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# Tax Incentives as a Part of Governments' Applied Mechanisms for the Third Pension Pillar in Estonia, Latvia, and Lithuania

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## Abstract

The main objective of the improvements to public pension systems is to create a balanced three-pillar pension structure and increase public accountability for pension capital formation. Most pension systems are based on the first two pension system pillars – mandatory contributions in the state compulsory unfunded pension scheme and the state-funded or accumulated pension scheme in pension funds. However, the pension level adequacy has been reached by adding the third pension system pillar - voluntary investments in private pension funds. Governments are private pension system policymakers by defining a legal framework and providing tax incentives for voluntary investments for retirement. In the Baltic countries – Estonia, Latvia, and Lithuania, the third pension pillar is at an early stage of its development, and as such, should be particularly stimulated. This research focuses on the tax incentives utilized by the governments of Estonia, Latvia, and Lithuania and aims to ascertain and compare the effectiveness of the tax incentive policies applied to the third pension pillar by the governments of the three Baltic countries. It questions the effectiveness of the incentive mechanisms the governments of the Baltic countries have chosen, which include involving most of the population in the private pension saving programs. The research methods used are the analysis of scientific publications on the previously conducted research, acts of legislation of Baltic countries, as well as an analytical study of statistical data on the development of voluntary pension fund contributions in Estonia, Latvia, and Lithuania. The research results indicate that the tax incentives are the mechanism to motivate the population to create savings in the third pension pillar in all three Baltic countries. However, Latvia being the country with the highest coverage rate of the third pension pillar has the most unfavorable conditions for creating savings. There are no tax incentives on returns on investment and tax-exempt withdrawals in Latvia, while Estonia and Lithuania have all positions tax-exempt. A more detailed analysis of the tax incentives at the contribution stage explains the underdeveloped third pension pillar in Lithuania, as Lithuanian personal income tax reliefs are targeted at low or medium wages or gross income. The research has highlighted the impact of tax incentives on voluntary savings for retirement in the three Baltic countries, opening a discussion about the effectiveness of governments' applied mechanisms.

**KEYWORDS:** government, pensions, tax incentives, third pension pillar, voluntary savings.



In the era of an increasingly aging population, pessimistic forecasts have been developed for future pension replacement rates. Countries face the need to balance their national social budgets: their revenues and expenditures, leading to a reduction in the amount of state-guaranteed future pensions. Recent developments in pension systems are based on their expansion to include second and third pillar in an attempt to create a balanced pension model. One of the greatest challenges of governments is to increase public accountability for pension capital formation by creating private pension savings in the third pension pillar - pension funds.

In recent years, empirical research has made considerable progress in analysing the factors influencing the third pension pillar formation. Most studies of voluntary savings for retirement focus on individuals' characteristics such as financial literacy (Ricci & Caretelli, 2017), education and income level (Vivel-Búa, Rey-Ares, Lado-Sestayo & Fernández-López, 2019; Daugeliene, 2016; Botos & Botos, 2020), gender (Kumar, Tomar & Verma, 2019; Foster & Smetherham, 2013), acculturation and ethnic identity (Fontes, 2011). Meanwhile, other studies have been carried out on how institutional factors influence the third pillar development, such as incentives to save privately or reforms of the whole pension system (Le Blanc, 2011). Researchers have studied the interaction of pillars in multi-pillar pension systems and have made comparison of Canada, Denmark, Netherlands and Sweden (Sørensen, *et. al.*, 2018), where authors have concluded that the relative importance and the role of the different pension pillars vary from country to country, and according to age, income, gender and socio-economic dimensions as well as between generations. (Sørensen, *et. al.*, 2018) have stressed that "in many countries, the generosity of public benefits is set to decrease - increasing the importance of private pensions". (Sørensen, *et. al.*, 2018) have concluded that "this will shift risk and uncertainty from employers and pension institutions to individuals". "Thus, risks and uncertainties related to private pensions will become more important, raising questions about the division of responsibilities between public and private pensions, and about the potential of mitigating such risk through pillar interaction" (Sørensen, *et. al.*, 2018). Studies on pension system development (Medaiskis, 2001) and evaluation of the 3 pillar pension funds in Lithuania (Jurevičienė & Volkova, 2014) have focused on different aspects the third pillar pension funds including the correlation between tax incentives and effectiveness of the third pillar pension fund.

To varying degrees, governments influence the involvement of population and the provision of adequate pensions with incentives that are suppressed by legislation. The Organisation for Economic Co-operation and Development (hereinafter - OECD) has published enlightening overviews of pension system developments and public policy reforms carried out in the OECD countries with the analyses of the global tendencies (OECD, 2019). However, in order to evaluate the effectiveness of a country's pension reform, it is useful to compare developments before and after the reform. Longitudinal studies of pension reforms provide the useful basis for practical implication for further legislation improvements.

The debate continues about the best strategies implemented for government incentive packages and their success in achieving the goal of engaging citizens in building up savings. On the one hand, the third pension pillar reforms influence development in the long run and as such do not allow one to identify the dominating factor - financial incentives, the availability of information, or the marketing efforts made by government and service providers (Börsch-Supan, Coppola, & Reil-Held, 2012). On the other hand, researches conducted on the UK pension system have confirmed that retirement savings growth depends on the increase in contribution ceilings (Chung, Disney, Emmerson & Wakefield, 2006; Disney, Emmerson & Wakefield, 2007) stated by the government.

Special attention by academic researchers has been paid to the life cycle aspects of the con-

sumption and savings behaviour of the society (Attanasio & Weber, 2010). The life cycle simulation provided on the people of the United States and Japan (Hayashi, Ito & Slemrod, 1988) savings and house purchase decision dependability on tax system showed a small impact of tax incentives on people's decisions. There are doubts of tax incentives positive impact on volume of national saving (Anton, Bustillo & Fernandes-Macias, 2014; Daugeliene, & Liepinyte, 2012). However, there is no clear evidence that pension fund contributions are generated by diverting other household assets or pre-planned savings therefore tax incentives might stimulate increase of household savings.

In Estonia, Latvia, and Lithuania, the third pension pillar is at an early stage of its development, and as such it should be particularly stimulated. Although in all the three Baltic countries pension systems have been compared by academic researchers (Rajevska, 2016), no special attention has been paid to the comparison of these incentives and the dependability of savings from them. Therefore, this analysis aims to fill this gap by focusing on the incentives utilized by the governments of Estonia, Latvia, and Lithuania.

The aim of this research is to ascertain and compare the effectiveness of the third pension pillar tax incentive policies applied by the governments of the three Baltic countries to create balanced and adequate pension systems. This research questions the effectiveness of the incentive mechanisms the governments of the Baltic states have chosen, which include involving most of the population into the private pension saving programmes.

The research methods used are the analysis of scientific publications on previous conducted research, acts of legislation of Baltic States as well as an analytical study of statistical data on the development of voluntary pension fund contributions in Latvia, Estonia and Lithuania.

The research has highlighted the impact of governance mechanisms on voluntary savings for retirement, opening a possibility to recommend the use of the best practice in the future development.

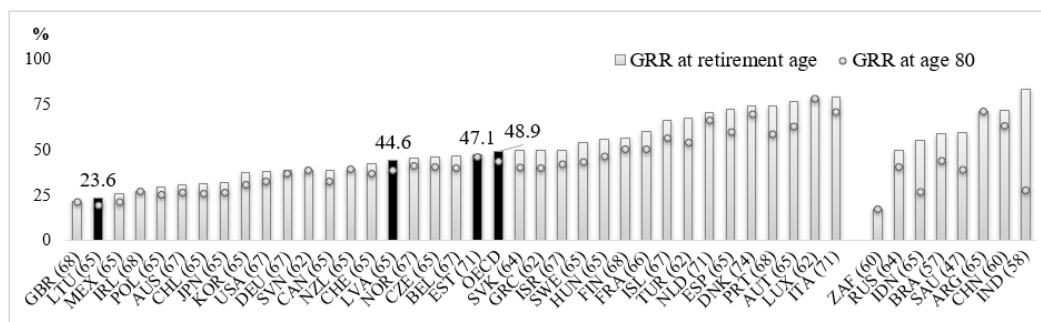
## Results and discussion

Pension adequacy in most countries of the world has been analyzed by OECD and World Bank in their statistical and analytical overviews. To present the retirement income level of countries, replacement rates are calculated. Replacement rate is an indicator describing the level of retirement income after retirement as a percentage of individual earnings at the time of starting the retirement period. Replacement rates are the degree to which pension systems allow typical workers to maintain their previous standard of living when they switch from work to retirement.

According to [Figure 1](#), at the end of 2019 gross pension replacement rates of Estonia, Latvia, and Lithuania were below the OECD average (OECD, 2019). Comparing all three Baltic States, Latvia's gross replacement rate (44.6%) was higher than in Lithuania and lower than in Estonia - it was about 5% lower in Estonia (47.1%) and almost twice as high as in Lithuania (23.6%).

**Figure 1**

Gross pension replacement rates: Average earners at retirement age and age 80



Source: OECD (2019), *Pensions at a Glance 2019: OECD and G20 Indicators*, OECD Publishing, Paris

The gross replacement rates at age 80 differ from those at retirement age due to the indexation of pension benefits in payment, which do not follow wages in many countries. Thus, the estimated replacement rate decline in Latvia was about 13%, in Lithuania - 17%, but in Estonia - only 2%.

Although all three pension systems of Baltic countries consist of three parts: (1) mandatory contributions based on the state compulsory unfunded pension scheme, (2) the state-funded or accumulated pension scheme in pension funds, and (3) a compulsory contribution-based private pension scheme in pension funds, the replacement rates calculated by the OECD included only the first two mandatory parts.

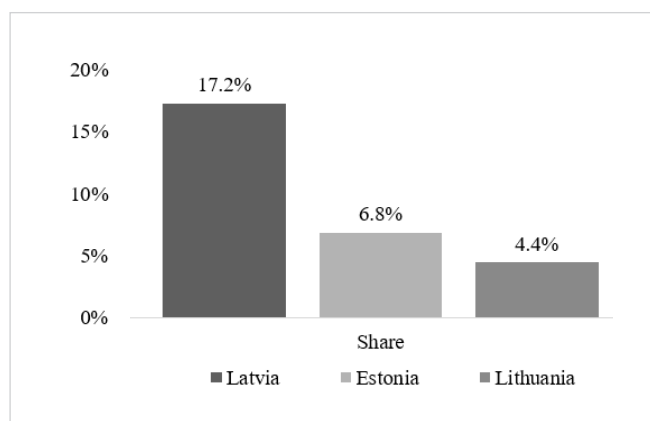
Meanwhile, the pessimistic forecasts of social budget strains resulting from the prolongation of life expectancy and reducing the share of the working-age population have led to discussions in academy and government institutions about possible scenarios. Contributions into the third pension pillar – private pension funds are one of the solutions. Besides, according to Robert Holzmann, a World Bank expert (Holzmann, 2012), the countries having lower replacement rates for state-guaranteed pensions accumulate more in private pension funds. The academics Orazio P. Attanasio and Agar Brugiavini in their research (Attanasio & Brugiavini, 2003) on substitutability between private and pension wealth in Italy after the pension reform found the evidence of higher level of private savings in the situation of reduction of pension wealth.

The beginning of the third pension system pillar in Latvia and Estonia can be dated earlier than the second pillar was established. Voluntary savings for retirement of both countries started with the respective legislation dated 1998 for Estonia (OECD, 2011) and Latvia (Groduma, 2002). In Lithuania, both the funded pension system parts - the second and the third pillar, were introduced in the year 2004 (Bitinas, 2011). In contrast to Latvia and Estonia, Lithuania chose the quasi/mandatory approach to the formation of the second pillar of pensions. That could be the reason for a less developed third pension pillar in Lithuania in comparison with Estonia and Latvia.

Based on the reports of financial supervision institutions of all three Baltic states and the statistical office of the European Union at the end of 2018, Latvia demonstrated better results compared to Lithuania and Estonia in the share of the population creating private pension funds (Figure 2) as the instruments for the third pillar of the pension system.

To enlarge ultimate total pension replacement rates by encouraging people to save voluntarily, the governments have introduced incentive systems. According to the OECD classification (OECD, 2019), financial incentives are the most common types of incentives. Usually, those are in the form of tax reliefs and can be applied in three stages – on contributions, return of investment, and the withdrawal of funds. If national regulations provide tax exemptions, the financial profitability of private pension schemes increases; if the position is taxed, the savings become less financially viable.

It can be seen in Table 1 that Latvia is the most disadvantaged country in the stages of *Returns of Investment* and *Withdrawal* in comparison with the other two countries.



**Figure 2**

Number of voluntary pension fund contracts as a share of the number of active population aged 20-64 in Latvia, Estonia and Lithuania, 2018

**Table 1**

Financial incentives for voluntary savings in private pension funds, 2019

Country	Contributions	Returns of Investment	Withdrawal
Estonia	Tax-Exempt	Tax-Exempt	Tax-Exempt
Latvia	Tax-Exempt	Taxed	Tax-Exempt if contributions made by the individual Taxed if contributions made by the employer
Lithuania	Tax-Exempt	Tax-Exempt	Tax-Exempt

Source: Elaborated by the author based on OECD (2019) *Financial incentives for funded private pension plans*

### Tax Incentives: Contributions

However, it is useful to make a deeper analysis in the part of *Contributions* and the limits of tax exemptions. The national regulations on personal income tax (hereinafter – PIT) of Estonia (Parliament of Republic of Estonia, 1999), Latvia (Parliament of Republic of Latvia, 1993) , and Lithuania (Parliament of Republic of Lithuania, 2002) provide several limitations on the contributions to the voluntary savings causing differences in the financial incentives at this stage. All three countries' regulations limit the sums to be paid to pension funds with the full PIT exempt principle. There are two kinds of limitations – the limit in the percentage of PIT payer gross annual income and aggregate limit of contributions to voluntary pension funds.

**Table 2**

Personal Income Tax (PIT) Incentives, 2019

Limit	Estonia	Latvia	Lithuania
Limit of gross annual income as a base for PIT reliefs	15%	10%	25%
Aggregated limit of contributions provided in voluntary pension funds	6 000 EUR	4 000 EUR	2 000 EUR
Applicability	Only Pension funds	Pension funds and Life insurance	Pension funds and Life insurance
PIT rate for employees applicable to a base for PIT reliefs	20%	20%	20%

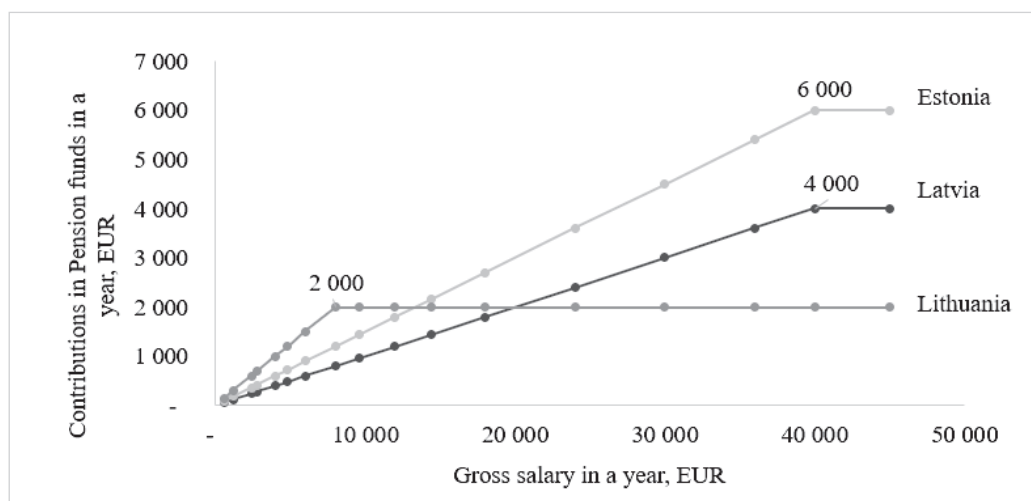
Source: Elaborated by E.Dundure based on *Personal income tax regulations of Estonia, Latvia and Lithuania*

As can be seen from the table above, the limitations differ considerably across the three Baltic states. The limits of gross annual income as a base for PIT reliefs vary from 10% for Latvia to 25% for Lithuania, the aggregated limit of contributions provided in voluntary pension funds varies from 2000 EUR for Lithuania to 6000 EUR for Estonia. The specified financial incentives apply to the investments into pension funds for all three countries, and into life insurance companies with the agreements more extended than ten years for Latvia and Lithuania. The tax rate for the employees' category applicable to a base for PIT reliefs is equal to all three countries and does not do a favour to any of them.

To evaluate the ultimate benefit from PIT financial incentive, the maximum gross yearly salary as the base for PIT incentives was calculated according to the formula:

*Maximum gross annual salary = Aggregated limit of contributions \*100/ Limit of gross annual income*

According to the calculation of limitations of PIT incentives covered *Maximum gross annual salary*, Lithuania has the smallest yearly salary limit 8000 EUR, Latvia and Estonia have equal annual salary limit of 40000 EUR.



Source: Elaborated by the author based on Personal income tax regulations in Latvia, Estonia and Lithuania

**Figure 3**

Personal income tax incentives covered contributions in Pension Funds exposure in Gross income level in Latvia, Estonia, and Lithuania in 2019

We can see from [Figure 3](#) that Lithuania has the highest financial incentive rate for the gross income level up to 8000 EUR in a year. However, for the gross income from 8000 EUR to 40000 EUR a year Lithuania does not have any PIT incentives to save, while Estonia and Latvia have.

Therefore, Lithuania is targeting smaller salary or gross income (till 667 EUR a month) receivers than it is in Latvia and Estonia (till 3333 EUR a month). However, in Lithuania the gross annual income limit as a basis for PIT relief (25%) is, on average, twice as high as in the other two Baltic countries (10% and 15%).

The ultimate sums of incentives could diversify more if we compare three Baltic countries' other tax incentives for PIT, such as not applicable with tax basic exemption and exemption for children. Those are exemptions different for each country and mostly changing according to a tax policy of each country. The main purpose of just mentioned exemptions is the reduction of poverty, and they are targeted at the lowest income recipients in society.

Lithuania having the smallest limit of an aggregate sum in contributions ([Figure 3](#)) might be at risk to reduce the real financial incentives effect of additional PIT reliefs. According to the PIT regulation of Lithuania, the non-taxable income of 4200 EUR in 2020 is stated if the annual income of an individual does not exceed the amount of twelve minimum monthly wages. It leads to only 3800 EUR income as a basis for other tax reliefs, including for contributions into voluntary savings for retirement.

This additional factor questions the effectiveness of financial incentives to contributions at small aggregate limits.

### Tax Incentives: Returns of Investment

According to OECD (OECD, 2019) analyses of thirty-six member countries, most of them do not levy a tax on investment on voluntary savings for retirement in pension plans. Estonia and Lithuania are among them. However, Latvia is one of the 11 OECD member countries that have the tax on *Return of investment*. Moreover, the Tax rate is one of the highest ones – at the level of 20% and equal for all types of asset classes, duration of the investment, or other parameters.

Latvia's determination to include the capital increase formed by pension funds in the taxable base of the PIT was proved by the fact that it was started already in 2010. From the year 2018, the rate of 10% was increased to 20%. The administration of the PIT on *Return of investment* has

been carried out upon withdrawal only. On the one hand, it makes it difficult to forecast the final pension savings amount; on the other hand, it gives a chance to pay for accumulated returns at the end of the saving period.

### Tax Incentives: Withdrawals

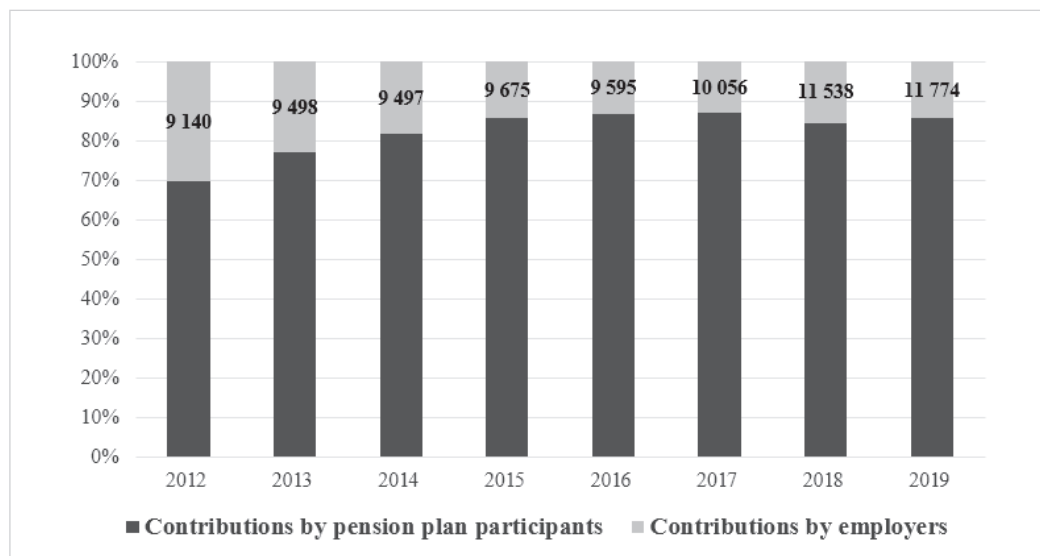
Although, according to [Table 1](#), Estonia and Lithuania have Tax-exempt withdrawals of private pensions, certain conditions should be met. To have PIT exemption in Estonia, private pensions can be received not earlier than at age 55 and for life annuities contracts. Regulations in Lithuania provide for the withdrawal period tied to the statutory pension age and for a tax-free payment not earlier than five years before it.

Latvia has differentiated voluntary savings according to the payer of contributions – whether it was an individual person or an employer on behalf of an employee. If a person has made contributions by himself/herself, the withdrawals are PIT exempt. For the contributions provided by the employer, PIT should be paid. The extra tax might be a reason for insufficiently developed pension plans created for employees in Latvia.

[Figure 4](#) presents an overview of the contributions of individuals and employers into private pension plans in Latvia from the year 2012 to the year 2019. The slightly growing trend of employers' contributions did not lead to a higher share in the amount of total contributions. On the contrary, the share of employers' contributions reduced from 30% in 2012 to approximately 15% in 2019.

**Figure 4**

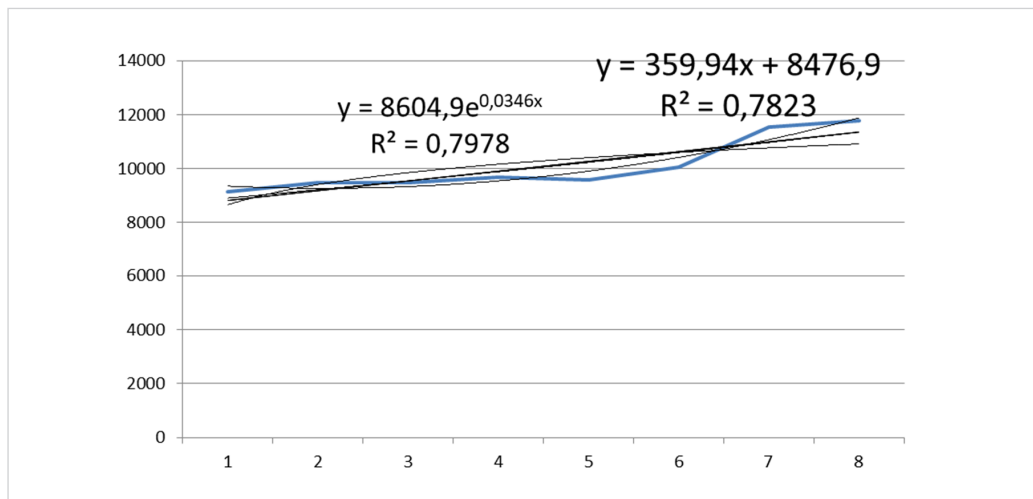
Latvia contributions by pension plan participants and employers in the third pension pillar funds, thousand EUR



Source: Elaborated by E.Dundure based on reports of Financial and Capital Market Commission in Latvia [www.fktk.lv](http://www.fktk.lv)

This trend questions the effectiveness of the government tax policy for employers' contributions to private pension plans. Contributions by employers to private pension plans in Latvia in 2012-2019 are included in [figure 5](#) together with linear trends and exponential trends.

Data indicate that with every year contributions of employers to private pension plans are increasing, linear trend indicates that annually increase of contributions by employers increase in average by 359,94 thousand EUR with coefficient of determination  $R^2 = 0,7823$ . Trend analysis indicate that for tendency of contribution by employers it is better to use exponential trend as for this trend  $R^2 = 0,7978$ . That is good indication for development of private pension funds in



**Figure 5**

Latvia contributions by employers in the third pension pillar funds and trends 2012-2019, thousand EUR

Latvia. Taking into account experience in other countries more motivation and support for such contributions would be useful – respective legislative regulation could be developed and for researchers more deeper analysis on correlation between tax incentives and effectiveness of the third pillar pension fund could be carried out in future.

The main goal of the current study was to determine the tax incentive mechanisms the governments of the Baltic countries – Estonia, Latvia, and Lithuania have chosen in the promotion of the population voluntary savings for retirement. The main conclusions are:

- In all three Baltic countries, tax incentives are the mechanism to motivate the population to create savings in the third pension pillar.
- According to the calculated pension replacement rates, Lithuania has the lowest rate among the three Baltic countries, and the least developed third pension pillar; therefore, the private pension savings should be more stimulated.
- From the perspective of tax incentives, Latvia has the most unfavourable conditions for creating savings. In Latvia, there are no tax incentives on returns on investment and tax-exempt withdrawals for employers created pension funds, while all positions are tax-exempt in Estonia and Lithuania.
- As a result of detailed analyses of personal income tax incentives at the stage of contributions, certain limitations have been recognized for all three countries. Lithuania's personal income tax incentives have been targeted to smaller salary or gross income (till 667 EUR a month) receivers than it was in Estonia and Latvia (till 3333 EUR a month). This finding supports the idea that a tax incentive at the stage of contributions is the motivator to create savings in the third pension pillar system.
- Contributions by employers to private pension funds increase in Latvia during last decade, more motivation and support for such contributions would be useful – respective legislative regulation could be developed.

The scope of this study was limited in terms of tax incentives as part of financial incentive mechanisms. An issue that was not addressed in this study was whether the Baltic countries have non-tax incentives for private pension savings and what their impact might be. Future research should, therefore, concentrate on the investigation of non-tax incentives and the voluntary savings aspect in the second

## Conclusions



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