Improvements to the performance of customs and tax authorities

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*   **Abstract.** One of the strategic goals of tax and customs authorities in the Baltic countries is to increase their efficiency and effectiveness in the use of resources. These countries therefore constantly seek solutions aimed at simplifying administrative procedures, improving and developing service quality and the business environment in general, automating internal work processes and significantly reducing the amount of manual work. The purpose of this publication is to provide critical points of contact that are common for the three Baltic countries and highlight key differences that hinder an objective comparison of the three countries with regard to their tax and customs administration and combating crime. This research aims to offer a model for assessing the effectiveness of tax and customs administrations in the Baltic countries based on factors that influence their efficiency and relative importance.*

Keywords: *efficiency, performance, public service, tax and customs administration.*

Reikšminiai žodžiai: *veiksmingumas, našumas, viešosios paslaugos, mokesčių ir muitų administravimas.*

592

Māra Pētersone, Kārlis Ketners, Alfonsas Laurinavičius.
Improvements to the performance of customs and tax authorities

Introduction

On a global scale, the Baltic countries are often perceived as a united set of nations with similar levels of economic development and prosperity. However, several objective factors should be taken into account when comparing the performance of the tax and customs administrations in Latvia, Lithuania and Estonia, using efficiency as one of its indicators. These include factors such as certain differences in law enforcement, tax administration processes and institutional affiliations of tax administrations.

In both OECD and non-OECD countries, one commonly used performance indicator for tax administration is their total revenue body expenditure as a percentage of gross domestic product (GDP). For example, in Latin American countries this figure averaged 0.15% of GDP in 2011, whereas the OECD member countries spent 0.04% of GDP more on tax administration. To compare the Baltic countries with regard to tax income as a percentage of GDP, their tax base should be assessed first: for example, what the impact is of microenterprise tax, how corporate tax credits are granted and other important aspects.

The second most widely used indicator is the cost of collection ratio, which compares aggregate tax administration costs per 100 units of net tax revenue collected. For example, the cost of collecting one unit of tax revenue in Paraguay is almost five times higher than that in Panama. This can be explained by the fact that tax policy and administrations in LAC (Latin America and the Caribbean) countries vary in terms of their structure, equity, coverage and performance (OECD, 2014).

The tax and customs administrations in Latvia, Lithuania and Estonia have different organisational structures, tasks and functions, which are determined by their areas of responsibility and the division of competences, as well as the country's location. It is impossible to draw conclusions on the performance efficiency of an institution by comparing it to an institution in another country that performs the same functions by comparing only separate indicators. Comparison according to the cost per collected euro is mentioned as the most popular indicator. To calculate this, three categories of costs are taken into account in most cases: administrative costs, remuneration costs and IT costs that play a key part in the authority functioning smoothly.

In Figure 1, it can be seen that the Estonian Tax and Customs Board (TCB) has the lowest administrative costs for tax administration compared with net revenue collected. However, this is not an objective indicator for comparing the efficiency of tax administration because the structure of significant expenditure items can be different.

One of the strategic goals of the tax and customs administrations of the Baltic countries is to increase the efficiency and effectiveness of resource use. These countries are therefore constantly looking for solutions aimed at simplifying administrative procedures, improving and developing service quality and the business environment in general, automating internal work processes and significantly reducing the amount of manual work.
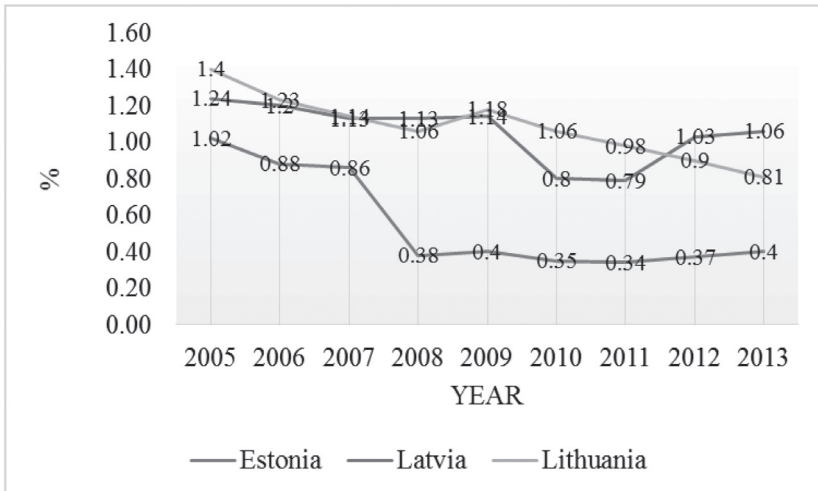
Figure 1. **Administrative costs for tax administration / net revenue collected (%)**
(OECD, 2015)

This purpose of this publication is to provide the critical points of contact that are common for the three Baltic countries and highlight key differences that hinder an objective comparison of the three countries with regard to their tax and customs administration and combating crime. This research aims to offer a model for assessing the effectiveness of tax and custom administrations in the Baltic countries based on the factors that influence their efficiency and relative importance. The research methodology consisted of the study and literature review and the analysis of information available on specialised websites. A synthesis and comparative analysis were also used to aid the interpretation of results.

1.   The role of efficiency in the improved functioning of the state institutions

Cantens et al. (2013) concluded that the central purpose for using measurements or any other technique in customs and tax reform should be to help an agency improve its effectiveness and optimise its efficiency. For tax authorities, effectiveness refers to the collection of taxes to the fullest extent possible according to the tax base and rates. For customs authorities, the key objective is to raise the appropriate amount of customs duties and taxes on the basis of the volume and types of goods that cross the country's border and existing tariff rates.

The tax and customs administrations in the Baltic countries seek to increase their efficiency by continually checking it and making improvements, as well as learning from each other if necessary. Specifically, national authorities organise

594

Māra Pētersone, Kārlis Ketners, Alfonsas Laurinavičius.
Improvements to the performance of customs and tax authorities

their processes in line with the objectives of the respective institution, and with the functions and tasks set out in legislation to achieve these in an economical and functional manner, as well as to ensure that they provide high-quality services (Pētersone, Ketners, 2016). However, Sudnickas (2016) points out that "one of the biggest challenges for performance measurement is integration of different aspects of organizational performance".

Economic efficiency shows the relationship between resources used and performance indicators, highlighting the factors that hinder an institution from achieving its goals with the resources allocated. By analysing (*Išoraitė, 2005)* efficiency, this indicator should be seen against the background of other measurements that characterise performance. Matei and Antonie (2014) have developed a system that represents how New Public Management controls the system and the surrounding environment in a way that results in effectiveness and efficiency.

Efficiency is broadly defined. Klein and Price (2015) identify three dimensions of the efficiency concept: 1) the budgetary dimension; 2) the output-efficiency dimension; and 3) the cost-efficiency dimension. Ensuring the quality of content for adequate efficiency measurements – a practice that is well-known and applied worldwide – is included and enshrined in Latvian legislation relating to performance development (Rezultātu un rezultatīvo rādītāju sistēmas darbības kārtība; Ministriju un citu centrālo valsts iestāžu rezultātu un to rezultatīvo rādītāju izstrādes un novērtēšanas metodika). A very precise definition for economic efficiency indicators (efficiency) is provided: the extent to which a certain system or the components of a system achieve the desired result (perform their functions) with regard to the consumption of resources. The authors are convinced that professionals at the customs and tax administrations in the Baltic countries would also have a professional interest in comparing other analytical indicators, such as functional efficiency (effectiveness) and quality. Of course, benefit - policy outcome indicators, output indicators and micro-impact indicators are present in the strategic plans and reports of the customs and tax administrations in the three Baltic countries. According to the IPSASB (The International Public Sector Accounting Standards Board; 2011), efficiency is one of the five performance indicators. According to the definition found in relevant literature sources, Coste and Tudor (2013) argue that service performance in the public sector can be defined through the relationship between efficiency and effectiveness in achieving objectives. Measuring service performance is also useful for comparing public institutions that offer the same services. PWC (PricewaterhouseCoopers) stresses in its surveys on productivity in the public administration sector that performance alignment is a vehicle for success in achieving greater and long-term efficiency (Maguire et al. 2013).

Unfortunately, in the public space the concept of efficiency at tax and customs administrations is not always understood in the same way. By comparing efficiency indicators such as cost for tax administration compared with net revenue collected or total revenue body expenditure as a percentage of GDP, the focus is on economic efficiency or, to be precise, economic indicators. This emphasis is related to the fact

that the public wants to spend the lowest possible amount of resources on tax-administration processes and more on defined public goals (Matei et al., 2016; Patapas and Diržytė, 2013; Antonakas et al., 2014).

Reforms at tax and custom administrations are carried out on a regular basis, in a bid to improve policy decisions and public management in a climate of governments challenged by budget deficits and declining public trust. Along the way, an efficient and effective programme helps to rebuild public confidence in a government. Mayne and Zapico-Goñi (2007) are convinced that through regular measurement of programme inputs, activities and outcomes, performance monitoring plays a central part in the most important current reform efforts. Modell et.al. (2007) show with the example of the Swedish Tax Agency how government reforms have already signalled a transition away from the output-based governance and control to more citizen-orientated and outcome-focused performance management. Matei and Enesc (2014) stress that from the perspective of organisational management, the performance of public administration refers to very specific factors: efficiency, efficacy, economy and ethics. According to Raipa (2016), in real life, both objective and subjective factors, as well as indicators, methods and procedures, are understood by the public value creation process.

A key aspect in the public sector is paying special attention to good service, as well as ensuring additional services or an expanded product range for clients. According to the experience of Boe and Kvalvik (2015), the problem is how to measure efficiency related to unclear goals. It could therefore be problematic to draw conclusions on whether the use of resources is really efficient. Therefore, Curristine et al. (2007) argue that increasing the use of performance information in budget processes is an important initiative, as part of an ongoing process that seeks to move the focus of decision-making in budgeting away from inputs towards measurable results. Alm and Duncan (2014) highlight that there is unfortunately little systematic information on how "efficient" any tax administration may be in using administrative "inputs" (such as personnel, materials, information, laws and procedures) to generate "outputs" such as tax revenues. However, according to Ali et al. (2014), the practice of measuring things that can be easily measured results in a prejudice against assessing performance in terms of economy and efficiency, and to a lesser extent on effectiveness.

The tendency to create and innovate in public sector organisations is a result of an evolution of their functions, a factor reflected in the departure from the traditional bureaucratic organisation based on the paradigm of Weber's administration towards New Public Management oriented towards effectiveness and performance (Wodecka-Hyjeka, 2015; Matei and Camelia, 2016).

The Trade and Transport Facilitation in Southeast Europe programme has gone further than any other customs and trade facilitation programme in identifying efficiency indicators. These indicators include revenue collected by customs staff; total cost of revenue over revenue collected; salaries over revenue collected; trade volume per number of staff; customs declarations per number of staff; and cost

per declaration. The results for each country, adjusted for extraneous factors that affect these indicators' absolute values, are good metrics to assess the efficiency of resource use. Comparisons across countries may indicate the scope for possible improvements, but these must be carried out carefully because many variables affect the absolute values of these indicators in each country, and these are often beyond the control of customs services (De Wulf and Sokol, 2005). The EC also points out the importance of the efficiency of customs blueprints in every typical basic process of customs activities, including revenue collection, risk management, border and inland control, post-clearance control and auditing, and information and communication technology, as well as in support processes such as organisation and management (European Commission – Taxation and Customs Union, 2007).

A number of factors have an impact on tax revenues. In Latvia, these are often related to the amount of shadow economy and the role of the SRS (State Revenue Service) in reducing it, but this is a narrow view on this phenomenon. Firstly, the business environment in general should be assessed, including tax policy. The amount of taxes collected directly depends on the types of taxes, the tax base, tax rates, tax credits and tax reliefs, as well as various exemptions. In addition, a large number of different tax rates, credits, reliefs and exemptions makes the administration process more complicated and more expensive.

2.   Comparison of operational processes at the tax and customs administrations of the Baltic countries

Tax and customs administrations implement tax policy, so a crucial part is often played by the extent to which tax policy defined by the government stimulates business activity or, conversely, imposes an additional administrative burden on businesses and increases the necessary resources and costs for tax administration. The structure and institutional affiliations of tax and customs administrations are based on revenues, security and business support policy defined by the government.

Important elements for analysis can be distinguished with regard to the functioning of tax and customs administrations, including:
  ✓   Institutional comparisons and different areas of responsibility;
  ✓   Geographical location;
  ✓   Administrative costs and automation of processes.

The OECD has identified five categories of institutional setups for conducting tax administration, although there are several exceptions in practice. These categories are a single directorate within the Ministry of Finance; multiple directorates within the Ministry of Finance; a unified semi-autonomous body; a unified semi-autonomous body with a management/oversight board; and "other" types. In accordance with this classification, Lithuania and Latvia has a unified semi-autonomous body, whereas Estonia has a single directorate within the Ministry of Finance.

Taking into account one of the most important functions of customs authorities – that of ensuring revenue – the Ministry of Finance is traditionally a govern-

ment structure that ensures the management and supervision of these authorities. There is no officially defined terminology for the institutional classification of customs administrations. However, the World Customs Organization has divided them into four categories according to their main work priorities, taking into account the degree of integration between customs and tax administrations, and the degree of dependency from the supervising ministry (*Yasui, 2009*). The following basic models can be classified under the model: Customs Department; Revenue Department; Revenue Service; Customs Agency; and Border Security Agency (Pētersone and Ketners, 2013). During the 1990s, the tax and customs administrations in Latvia and Estonia were integrated at a national level. However, the form of integration and its typology was different in both countries.

The structure of tax and customs administrations is also defined by factors such as the size of a country and its location, which should be taken into account when comparing the administrations of the three countries. Considering the significant difference in the length of their external land borders (294 km for Estonia, 407 km for Latvia and 933 km for Lithuania), Estonia has only 11 customs control points (CCPs) (with three on the country's outer border), compared with 23 for Latvia (with five on its outer border) and 38 for Lithuania (Lietuvos muitinės struktūra). The fact that Latvia and Lithuania have an outer border not only with the Russian Federation but also with the Republic of Belarus needs to be taken into account because large amounts of illegal cigarettes often come from this country and our country is often used for a transit (Fight Against Cigarette Smuggling: Experience of Lithuanian Customs). For example, customs officials at Latvia's SRS prevented the smuggling of 136,686,607 items of illegal tobacco and cigarettes in 2015, whereas in Estonia the amount was approximately 8 times smaller, at 16,568,096 items. Latvia's SRS has also ensured that more than double the number of criminal cases were sent for criminal prosecution, at 123, whereas Estonia sends around 40-50 criminal cases for criminal prosecution per year. In Lithuania, these indicators are regarded as results of the customs administrations, a situation that differs from that in Latvia and Estonia, where cigarette smuggling is an integrated function of the tax of customs administration.

The role of customs administrations in the collection of taxes has decreased significantly since these countries joined the European Union (EU) because there is no need to collect taxes within the EU, whereas the role of control and security functions has increased.

The make-up of taxpayers is more fragmented in Latvia, in that a higher number of taxpayers carry out small-scale economic activities. For example, there were 233,675 (Statistics) economic operators in Lithuania, 129,124 in Latvia and only 32,283 in Estonia in 2015. There is therefore certainly a greater need for resources for administration and control in Latvia and Lithuania.

Government policy with regard to the suspension and extension of deadlines for paying taxes also has an impact on the amount of tax collected. An assessment of applications received from taxpayers on extending deadlines for paying taxes shows

598

Māra Pētersone, Kārlis Ketners, Alfonsas Laurinavičius.
Improvements to the performance of customs and tax authorities

that Latvia's SRS prepared 11,052 decisions on extending deadlines for paying taxes worth €134.2 million, whereas in Estonia deadlines were extended in 2,922 cases for the payment of taxes worth €13.5 million. Administrative costs are also raised by the manual circulation of documents among various state institutions and the SRS, as well as among state institutions and taxpayers. Regardless of government decisions on the use of documents signed using a secure electronic signature, it is still not possible in Latvia, for example, to submit an application on the insolvency of an economic operator in electronic form, and some courts do not accept documents signed with a secure electronic signature. In addition, a high proportion of individuals in Latvia prefer to visit state institutions in person. In Latvia, 41% of individuals submitted their annual income declaration in person in 2015, whereas 95% of individuals in Estonia submitted theirs electronically. In Lithuania, 96% of individuals already submitted an electronic form for annual income declaration in 2013. It has been possible to do this electronically since 2000 in Estonia, 2004 in Lithuania and 2008 in Latvia. However, the situation is similar in the three Baltic countries with regard to electronic annual declarations of corporate tax and VAT.

To make an objective comparison between tax and customs authorities in Latvia and Estonia, it is also necessary to assess their areas of responsibility and division of competences. Significant differences can also be seen here. The Latvian State Revenue Service performs several functions that are not included in the TCB's processes, namely:

- ✓ the identification, tracking and monitoring of subjects of the law on money laundering and the financing of terrorism (in Estonia, a special bureau in the Estonian Police is established for this function);
- ✓ the granting and withdrawal of the status of public benefit organisations;
- ✓ all functions related to cash registers (registration, keeping records, etc.);
- ✓ functions related to property under the state's jurisdiction;
- ✓ functions of the customs laboratory (in Estonia, this is a function of the Estonian Environmental Research Centre);
- ✓ the suspension and termination of economic activities, with the maintenance of lists on information such as risk addresses and individuals.

Of course, the TCB also has functions that are not typical for a tax and customs administration, such as non-tax functions, certain benefits payments, property valuation and the population register. The functions of Lithuania's State Tax Inspectorate (STI) include activities relating to takeovers, accounting, safekeeping, realisation, return and write-off of property under state jurisdiction, including forfeited, derelict and inherited state property, material evidence, treasure and findings, and, since 2012, the acceptance of public officials' declarations on public and private interests and social-security contributions.

Estonia is one step ahead of the other two Baltic countries in terms of the use of information technology. According to the World Economic Forum (WEF) report on global information technology (IT) in 2015, Latvia was ranked 33rd in the world, compared with Lithuania in 31st and Estonia in 22nd. This historical tendency has

developed since the 2000s, when state institutions in Estonia focused on their main functions and outsourced IT services, whereas those in Latvia and Lithuania mainly used internal resources. The WEF points out that the strong performance of Estonia and the continuous growth in Latvia, helping it catch up with Lithuania, allows the Baltic countries "slowly but surely" to reduce the gap between them and the Nordic countries, a "remarkable achievement for the three former Soviet republics" (Dutta et al., 2015).

In Latvia, the information technology budget is part of the SRS and was equal to 15.4% of its budget in 2015, whereas in Estonia the information technology budget of the tax and customs authority is included in the budget of the Ministry of Finance. It is therefore not possible to analyse IT costs with regard to Estonian costs for tax administration. In Lithuania, the Customs Department has its own Customs Information Systems Centre, and the STI has its own IT department.

Although the tax and customs administration in Estonia is integrated in a similar way to that in Latvia, the support processes are basically centralised in the Ministry of Finance. In other words, this administration in Estonia independently performs its core functions of tax and customs administration, as well as combating crime in that area, but essential support processes (Истомин, Соколов, 2009) – such as financial management, internal control, public relations and the administration of information and communication technology – are carried out by the Ministry of Finance. In addition, a separate IT centre is established for the governance of information systems and information and communications technologies (*Information Technology Centre for the Ministry of Finance*), which performs the same functions as one of the structural units at the SRS – the Informatics Department. This means that costs for support processes are not included in the budget of the Estonian tax and customs administration.

The development of Estonia's digital environment means that several functions are already partly or fully automated, or are performed without an additional bureaucratic load. For example, one of the most important tax-administration processes, which involves significant SRS resources, is the refunding of overpayments for personal income tax based on submitted declarations of annual income. It is possible to electronically submit such declarations in all the Baltic countries, but these are checked manually in Latvia. In Estonia, this resource-intensive process has been fully automated for many years, in line with the electronic data movement among employers, banks and other state institutions. When taxpayers submit their declarations of annual income, it is therefore not necessary to attach supporting documents. In Estonia, there is also a narrower range of expenses relevant for tax repayment. For example, medical and dental expenses do not qualify for tax advantages because people can make a free choice regarding these payments. In Lithuania, this process was fully automated five years ago, except in situations that require a detailed audit (after automatic selection). A few years ago, the Lithuanian tax administrator introduced a new electronic services package called My STI. This is an area of electronic services in which a taxpayer can find relevant personal information, including debts

600

Māra Pētersone, Kārlis Ketners, Alfonsas Laurinavičius.
Improvements to the performance of customs and tax authorities

and tax overpayments administered by the STI, reminders of payable taxes, and the opportunity to submit and receive documents electronically, acquire and extend business certificates, and participate in distance training and discussions.

One further example of the administrative burden supported by current legislation is the process of applying administrative sanctions. In Estonia, this process is automated: individuals are not invited to be present at the decision-making, but in the event of further delays in submitting declarations, these taxpayers are automatically sent an administrative sanction protocol. In comparison, sanctions for delays in submitting declarations in Latvia are imposed according to the country's Administrative Violations Code prescribing to issue an administrative violation report and make a decision only in the presence of the respective taxpayer, taking into account aggravating and mitigating circumstances. Another example of differences in legislation is the length of time for which submitted declarations and reports can be amended. This is permitted for a period of three years in Latvia and five years in Lithuania, whereas in Estonia taxpayers can only do this until the end of the financial year.

3. Integral indicator for comparing efficiency

Assessing the efficiency of customs and tax (revenue) administrations is important, and it is necessary not only to determine the current situation, but also to analyse and forecast changes. There is a need to foresee opportunities for future developments of tax and customs administration in all EU countries, because this should be taken into account in developing EU-level strategies and cooperation projects in this area across nations. When this is considered alongside differences between administrations in the region, it is possible to set out an approach that uses complex (integrated) analysis of revenue authorities by using this concept for tax and customs authorities that collect mandatory payments for the national and EU budget as one of their functions.

An efficiency of separate revenue administration shows its complex development in comparison with other revenue administrations, because it reflects the extent to which certain systems or their components achieve the desired results with regard to resources consumed.

Two indicators are typically used to assess the efficiency of revenue administrations in absolute and relative terms: cost for administration and net revenue collected. The authors consider that this number of indicators is not sufficient for assessing the efficiency of different revenue administrations, because there are significant variations between their areas of responsibility, geographical locations, administrative costs and levels of process automation. Instead, they propose using a multifactor model to assess this, taking into account the proportion of costs allocated to personnel and IT, tax collection efficiency (tax gap) and indicators that characterise the number of administrative procedures, such as the relative numbers of taxpayers (economic operators) and customs procedures (declarations).

The proposed model is based on factors that influence efficiency and load, and their relative importance. One aspect related to the development of an integrated indicator is the determination of such factors, as well as the monitoring of their importance and use of the factor pair comparison method to assess the efficiency indicator. This method is essentially an expert method and can be successfully applied to assessing the efficiency of revenue administrations. It involves creating a matrix in which influencing factors are listed horizontally and vertically, with each one compared to the other factors. The corresponding box in the horizontal row is marked as an order number of the factor, which exceeds another factor. The number of advantages is visible at the end of the row. The sum in a vertical column shows the total number of advantages compared to other factors, with this sum assumed to be 1. The proportion of advantages for each factor shows the relative importance of the given factor, in a range from 0 to 1. The numerical evaluation of the factor is taken into account in the model for assessing the efficiency of revenue administrations by multiplying it with the importance coefficient (α_i). The authors think that the respective average indicator of revenue administrations in the European region and the respective indicator of the same administration in the previous year can be used as an assessment base (benchmark) of the relative factors.

The following model is therefore proposed for assessing the efficiency of revenue administrations:

$$E = \int \left[\frac{F_1 a_1}{F_{1b}} + \frac{F_2 a_2}{F_{2b}} + \frac{F_3 a_3}{F_{3b}} + \frac{F_4 a_4}{F_{4b}} + \frac{F_5 a_5}{F_{5b}} + \frac{F_6 a_6}{F_{6b}} \ldots \frac{F_n a_n}{F_{nb}} \right] \rightarrow max$$

E – Integrated indicator of efficiency

$F_1 \div F_n$ – Factors influencing the integrated indicator of efficiency

$F_{1b} \div F_{nb}$ – influencing factors used as a basis for comparisons

$a_1 \div a_n$ – importance of factors calculated according to the given methodology.

For approbation of the model, the integrated indicators of efficiency in Latvia and Estonia will be compared because the tax and customs administrations in both countries are integrated into a single institution. By comparing the cost for tax administration compared with net revenue collected in 2013 (Fig. 1), it can be seen that the proportion is 1.06:0.81 = 1.31 and 1.06:0.4 = 2.65. It can therefore be concluded that the efficiency of the tax and customs administration in Estonia is 1.31 times higher than that in Lithuania and 2.65 times higher than that in Latvia. This is one of the most important factors, but not the only one, that characterises the efficiency of these authorities.

In line with the methodology provided, we will create a matrix of the factors influencing the efficiency of tax and custom administrations and will assess their importance (Table 1).

The following groups of factors will be used:

F_1 – Costs per 1 euro collected

F_2 – Personnel costs in relation to total expenses (%)

F_3 – IT costs in relation to total expenses (%)

F_4 – Economic operators

F_5 – Expenses for non-tax functions (% of total expenses)

F_6 – Shadow economy (% from GDP)

Table 1. **Matrix of factors and comparison of pairs of factors using the expert method**

Factor	F1	F2	F3	F4	F5	F6	Number of factor advantages	Importance of factor α
F1	-	F1	F1	F1	F1	F6	4	1/15 * 4 = 0.267
F2	F1	-	F2	F4	F2	F6	2	1/15 * 2 = 0.133
F3	F1	F2	-	F3	F5	F6	1	1/15 * 1 = 0.067
F4	F1	F4	F3	-	F4	F6	2	1/15 * 2 = 0.133
F5	F1	F2	F5	F4	-	F6	1	1/15 * 1 = 0.067
F6	F6	F6	F6	F6	F6	-	5	1/15 * 5 = 0.067
Total							15	1.0

The results in Table 1 show that the cost for tax administration compared with net revenue collected defines only 26.6% of the efficiency of a tax and customs administration (with a score of 4 out of 15), with the proportion of the shadow economy more important for efficiency. More attention should therefore be paid to other indicators and they should be analysed.

It is important to examine the six groups of factors, as well as carrying out an objective quantitative assessment**.** Two countries will be compared by using the tax and customs administration in Latvia as a basis to assess whether or not the efficiency of its counterpart in Estonia is higher (Table 2).

The calculations, which take into account the six most important factors and the relative importance of their impact, show that the efficiency of Estonia's tax and customs administration is 2.24 times higher than that in Latvia. By comparing the costs per euro collected, the difference between the two administrations is 2.65. The influence of other factors is therefore also important, and the most important is that of economic operators.

The model developed shows the need for complex analysis of the efficiency of tax and customs administrations, and the integral indicator used to compare efficiency shows the importance of several influencing factors.

Table 2. **Comparison of the tax and customs administrations in Latvia and Estonia (OECD, 2015; Schneider, 2013)**

Factor	Coefficient of importance	Estonia	Latvia	Comparison
F1 – Costs per 1 euro collected (in 2013) α1 = 0.267	0.267	0.4	1.06	0.4/1.06 = 0.38
$\sum F_1\, a_1 = 0.38 * 0.267 = 0.10$				
F2 – Personnel costs in relation to total expenses (%) (in 2013) α2 = 0.133	0.133	76.0	68.6	76.0/68.6 = 1.11
$\sum F_2\, a_2 = 0.133/1.11 = 0.14$				
F3 – IT costs in relation to total expenses (%) (in 2011) α3 = 0.067	0.067	15.8	9.8	15.8/9.8 = 1.61
$\sum F_3\, a_3 = 0.067 / 1.61 = 0.11$				
Total number of employees in the whole service at the start of 2013	-	1,546	4,312	0.36
F4 – Economic operators (number) α4 = 0.133	0.133	129,124	32,283	129124/32283 = 4.00 4.00/0.36 = 11.11
$\sum F_4\, a_4 = 0.133/11.11 = 1.48$				
F5 – Expenses for non-tax functions (% of total expenses) (in 2013) α5 = 0.067	0.067	38.00	46.00	38/46 = 0.83
$\sum F_5\, a_5 = 0.067/0.83 = 0.05$				
F6 – Shadow economy (% from GDP) α6 = 0.333	0.333	27.6	25.5	27.6/25.5 = 1.08
$\sum F_6\, a_6 = 0.333 * 1.08 = 0.36$				
$\sum F_i\, a_i = 0.10 + 0.14 + 0.11 + 1.48 + 0.05 + 0.36 = 2.24$				

604

Māra Pētersone, Kārlis Ketners, Alfonsas Laurinavičius.
Improvements to the performance of customs and tax authorities

Conclusions

In recent years, the tax and customs administrations of all three Baltic countries have set the efficient use of resources and increased effectiveness as being among their goals by introducing new progressive methods of work and developing information systems that allow them to reduce the use of manual operations.

These administrations identify and use best practices that come from other European countries. The TCB is compared to the SRS most often in this publication because this administration is a leader among the Baltic countries thanks to its successful development.

The tax and customs administrations in Latvia, Lithuania and Estonia have different organisational structures, tasks and functions, which are also determined by their areas of responsibility and the division of competences, as well as the country's location. The comparison of separate indicators, such as tax revenue collected as a proportion of GDP or the administrative cost for tax administration versus net revenue collected cannot provide objective information on the efficiency of an institution compared to another one in a different country that performs the same functions.

The costs for tax administration and net revenue collected are insufficient for comparing the efficiency of tax and customs administrations because there are too many differences with regard to responsibilities, geographical location, administrative costs and automation of processes. The authors therefore propose a multifactor model for assessing the efficiency of such authorities. This model is based on factors that influence the efficiency of administrations and their relative importance.

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Muitų ir mokesčių administratorių veiklos gerinimo tendencijos

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Anotacija

Vienas iš mokesčių ir muitų administravimo strateginių tikslų Baltijos šalyse yra pagerinti išteklių naudojimo veiksmingumą ir našumą. Šių valstybių administratoriai nuolat ieško sprendimų, kurie padėtų iš esmės supaprastinti procedūras, gerinti ir plėtoti paslaugų kokybę bei verslo prieinamumą, konsoliduojant tarnybų veiklos procesus, optimizuojant žmogiškuosius ir finansinius resursus. Straipsnio tikslas – atkreipti dėmesį į bendras visų trijų Baltijos šalių problemas, taip pat atskleisti esminius skirtumus mokesčių ir muitinės administravimo bei kovos su nusikalstamumu srityse. Šio tyrimo naujumas – atskleisti visų trijų Baltijos šalių mokesčių administravimo praktikos specifiką, pateikti bendras tendencijas, esminius muitų ir mokesčių administratorių veiklos savitumus.

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