it, if it acquired goods or services, to which the VAT was applied earlier, in the process of production or provision of services. Each further resale of a product or service is related to further payment of the VAT amount. One enterprise pays the VAT and another enterprise reduces the VAT payable to the state by the amount of the paid VAT. However, problems arise when in the process of such resale one of the enterprises does not pay the VAT and becomes unreachable (the company is liquidated or it becomes impossible to contact it, since it was fictitious, etc.). Such situations are created in the so-called carousel fraud scheme, when goods are imported into the country, then resold several times and finally exported to the same importer. Thus, some enterprises reduce the payable VAT, whereas others do not pay it and, consequently, the state budget incurs losses (European Commission 2016a).

The VAT reverse charge mechanism may help avoid the damage done by the so-called missing traders. It may be applied to certain specific goods and services. When applying such taxation, the duty to pay the VAT to the state falls on the buyer of goods or services instead of their seller. For example, the seller may issue an invoice, which indicates the price without VAT and includes an instruction for the buyer to pay the VAT to the state budget. Thus, the buyer has to pay the VAT and also, in this way, he can reduce the payable VAT amount in the future. Such mechanism hinders the so-called carousel fraud scheme, since the VAT is paid and recovered by the same enterprise, therefore, the actual payment of the VAT does not take place. Thus, the problem of the so-called missing traders is solved this way.

On the other hand, the current application of the reverse charge mechanism deviates from the key principles of the VAT system used in the EU. This mechanism is only a temporary measure at the EU level, which is used to

reduce the VAT gap in those states where it is particularly large, until the final VAT system reform is completed. When the amount of goods and services provided by a taxable person or enterprise under one invoice exceeds €10,000, the VAT Directive allows to apply the local VAT reverse charge mechanism until 2022 (European Commission 2014). A number of discussions arise with regard to the fact that active application of this mechanism in specific sectors may encourage fraud in other areas, whereas a large-scale application of the mechanism may turn the VAT into the sales tax.

More active use of electronic devices contributed to a more efficient control of compliance with tax laws. Since the VAT is used to tax turnover, an enterprise may attempt to report lower turnover than it is in reality. If cash payments are made, cash may be not included in cash registers or special software may be used to delete or edit a part of cash register's sales records to reduce the reported turnover and the payable VAT. When a tax inspection is conducted, it is often impossible to see if a part of records were edited or deleted. Fiscal cash registers that immediately register the sale record are used to deal with this problem. The technology used in them does not allow deleting or changing records without leaving evidence, therefore, all these actions can be seen by a tax inspector. Some countries, for example, Czech Republic, Slovenia and Hungary, plan to connect cash registers to the tax administrator's databases. This allows a real-time transfer of the data of each sale transaction to the tax administrator. This measure allows selecting enterprises that pose higher tax evasion risk for tax inspection more accurately, to perform such inspection remotely, reduce the time needed for such inspection and increase its efficiency. Under the risk of higher fines, enterprises would be less inclined to take risks and evade taxes. This could increase the VAT revenue in those service sectors where payments are often made in cash, for example, restaurant, accommodation services, etc. Similar application of information technology in business-to-business invoicing also could increase the effectiveness of tax inspection.

One more significant measure for reducing the gap is the register of high tax evasion risk entities. There are cases when a natural person deliberately liquidates an enterprise and creates a new enterprise that takes over the former enterprise's assets, customers, etc., but not its tax debt. The scale of damage done by such activity has not been accurately estimated, however, the persons that perform such manipulations could be included in a certain register, which in turn would limit their capacity to create new enterprises.

3. VAT exemptions and reduced rates

VAT efficiency usually depends on the demand response to the change in the prices of taxable goods and services. When the demand for goods and services is elastic to price, even small price changes may significantly affect it. In this case, the VAT rate applied to goods and services may substantially change consumer decisions. The economic intuition is that in the efficient tax system goods and services that have low price elasticity should be taxed more than those goods and services whose demand is more elastic. In turn, the application of different VAT rates would ensure higher efficiency of the tax system. On the other hand, it is difficult to evaluate elasticity of the demand for goods and services to price in practice. Tax authorities should not only evaluate price elasticity for each product and service in the market (in each EU country), but also regularly assess elasticity after the change of consumer preferences or if there is a market entry of new products that may affect elasticity of demand for existing products. Thus, the differentiation of VAT rates without having comprehensive information on elasticity of the prices of goods and services would not increase efficiency, therefore, the application of a single VAT rate is a much simpler solution.

On the other hand, lower-income households usually spend a larger share of income for consumption than higher-income households, therefore, as a consumption tax the VAT is regressive and leads to a heavier burden for households with lower income. Usually the tax system is considered to be regressive, when the share of taxes, compared to total income, decreases, when income grows. To make VAT less regressive and protect the most sensitive residents, governments choose the differentiation of VAT rates and exemptions as a solution. However, the empirical research results show that the application of different VAT rates does not always ensure progressiveness and incurs losses to the state budget.

Reduced VAT rates are often applied in certain sectors with the expectation that the VAT rate reduction will increase the demand for low-skilled employees in these sectors and ensure competitiveness at the international level. For example, reduced VAT rates are applied in most countries in labour intensive sectors, especially in restaurant and hotel sector, with the aim of increasing employment. Lower-skilled staff is often employed there, so the VAT reduction should theoretically increase the demand for such employees, whereas the decline in the final prices for hotel and restaurant services would stimulate tourism more. Nevertheless, the empirical research results show that the economic impact of reduced VAT rates is not always such as expected (Harju, Kosonen 2016). The effect is often temporary and works in countries with inflexible and unstable labour market.

The solutions to issues of progressiveness and competition are not the only reason for the application of reduced VAT rates. Different VAT rates may be applied to stimulate the demand for certain goods and services, because consumers often underestimate their long-term benefits. For example, although a person earning higher income may also acquire goods, for which reduced VAT rates are applied, most EU states apply reduced rates for books and publications and in turn directly stimulate the transfer of knowledge.

Compared to other EU states, Lithuania does not stand out in terms of overall policy gap (see Chart E),

however, part of the gap determined by tax exemptions is relatively significant. Although Lithuania applies only those exemptions that are indicated in the above-mentioned VAT Directive, the cases when the provision of goods or services is not taxed may emerge due to a relatively broad definition of exemptions. Such definition may create possibilities to avoid taxation of those goods and services, for which taxation was intended. For example, it may be not clear whether services related to a person's appearance or recreation may be considered as personal health services. Such application of exemptions may in certain cases lead to an unjustified reduction of general government revenue. The value and benefits of applying reduced rates are also to be considered. Although reduced rates (for example, those applied to passenger transportation, heating or medicines) are meant to help low-income residents, in reality these reduced rates benefit not only low-income households, but high-income ones as well. Thus, such support is inefficient and a relatively significant amount of state revenue is lost because of it (see Chart A).

On the other hand, fairness and reallocation would be better ensured by progressive direct income taxes and a system of targeted benefits than by the application of reduced VAT rates and exemptions (Mirrlees et al. 2011). The differentiation of VAT rates is usually beneficial only when the state has the aim of reallocation, but does not apply an efficiently operating system of direct taxes and social benefits. The abandonment of reduced VAT rates and the unification of the tax base would ensure simplicity of the indirect tax system and reduce the administrative burden of enterprises that deal with several VAT rate categories, as the burden of documentation and additional calculations would be lifted. Finally, a uniform VAT tax rate would simplify the political decision-making, as the system of different rates is favourable for interest groups to compete for reduced rates and discounts. The reduction of the tax wedge of persons with lower income and the adaptation of the labour market would be a substantially more efficient measure for increasing the demand for low-skilled employees (Le 2003).

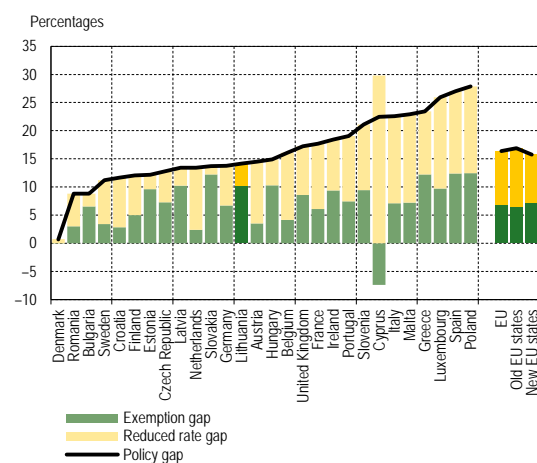
Table A. The assessment of reduced rates established in the Republic of Lithuania Law on VAT

Reduced rate	Theoretical justification	Problems arising	VAT income losses due to reduced rates (EUR million and as a percentage of GDP)
Medicine and medical assistance tools, technical assistance devices for the disabled	Reallocation, support for persons with low income	Beneficial to households with both low and high income; a targeted system of benefits (allowances) would ensure better reallocation	97.7 (0.22%)
Central heating and hot water	Reallocation, support for persons with low income	The reduced rate is beneficial to households with both low and high income; a substantial loss of budget revenue	47.0 (0.11%)
Passenger transportation according to set regular transport routes, passenger luggage transportation services	Attractiveness of the public transport system and access to it for persons with low income	The reduced rate is beneficial to households with both low and high income; a substantial loss of budget revenue	31.0 (0.07%)
Hotels and special accommodation services	Growth of demand for low-skilled employees, increase in the sector's competitiveness	Economic impact on labour market is temporary or insignificant; analysis of consumer prices shows that the sector's competitiveness not necessarily increases	14.2 (0.03%)
Books and periodicals	Stimulation of the demand and supply of goods and services, taking into consideration the long-term benefit	Most countries apply this reduced rate	12.0 (0.03%)

Sources: State Tax Inspectorate under the Ministry of Finance of the Republic of Lithuania.

Lithuania's VAT gap – the difference between actual and theoretical tax revenue – is one of the highest in the EU. Its largest part is determined by the tax payer behaviour that does not comply with the laws (compliance gap). In this aspect, Lithuania stands out among the EU states, where the largest part of the VAT gap is determined by the policy gap (reduced rates and exemptions established by laws). Lithuania differs from most of the other EU states with a large compliance gap, since it reduced the gap only slightly over four years. In recent years, the EU states have applied a number of measures, which contributed to the reduction of the VAT gap. A more active application of the VAT reverse charge mechanism could have reduced the losses related to the so-called carousel tax fraud schemes. A more active application of electronic means allowed to perform a more efficient control of compliance with tax laws and created possibilities to increase its volume. Creation of the register of high tax evasion risk entities could have reduced the probability of VAT evasion by liquidating old and creating new enterprises. Although the policy gap in Lithuania is not large, the justification of some reduced VAT rates is worth discussing. For example, the reduced rate for heating is not an efficient measure to reduce the tax burden for persons with low income, since this rate is applicable to all residents. The relatively broad definitions of the VAT taxation exemptions could also add to the increase of policy gap.

Chart E. VAT policy gap in 2015 according to cause



Sources: European Commission and Bank of Lithuania calculations.

References

- European Commission 2014: *Assessment of the Application and Impact of the Optional 'Reverse Charge Mechanism' within the EU VAT System*: https://ec.europa.eu/taxation_customs/sites/taxation/files/docs/body/kp_07_14_060_en.pdf.
- European Commission 2015: *Study to quantify and analyse the VAT Gap in the EU Member States*. CPB Netherlands Bureau for Economic Policy Analysis: https://ec.europa.eu/taxation_customs/sites/taxation/files/docs/body/vat-gap.pdf.
- European Commission 2016a: *Generalised Reverse Charge Mechanism*. Commission Staff Working Document.
- European Commission 2016b: *Study and Reports on the VAT Gap in the EU-28 Member States: 2016 Final Report*. IHS, Institute for Advanced Studies.
- European Commission 2017: *Study and Reports on the VAT Gap in the EU-28 Member States: 2017 Final Report*. IHS, Institute for Advanced Studies.
- Harju J., Kosonen T., 2016: *Reduced VAT Rates in Service Sectors Increasing Employment? Evidence from Restaurant Industry*. Government Institute for Economic Research.
- Mirrlees J., Besley T., Stuart A. ir kt. 2011: *Tax by Design*. Oxford University Press.
- Le T. M. 2003: *Value Added Taxation: Mechanism, Design, and Policy Issues*. World Bank Course on Practical Issues of Tax Policy in Developing Countries.