# VOLUNTARY PENSION FUNDS CONTRIBUTION IN THE PENSION SYSTEM OF LATVIA IN COMPARISON WITH ESTONIA AND LITHUANIA

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**Abstract**. Pension system formation is one of the questions on the daily agenda for most countries of the world. Most attention and discussion focus on the first two pension system pillars – state compulsory unfunded pension scheme and the state-funded or accumulated pension scheme in pension funds, both based on mandatory contributions. Private voluntary investments are the "third pillar" of pension systems and the gear to ensure an adequate level of income at retirement age by creating private pension funds. Voluntary savings are becoming the source of retirement income received on a monthly basis in line with the progress of private pension funds and expansion of the choice of pension schemes. This research task is to evaluate the 3rd pension pillar's current results in Latvia and create a comparison with Lithuania and Estonia. The research outlines the common and the differences between engagement in financial future planning decisions of the population in Baltic States and existing legislative frameworks to promote the formation of private pension funds. It rises the research question on the importance of the role of voluntary savings in each country as well as gives recommendations for further voluntary savings advancement. Research methods used are the analysis of scientific publications, acts of legislation and previously conducted research, analysis of statistical data on the development of voluntary pension fund contributions in Latvia and comparison with Lithuania and Estonia.

**Keywords:** *pension system, voluntary savings, pension funds, private pension.*

**JEL code:** M10, M38

## Introduction

Latvia, like other developed country population is getting older by putting the pressure on the state budget and work age people tax load. It intensifies the necessity for improvements of the pension system principles. Taking into consideration the given recommendations of World Bank, OECD and Europe Union institutions, pension system policy makers of Latvia are working towards the advancement of it. There are researches and future projections provided on the optimal combination of pension pillars built on the example experiences of other countries. The common recommendation is to create as balanced as possible pension system including all three pillars or elements. For the countries with the dominance of 1st pillar this is a real challenge as it requires a transformation of people understanding about their income after retirement, by enlarging their involvement and level or responsibility for the future.

The aim of this research is to evaluate the 3rd pension pillar current results in Latvia and create comparison with Lithuania and Estonia. All three Baltic States as the post-soviet countries experienced principal changes in pension system. The tasks of the research are 1) analyse the scientific publications and previous conducted research on voluntary pension system's development; 2) analyse academic literature on pension system development in all three Baltic countries; 3) create comparative analyses of the 3rd pension pillar contributions; 4) investigate level of people engagement and tax reliefs to assess the role of the private pension savings collected on a voluntary basis in Latvia, Lithuania and Estonia; 5) observe the possible common patterns on voluntary pension system development in the Baltic countries. Voluntary savings for retirement and private pensions have been introduced in all the Baltic countries on quite an early stage of current pension system. Yet, there are not enough high-level scientific publications and comparative analyses provided focusing on the voluntary savings for retirement behaviour in these three Baltic countries.

To fulfil the research aim the research methods used are: analyses of the academic literature, scientific publications and acts of legislation, analysis of statistical data on the development of voluntary pension fund contributions in Latvia, Lithuania and Estonia. Academic literature has been analysed to draw a framework of how the three Baltic States - Latvia, Lithuania and Estonia - are enhancing their pension systems. The provided researches and wellbeing policies papers enlighten the topicality of the 3rd pension pillar and necessity to create a sustainable pension system as soon as possible. In order to plan future developments, it is important to evaluate existing situation. Therefore, analyses of private pension fund activities in Latvia have been provided and two comparative ratios have been created in order to compare Latvia with its neighbour countries – Estonia and Lithuania. Analysis of statistical data on the assets of the third pillar pension plan and the membership is included in the paper.

To create the empirical analysis on voluntary pension plans implemented in Latvia, Estonia and Lithuania, statistical data has been collected from various sources, such as reports of Financial and Capital Market Commission of Latvia, Estonian Financial Supervision and Resolution Authority, reports of Bank of Lithuania, European Commission data as well as private pension service provider published information.

## Literature Review

The society's wellbeing policy makers and academic researchers all over the world are deliberating the best possible constructions of national pension systems: their components, structure and conditions. Topicality of pension systems raised during last years as the consequences of financial crises and necessity to constrain national social budget expenditures. International organizations such as the Organisation for Economic Cooperation and Development (OECD), the World Bank, European Central Bank as well as different Europe Union institutions are providing permanent monitoring of national pension system indicator improvements and legislation changes, conducting researches, publishing data and giving recommendations for the possible further pension systems enhancements.

OECD Pension outlook issue in 2018 (OECD, 2018) have initiated discussion about primary objectives of the pension systems – putting in the foreground income security, which includes "poverty relief, consumption smoothing and insurance against risks during working life and in old age". Sustainability and adequacy have been named as the secondary goals of pension systems together with income distribution between poorer and richer people as well as reaching the largest possible exposure of system participants. However, threat to reduce sustainability is the main concern for the pension system policy makers and academy when analysing the consequences of people ageing, especially in the developed countries (Walker, 2019).

The international organizations as well as academy in their publications agree on the general structure of pension systems. It did not change significantly since the World Bank in its policy research report in 1994 presented an idea of pensions multi-pillar system. It was suggested as the way to separate the redistribution and saving functions in different forms or so-called pillars. The three basic pillars were specified as following: (I) a mandated, unfunded, and publicly managed defined benefit system, (II) a mandated, funded, and privately managed defined-contribution scheme, and (III) voluntary retirement savings (The World Bank, 1994). Later on, in year 2005 the World Bank researchers proposed 5 pillar system by adding to the existing ones - "0" pillar as the basic level pension to reduce the risk of poverty and an additional pillar on the top – the 4$^{th}$, the "nonfinancial" pillar that would include family support and other social benefits. The latest researches stay on the 3-pillar system since the first pillar typically includes the basic guaranteed pension payments for poorer part of people and the 5$^{th}$ pillar hasn't become the focus point so far.

During the last decade the main subject of discussions was the evaluation of the mandatory payment system into state social budgets and pension funds, the national regulations established legislative frameworks, governments given promises and possibilities to fulfil them. Special attention has been paid to "pension privatization" – pension system reforming process carried out in a great part of Latin America starting from 1980s and later in former socialist countries in Europe, including Latvia (Kogut, 2008; Hu, Manning, 2010; Coman, 2011; Roberts, 2010). The pension privatization was the World Bank's recommended way, how to improve sustainability of pension systems and soften responsibility for retirement savings of governments by moving it to the individuals. All three Baltic countries followed the developed country best practises and introduced the 2nd pension pillar with defined time schedule of when a certain part of social tax will be invested into the pension funds.

The pension reform in Latvia was carried out, believing that all three parts of the new multi-pillar pension system will stabilize each other, i.e. they will offset potential financial and demographic risks. By realizing the intention to move from a full state liability pension to each worker's ownership, a pension system has been set up, consisting of 3 parts:

- 1st Pillar - state compulsory unfunded pension scheme or so-called *Pay-As-You-Go*: based on the generation solidarity;
- 2nd Pillar includes the state funded or accumulated pension scheme: part of the social contributions are accumulated and invested in the financial and capital market and bank deposits;
- 3rd pension Pillar is private voluntary pension scheme: part of income is invested in a private pension fund by individual or by its employer.

Financial crises came with the pressure on states budget capacities to cover the 1st pension pillar financial needs. It resulted in reduction of contributions into pension funds and consequently diminished the importance of the 2nd pillar. This and drop of investments fund return rates raised the disputes on the privately managed 2nd pension system pillar input in future pensions adequacy level (Ebbinghaus, Whiteside, 2012). The researchers analysed effectiveness of provided pension reforms and questioned the reasonability of shifting investment risk to the individuals for too high price and even developed an action plan of how to reverse the pension privatization with the next reform (Ortiz *et. al*, 2018).

Several countries, including Estonia, Latvia and Lithuania, reduced the share of contributions into 2nd pillar companies by downsizing the individual accounts, other countries – Poland in year 2011 and Hungary in year 2010, terminated individual accounts in pension funds and transferred them back to the national Pay-As-You-Go system budgets (Ortiz *et. al*, 2018). Later Latvia introduced corrections into contribution rates of social tax into 2nd pillar pension funds – it was decided to keep them on 6% level instead of previously specified 10%. Since current pensioners in Latvia are receiving very small part of pension from the 2nd pillar (because of the short duration of the scheme), the real effect of the 2nd pillar cannot be fully assessed yet (Rajevska, 2013). The author presumes the topicality of effectiveness of 2nd pension system pillar in Latvia should be further explored.

From June 2019 Poland has been introducing new occupational pension saving scheme, which based on auto-enrolment and shared between employee and employer, so the contributions are to be made in both ways – mandatory and voluntary (Chłoń-Domińczak, 2019). In Estonia there is an ongoing government initiative to make the 2nd pillar voluntary from year 2020-2021 with the possibility to opt-out from the system by receiving saved capital before pension age (Eesti Pank, 2019). In Lithuania, from year 2019 new formula (4%+2%) for pension accumulation in voluntary pension funds was established. According to the Parliament of Lithuania (Seimas) approved amendments to the Law on the Accumulation of Pensions and its secondary legislation "the contribution into the pension fund is comprised of 4% of the participant's personal income and 2% of the national average salary as a supplementary contribution paid for a participant out of the state budget. After the consolidation of taxes, i.e. when the nominal earnings will grow, the accrual rates will change" (Parliament of Lithuania, 2003). Governments are looking for the possible instruments on how to lighten their states budget expenditures and maintain future pension systems on an adequate level by involving individuals into decision making for retirement savings.

Academics and pension policy creators are analysing the efficiency of pension systems by calculating the after-retirement income replacement rates calculated from pre-retirement income. According to the OECD Pensions at a Glance report from year 2017 (OECD, 2017) the gross replacement rate for average wage earner of OECD countries was 52.9% and EU 28 countries 58.3%. Latvia got the rate in amount of 47,5% which is higher than other EU countries, such as Poland (31.6%) and Slovenia (38.1%). However, calculations provided by Bank of Latvia economists (Kalniņš, Tkačevs, 2018) give a warning of the negative tendency of further reduction of the replacement rates depending on negative demography trends, growing pensioners after-retirement living period and the low rate of return of pension funds. On year 2080 Kalniņš and Tkačevs have predicted replacement rate in amount of 19.7% in the most pessimistic scenario and 45% in the most optimistic one by calculating the 1$^{st}$ and 2$^{nd}$ pension pillars together in Latvia.

According to the latest OECD Economic Survey in Lithuania (OECD, 2018) the 1st pillar pension gross replacement rate is forecasted to decline from 34,9% in 2014 to only 17,3% in 2060. Whereas in terms of the 2$^{nd}$ pillar the opposite trend is visible – it is expected to grow from 1% on 2014 till 16,7% in year 2060. However, both first pillars together are not expected to exceed 32%. Even more – the net replacement rate of mandatory pillars is forecasted on a level of 24% in a period from 2034 till 2038 questioning the adequacy of the system. For Estonia (OECD, 2017), OECD replacement rates of public pension system range are among the lowest ones, expected to drop to 25% by year 2060.

Both mandatory pension system pillars aim is to increase redistribution among pensioners and avoid poverty. The net replacement rates differ according to pre-retirement income level – the smaller was income – the higher is the replacement rate (OECD, 2018).

The mission of the 3$^{rd}$ pension pillar is to give an opportunity for higher income earners not only to cover the gap until the benchmark country replacement rates are reached, but also to give the chance to society to cumulate additional funds for retirement period to keep the living standards on the adequate level. There are countries with pension system strategy that includes strong presence of voluntary savings for retirement – United States, Ireland, Canada, United Kingdom, Japan, New Zealand, Belgium, South Africa and Germany. However, in 2017, the average 3$^{rd}$ pillar contribution into the replacement rate in the European Union (including the United Kingdom) was only 3.5%, whereas in OECD countries it was twice as bigger (but still small) - 6.15% (OECD, 2017).

The academic researchers analyse the main factors influencing the level of household voluntary savings for retirement. The financial literacy of the population is one of the most discussed issues and often observed factor. The World Bank is measuring the people financial inclusion impacts since 2011 by creating Global Financial Inclusion (*Global Findex*) database and evaluating access to the bank accounts, making payments, saving, borrowing and managing the risk. (Asli, Klapper, Singer, Ansar, Hess, 2018). However, Lusardi and Mitchell (Lusardi, Mitchell, 2014) according to their research stated that still "many people around the world are financially illiterate" and it is one of the reasons for the inability to make long-term financial decisions. Vivel-Búa, Rey-Ares, Lado-Sestayo, Fernández-López observed financial planning for the retirement decisions from the income perspective and focused on income, socio-economic determinants and determinants of personal or individual nature (Vivel-Búa, Rey-Ares, Lado-Sestayo, Fernández-López, 2019) in Spain. There is suggestion to categorise European society in four groups depending on the "country' 'social model' on the decision to invest in retirement accounts" (Rey-Ares, Fernández-López, Vivel, 2018) as the result of evaluation of factors such as age, household size, income and wealth, levels of formal education, job situation, health status, long-term planning horizons and financial risk aversion. In the Baltic states – Estonia, Latvia and Lithuania the established pension system consists of all 3 pillars, however the existing results of voluntary savings is the least discussed section among researchers, pension policy makers and society. The most attention from the academy has been paid to the structure of the pension system and validity of the first 2 pillars (Rajevska, 2016;

Dundure, 2017) as well as pension funds efficiency measurements (Arefjevs, 2017). Yet, there are researches dedicated to voluntary pensions exposure in CCE region countries (Marcinkiewicz, 2016; Marcinkiewicz, 2018), which demonstrate some similarities, such as the share of voluntary savings for retirement is very small, however growing and largest part of contributions in pension plans have been made by individuals not employers. Researchers emphasise the role of the government to motivate voluntary savings by introducing special income tax regimes which differ for countries and time periods.

## Research results and discussion

1. The 3rd pension pillar in Latvia

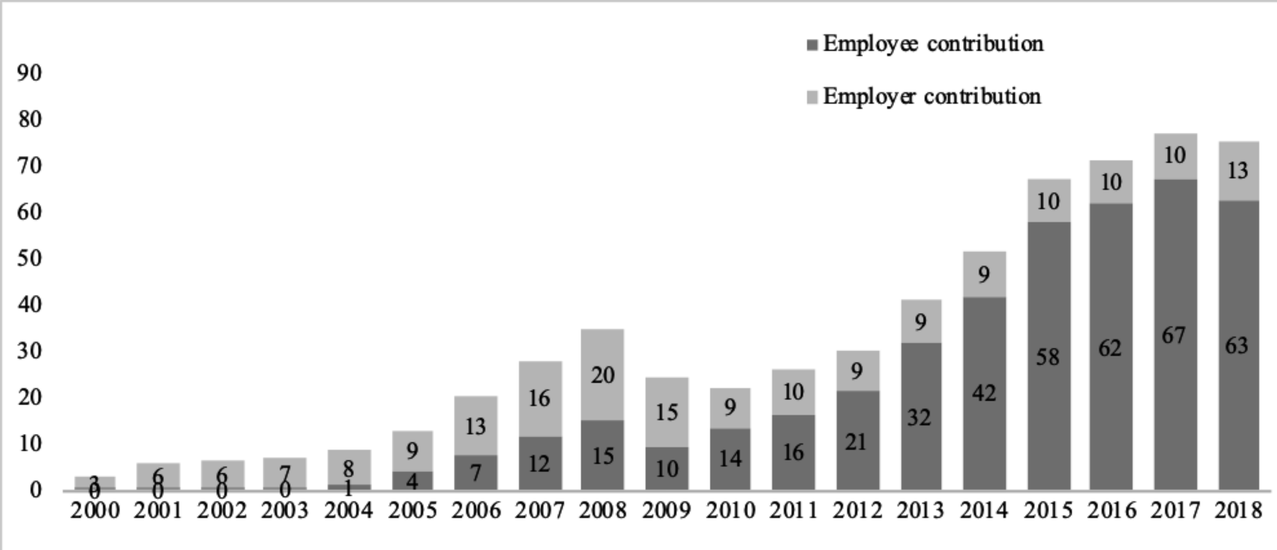
The 3rd pension pillar has been introduced in Latvia just after establishing the existing state pension system by the Law" On Private Pension Funds" (Parliament of Republic of Latvia, 2000). The Law regulates private pension funds, pension schemes and participants, it refers to the individual and group savings in private pension funds. At the end of 2018 in Latvia there were 6 private pension funds and 18 private pension plans (Figure 1).


*Source: author's construction based on reports by Financial and Capital Market Commission of Latvia, retrieved from www.fktk.lv*

Fig.1. **Number of voluntary private pension funds and plans in Latvia, 2000-2018**

The Law entitles to establish special tax regime for personal income tax. At the end of year 2019, the personal income tax can be recovered for private contributions to the third pillar of pension and life insurance, which do not exceed EUR 4 000 a year and do not represent more than 10% of gross annual salary (The Law on Personal Income Tax, 1993).

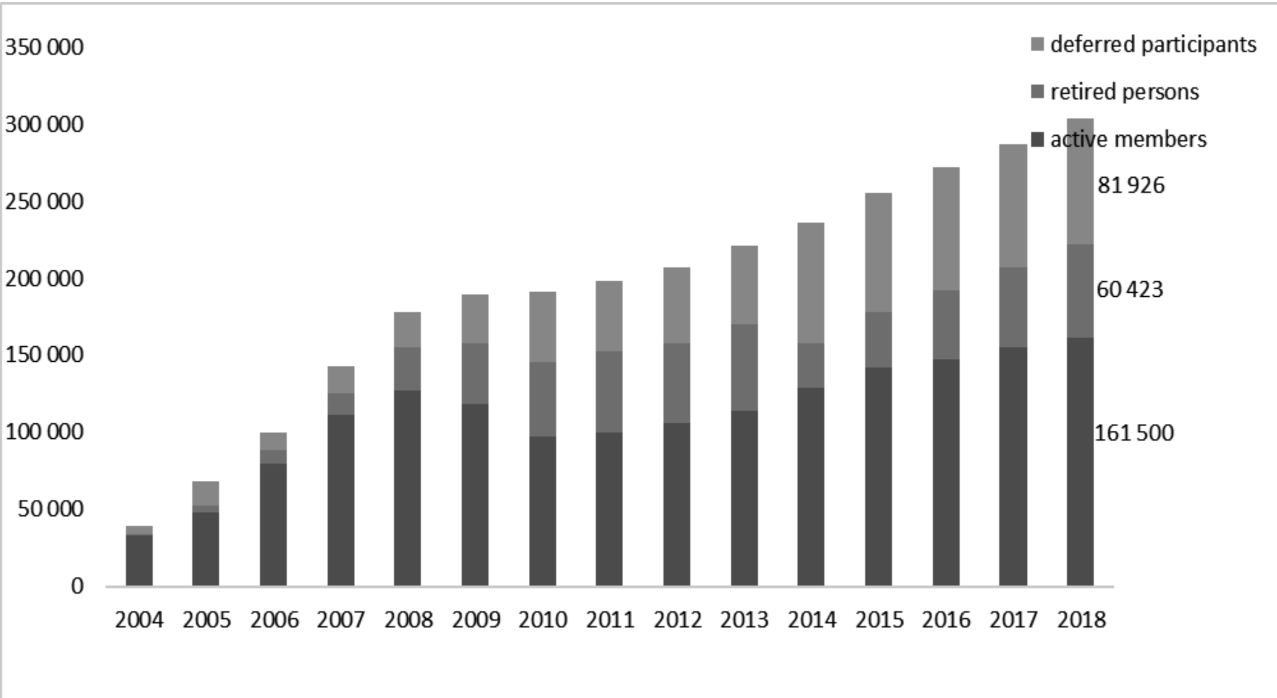
In 2018 more than 80% of contributions in private pension plans in Latvia have been carried out by individuals, yet this proportion was reverse at the beginning of private pensions funds. Contributions to the private pension funds were initiated by the employers. In figure 2 we can observe how the financial crises triggered the contribution reduction and further growth trends of both employee and employers' contributions.




*Source: author's construction based on reports of Latvia Financial and Capital Market Commission, retrieved from www.fktk.lv*

Fig.2. **Contributions to voluntary private pension funds in Latvia, 2000-2018, in millions of Euros**

The number of pension plan members is represented in figure 3 and shows the constant growth by reaching 303,9 thousand members in 2018. The calculated engagement rate of the active population of Latvia aged from 20-64 (939 000 people in 2018 according to Eurostat) in private pension plans is 32,36% which can be seen as rather high.




*Source: author's construction based on reports of Latvia Financial and Capital Market Commission, retrieved from www.fktk.lv*

Fig.3. **Number of voluntary private pension plan members in Latvia: active, deferred and retired, 2004-2018**

Source: Reports of Latvia Financial and Capital Market Commission. Retrieved from www.fktk.lv.

However, there is a growing part of pension plan members, which are not making contributions every year they are so called deferred participants. In year 2018 the share of inactive pension members was 27%. There is a certain part (20%) of pension plan members already retired and receiving the pension payments. If we calculate the engagement rate of active members of the population, aged 20-64 in Latvia, in year 2018 it reaches 17,2%.

2. The comparison between the results of the 3rd pension pillar in Latvia, Estonia and Lithuania

Latvia as the member of the European Union since 2004 and one of the OECD countries since 2016 has been analysed and compared with other countries. The closest neighbour countries to Latvia are Estonia and Lithuania. All three countries have a common experience of socialism with the consequences influencing pension system further development.

All three country pension systems are based on three components one of which is voluntary savings for retirement in private or voluntary pension funds. The governments of all three countries carry out the policy of Personal Income Tax reliefs on contributions in the 3rd pension pillar. According to data included in Table 1, different strategies can be observed between the governments: Latvia has the smallest limit of share of gross annual income while Lithuania has the smallest aggregated gross income sum as the bases to tax reliefs. From the table it can be assumed that Lithuania's target segment of tax reliefs is population with the smaller income till 7500 EUR a year while Latvia and Estonia are targeting on the equal total level of income – till 40000 EUR a year. Estonia's personal income tax relief is the highest one among the Baltic countries.

Table 1

**Personal Income Tax incentives to contributions to the 3rd pension pillar – pension funds at the end of 2019**

| | Latvia | Estonia | Lithuania |
|---|---|---|---|
| Limit of applicable sum from gross annual income in % | 10 | 15 | 20 |
| Aggregated limit of tax applicable sum (EUR) | 4000 | 6000 | 1500 |

*Source: author's construction based on www.swedbank.lv; www.swedbank.ee; www.luminor.lt*

In terms of competition, all three countries have a list of the 3rd pension pillar companies providing services to create savings in pension plans with different level of saving strategies. According to the Table 2, Latvia has the largest number of service providers with the broadest choice of investment plans.

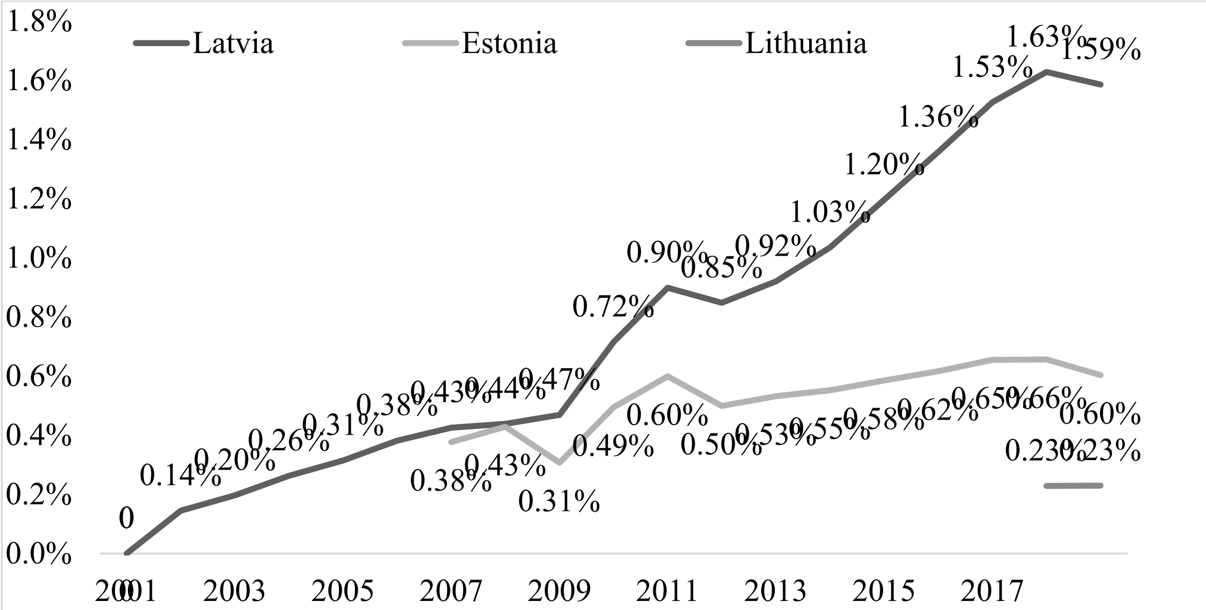
Table 2

**Number of the 3rd pension pillar companies and pension plans in the Baltic countries at the end of 2019**

| | Latvia | Estonia | Lithuania |
|---|---|---|---|
| Number of the 3rd pension pillar companies | 6 | 4 | 3 |
| Number of pension/ investment plans | 18 | 9 | 12 |

*Source: author's construction based on www.fktk.lv; www.fi.ee; www.lb.lt*

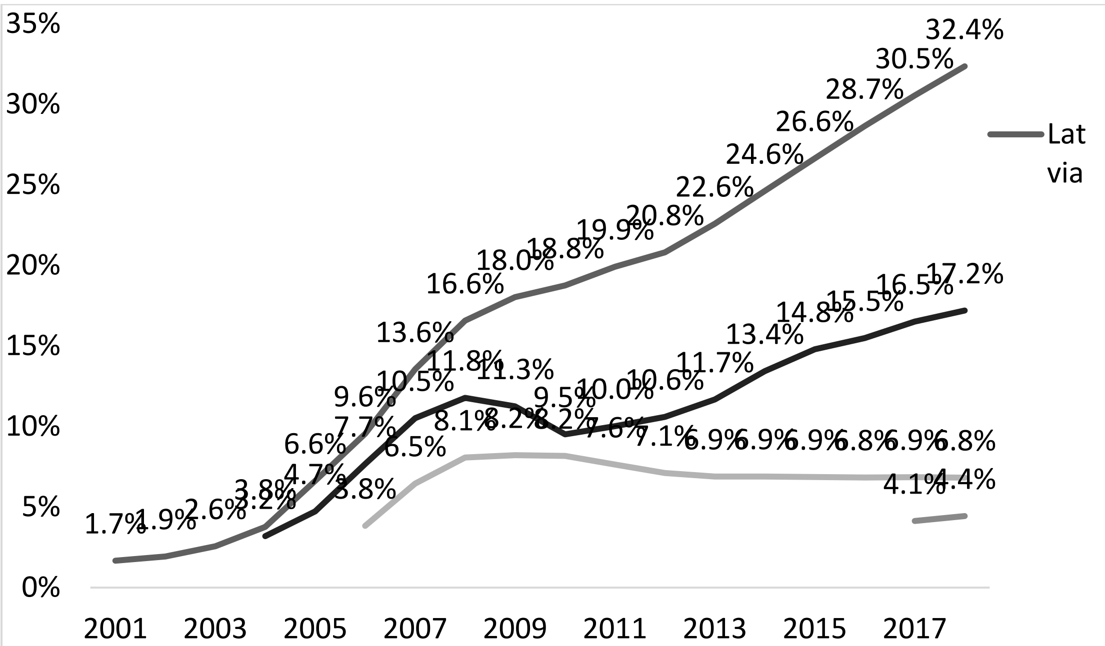
Publicly available statistical data of voluntary savings in Baltic States are rather limited especially in terms of historical data. The yearly overviews of private pension fund activities and financial results have been published by the financial capital market supervisors of each country that is by The Financial and Capital Market Commission in Latvia, Bank of Lithuania in Lithuania and The Financial Inspection in Estonia. Publicly available data about the pension funds in Lithuania gives insight about the last two years only therefore it is not possible to compare voluntary savings for retirement in a long term. Though, data available gives the perceptiveness of the existing situation in the period from 2017 till 2018 in all three countries and for Latvia and Estonia for the period from the very beginnings of the private pension funds.




*Source: author's construction based on reports of Latvia Financial and Capital Market Commission www.fktk.lv; reports of Estonian Financial Supervision and Resolution Authority www.fi.ee; reports of Bank of Lithuania www.lb.lt; European Commission data https://ec.europa.eu/*

Fig.4. **The assets in the third pillar as a share of GDP at market prices in Latvia, Estonia and Lithuania, 2001-2018**

Data included in the Figure 4 presents the development trend of voluntary pension funds in Latvia, Estonia and Lithuania till year 2018 in terms of accumulated assets in the third pillar as a share of national Gross Domestic Product in market prices. In year 2018, the contribution in GDP is starting from 0,23% in Lithuania till 1,59% in Latvia. Estonia's voluntary pension funds' net asset value is making 0,6% of the GDP.




*Source: author's construction based on reports of Latvia Financial and Capital Market Commission www.fktk.lv; reports of Estonian Financial Supervision and Resolution Authority www.fi.ee; reports of Bank of Lithuania www.lb.lt; European Commission data https://ec.europa.eu/.*

Fig.5. **Number of voluntary pension fund contracts as a share of the number of active population aged 20-64 year in Latvia, Estonia and Lithuania, 2001-2018**

Data included in the Figure 5 gives overview of people engagement in voluntary pension funds in Baltic States. The ratio calculated is based on the population aged 20 till 64 for all three countries to get comparable data. Statistical reports in Latvia provide with data on the structure of pension plan members – active, pensioners and deferred ones and therefore it gives the possibility to evaluate the active member share in population. There is no detailed information about the characteristics of the pension plan members in Estonia and Lithuania. Created comparison of all available data shows that the lowest engagement level of population in the 3rd pension pillar is in Lithuania – in year 2018 it is 4,4%, a little bit higher in Estonia – in year 2018 6,8%. Latvia has the highest population engagement ratio in voluntary savings for retirement in pension funds: active members with pension plans compromise 17,2% of all the active population aged 20 till 64.

## Conclusions, proposals, recommendations

In the light of the topicality of the 3rd pension pillar importance growth the current situation in Baltic States has been observed. The main conclusions are:

1. Although Latvia, Lithuania and Estonia started the 3rd pension pillar at a very early stage of pension system, the current results verify differences in development and Latvia's step ahead of its neighbour countries Estonia and Lithuania in voluntary savings in pension funds.
2. The governments of all three countries are realizing similar tax relief politics in voluntary savings, however their target audience differs.
3. Latvia has the superior results over the two other neighbour countries - Estonia and Lithuania, in terms of number of pension funds and plans, cumulated assets in private pension funds and people engagement rate into voluntary savings using private pension funds.
4. There is difficulty to compare all three Baltic countries private pension dynamics for long enough period because of the lack of publicly available statistical data, especially in Lithuania.

On the results of analyses of private pension system in Baltic countries respective recommendations are prepared:

1. In Latvia the 3rd pillar should be further improved to keep the growth of the engaged people into pension plans and create larger in volume personal savings for retirement.
2. The governments of the Baltic countries should look at the pension system as a whole and any changes in their pillars should be seen in relation to each other.
3. Government-provided statistics on the volume and performance of the 3rd pension pillar, and the number of people involved must be introduced to be aware of real pension income replacement rate calculated from all pension system monetary parts.
4. For researchers it would be useful to create the analyses of private pension contributors' structure and the incentives 'impact on employers' motivation to make a payment to employees ' pension funds as part of a long-term recruitment system for skilled workers.
5. The researchers could develop comparative analysis and ground for further investigations on the reasons of current results in Baltic States the 3rd pension pillars and instruments to improve pension system structure in a sustainable and adequate level.

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