ABSTRACT
Pension systems have become one of the main priorities for the national governments. Developed countries population is getting older by putting the pressure on the state budgets and work age people tax load. The current pension system in Latvia performs according to regulation of state compulsory unfunded pension scheme since 1996 and regulation of the state funded or accumulated pension scheme since 2001. The third pension system pillar is private voluntary pension schemes realized in form of people contributions into pension funds and life insurance policies. Aim of the research – deeper analyses of voluntary private investments as the pension system part and its development challenges in Latvia. Research methods: scientific publications and previous conducted research analysis; analysis of time series on private pension fund developments in Latvia and comparisons with the situation in other OECD countries. The authors were looking for answer on the question – can voluntary private investments cover the gap between pre-retirement and after-retirement income of population in Latvia and what are the pre-conditions for it.

KEYWORDS: Pension system, voluntary savings, financial literacy, Bancassurance

JEL CODES: M10; M38

Introduction
Due to life expectancy growth, negative birth rate and an aging population the topicality of retirement pensions have increased dramatically, especially in developed and high-income countries.

Demographic revolution and after-crises period challenges have threatened the pension schemes sustainability which according to Holzman and Hinz (Holzman, Hinz 2005: 55) is one of the 4 main goals of pension system in general. Three others are: adequate, affordable and robust. Keeley, Brian and Patrick Love (Keeley, Brian and Patrick Love, 2010: 84) warns the governments to keep the track on changes in pension funds and consider working-life prolongation. Obviously, it can be implemented gradually, nevertheless the retirement income trend from public forces should become negative.

Giarini (Giarini, 2009: 508) suggests calling existing situation as the demographic revolution and treat the ageing as the “notion of older age” itself. The people nowadays having 60 years are comparable with 75 old ones a century ago. In the literature this phenomenon is named as “the lengthening of the life-cycle”.

The incentives to create private investments are the ways how to keep the pension system sustainable and balanced. Voluntary pension schemes are not the solution for all pensions related problems. They are not the effective in reduction the poverty in the society since are generally used by higher income earners. Volunta-
Voluntary private investments in pension schemes and life insurance with savings is a way to create the sustainable pension fund with the highest possible income replacement ratio (OECD, 2018: 38).

This research will focus on the deeper analyses of so-called “third-pillar” pension system part and its development challenges in Latvia.

Research object: voluntary investments in pension schemes and life insurance with savings.

Research subject: to assess the voluntary private investments contribution in pension system in Latvia.

The problem of research and research question: can voluntary private investments cover the gap between pre-retirement and after-retirement income of population in Latvia and what are the pre-conditions for it?

Methodology used: analysis of scientific publications, analysis of previous conducted research, analysis of statistical data on development of voluntary pension fund contributions in Latvia and comparison with other Economic Cooperation and Development (OECD) countries.

1. Development of Pension System

The early beginnings of pension system as the mandatory social insurance can be found in Germany in year 1889, later it was officially introduced in France. After World War 2 the other developing countries created their own pension systems with the different kinds of contributions and reimbursement systems.

According to Holzman and Hinz (Holzman, Hinz, 2005: 2) pension systems in every country are up to five pillar combinations and can consist of:

“(a) a non-contributory or “zero pillar” (in the form of a democrat or social pension) that provides a minimal level of protection;
(b) a “first-pillar” contributory system that is linked to varying degrees to earnings and seeks to replace some portion of income;
(c) a mandatory “second pillar” that is essentially an individual savings account but can be constructed in a variety of ways;
(d) voluntary “third-pillar” arrangements that can take many forms (individual, employer sponsored, defined benefit, defined contribution) but are essentially flexible and discretionary in nature; and
(e) informal intrafamily or intergenerational sources of both financial and nonfinancial support to the elderly, including access to health care and housing.”

Every country tends to combine those 5 pillars in order to reach the most effective pension scheme suitable for their economical and demography situation. The first 3 pillars (a, b, c) fully depend on the regulations of local governments. “Third-pillar” which is voluntary arrangements made by or for individuals depends on private persons and sometimes their employer’s initiative. While the fifth pillar can be combination between state’s regulations and private initiative, it depends on the culture and habits of each country.

After a while Giarini (Giarini, 2009: 509) on behalf of The Geneva Association in his editorial defines 4 pillars by merging Holzman and Hinz named (a) and (b) into one – compulsory state pension and replacing the (e) with income from pensioner remunerated activities.

Giarini (Giarini, 2009: 510) suggests calling existing situation as the demographic revolution and treat the ageing as the “notion of older age” itself. The people nowadays having 60 years are comparable with 75 old ones a century ago. In the literature this phenomenon is named as “the lengthening of the life-cycle”.

Many academic researchers in many countries devote their academic research for private pension funds to analyse differences in several countries – in Lithuania (Kabašinskas, Šutienė, Kopa, Valakevičius, 2017: 1628), in Romania (Matei, Durac, 2016: 140), in Serbia (Đekić, Nikolić, Vesić, 2019: 76), in Lithuania (Simanskiene, et al., 2015: 106; Pauzuoliene, Simanskiene and Siksnelyte, 2017: 121) and in many other countries (Militaru, Spînu, 2011: 28) stressing the respective country specifics,
2. Pension system in Latvia

Latvia pension system structure is as follows:

1st Pillar – state compulsory unfunded pension scheme: based on the generation solidarity, introduced from year 1996, regulated by the Law “On State Pensions”.

2nd Pillar includes the state funded or accumulated pension scheme: part of the social contributions accumulating and investing in the financial and capital market and bank deposits, introduced from 1st July 2001, regulated by the ”Law on State Funded Pensions”.

3rd pension Pillar is private voluntary pension scheme: part of income is invested in private pension funds by individual or by his employer, introduced from July 1998, regulated by the Law ”On Private Pension Funds”.

According to OECD (OECD (2018:19), “there are two mandatory, earnings related pension schemes in Latvia: a pay-as -you non-financial (notional) defined contribution (NDC) and a funded defined contribution (FDC) scheme.” 1st and 2nd Pillars together contribute 47.5% of pre-retirement pension income level (see Figure 1).

![Figure 1. Gross pension replacement rates from mandatory public, private and voluntary private pension schemes (Percent of individual earnings, average earner)](source: (OECD, 2017), other OECD data)

Various literature and industry professionals suggest creating pension plan in the way to guarantee about 70% of pre-retirement net income. Knowing that the expecting share of guaranteed income in the old age is not going to exceed half of the working life income level the important part of pension system is voluntary savings and private investments.

For this purpose, the third pillar of pensions is established in Latvia. Voluntary saving system consists of pension funds and private investments in life insurance programmes.

2.1. Pension Funds

At the end of 2018 there were 6 pension funds in Latvia offering a choice from 18 pension plans (the statistical data of Latvia Financial and Capital Market Commission in www.fktk.lv). Plans differed according to risk perception of the client – there were more conservative and balanced plans in parallel with the ones with potentially higher income rates, meant for less risk averse people.
Data included in Figure 2 shows the dynamics of number of pension plan members: in year 2018 in reached 303 thous. people and it is 12% more than in year 2016. Putting together this number with statistics of Latvia people of working age, the trend is positive: in year 2018 25% of Latvia people of working age were pension plan members in comparison with year 2016 with 22%. The total number of Latvia population of working age had reduced in year 2018 giving positive effect in our trend. Data included in Figure 4 shows the development of yearly contributions and payments of pensions funds for the period of 201–2018.

![Figure 2](image)

**Figure 2.** Number of people of working age and pension funds’ plans members in Latvia in years 2016–2018

*Source: Statistical data from Latvia Financial and Capital Market Commission (www.fktk.lv)*

Although the number of pension plan participants is growing, the sum of contributions paid into the pension funds in year 2018 showed the negative trend.

Pension capital paid out in 2018 was almost 25 million EUR (Figure 3) and according to data from the Central Statistical Bureau of Latvia (www.csb.gov.lv) public pensions paid in year 2018 were in amount of 1,83 billion EUR. Assuming public pension pre-retirement income replacement rate at the level of 47%, the pensions funds input in it does not exceed 1%.

![Figure 3](image)

**Figure 3.** Latvia pension funds payments and contributions dynamics in years 2016–2018, thousands EUR

*Source: Statistical data from Latvia Financial and Capital Market Commission (www.fktk.lt)*

2.2. Life Insurance companies

Additional way how Latvia people are creating savings for retirement period. At the end of 2018 there were 6 life insurance companies offering annuity insurance pension plans in Latvia. The statistical data of Latvia Financial and Capital Market Commission shows positive trend in development of annuity insurance premiums (see Figure 4).
Annuity Insurance claims paid is growing, still 3,6 million EUR from private insurance companies is very small amount if we compare with public pensions paid in year 2018 in amount of 1,83 billion EUR (data from the Central Statistical Bureau of Latvia, www.csb.gov.lv).

Since Annuity insurance is only the part of life insurance with savings programmes, the part of pension plans ment for retirement had been booked under other types of life insurance agreements. According to statistics (www.fktk.lv) the total life insurance programs with savings claims paid in year 2018 exceeds 42 million EUR and therefore brings higher contribution into common pension system as pension funds.

3. Voluntary savings driving factors

3.1. National government initiative

Well balanced and effective pension system is one of the strategic tasks of every national government. World Bank as well as OECD and European Union institutions are monitoring and giving recommendations for the improvements of pension systems. Not only socio-economic situation varies in the different parts of the world, even within Europe the development stage of economy and therefore pension system can have their specifics.

In the process of pension system reforms basic principles should be considered (Holzman, Hinz, 2005: 55) – the system should prevent from old age poverty, the contribution level should be affordable for people and state budget, sustainability and stability in contributions, should be kept and pension system has to be developed in a minimum risk initiated by change in economy, demography or politics.

By establishing pension system and realizing reforms, governments not only interact mandatory contributions pensions pillars, they create motivation for people to make voluntary savings for retirement.

In Latvia there is special regime for insurance indemnities and payments applicability with personal income tax (The Law on Personal Income Tax; 1993). Income tax should not be paid for:

- insurance indemnities paid on occurrence of an insured event in respect of: the life and health of the insured person as a result of an accident or illness under the life insurance policy the insurance contract (including the accumulation of funds), regardless of who has concluded the insurance contract;
supplementary pension capital formed by the natural person himself or by his or her spouse or by his / her relative contributions to private pension funds of persons up to the third degree within the meaning of the Civil Law licensed pension plans and paid out to members of pension plans.

Not all initiatives taken by Latvian policy makers gives immediate positive effect. Accordingly the restrictions introduced by the tax reform on private third pillar pension and funded life insurance in the short term had a negative impact on the new contributions (Figure 3). The drop is largely due to the so-called ceiling for personal income tax relief. Starting in 2018, personal income tax can only 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. This undermined the motivation for large payers, above 40,000 euros a year, to make contributions in excess of 4,000 euros a year, using all 10% of their annual income.

At the same time employer contributions to private pension funds increased relatively rapidly. Therefore the structure of contributions sources is changing and Latvia and shifting towards the practice of developed countries employers’ contributions represent at least half of all contributions to private retirement savings.

Another actual topic in Latvia is about social benefits for people employed in special tax regime companies. This type of tax payment system was introduced on year 2010 as an answer on the financial crises caused solvency problems. For small businesses it turned to become the way to survive and developed. For employees it raised the issues of social benefits, including the amount of future pension income. The social contributions of the employees of a micro-tax company being several times lower than those of the general tax system, consequently, resulted with much smaller social guarantees, including smaller pension savings. As the role it influenced the lower level of salaries receiving people and therefore can cause the risk of poverty even on higher level.

From other perspective, if people cannot expect the adequate public pension level to keep the living standard, they should consider possibilities to save voluntary as it is well organised and realised in many developed countries where financial literacy also on voluntary savings importance is well developed. The further research is focusing on people’s ability to take initiative on themselves.

3.2. People financial literacy

If we analyse the factors influencing the ability and willingness to create private investments the first aspect to start with is the market situation.

Since 2011 World Bank Group is creating Global Financial Inclusion (Global Findex) database to make overview of 140 countries adults’ ability for financial services. It includes the data of accessing bank accounts, making payments, saving, borrowing and managing the risk. Those are basic conditions after which people can decide on investments in their futures.

Latvia as the high-income country according to World Bank Group the Global Findex Database 2017 has the relatively high share of opened bank accounts for adults – 93% of them have a possibility to transfer digital money (Asli, Klapper, Singer, Ansar, Hess; 2018: 126). It is the level of United States, 6 ppts higher than Poland having 87% and 7 ppts lower than Norway and Sweden with 100% share.

The trend of changes of opened bank account for adult’s ratio shows the rapid growth in developing countries while high-income countries have reached rather high level with insignificant increase potential. For national policy makers it means challenges for further sophistication of legislation frameworks.

People having bank account have technical background to consider savings for retirement. The Global Findex Database 2017 shows that 44% of adults in high-income countries have savings for the old age while only 16% in developing countries have (Asli, Klapper, Singer, Ansar, Hess; 2018: 27).

The people financial inclusion driving factors according to World Bank are the policies of national governments, digital payments and innovative ways of financial services powered by internet and mobile technologies (Asli, Klapper, Singer, Ansar, Hess; 2018: 13).
Latvia is not unique in the people unwillingness to save for pensions. Countries with the important share of voluntary investments are facing the situation when employees opt-out from private pension schemes. Especially it is typical for employees with low income, younger people and short-term workers (Lusardi, Keller, Keller, 2009: 6). Peoples’ values and perceptions are changing and there are other aspects to consider deciding for long-term saving. Lusardi, A., Keller, P. A., & Keller, A. in their research were modelling the way how communicate with people by using social marketing and reach expected results (Lusardi, Keller, Keller, 2009: 19).

In the literature of financial literacy researchers emphasise the difference in gender and in-come level within the same region or country.

3.3. Voluntary private savings marketing channels

In Latvia voluntary private savings for retirement income has been provided by pension funds and life insurance companies. Main marketing channels exploited for promotion of private saving programmes are agents and direct sales as well as bancassurance.

From 6 life insurance companies 3 of them is a part of financial conglomerates and 4 are operating in close cooperation with commercial banks in Latvia (Dundure, Sloka, 2019: 145). All pension fund management companies are integrated with banks and uses the Bancassurance as an alternative sales channel to a traditional distribution (Arefjevs, 2017: 196). Thus Bancassurance has become the dominating model for voluntary saving programmes.

Bancassurances advantage over other sales channels is to service the client at one place. It simplifies the access for the clients to the professional consultancy on the ways of private pension schemes. Nevertheless far from majority of banks’ clients have the life insurance policy or participates in pension fund. The development trends of voluntary savings comes with the effectiveness of Bancassurance operations. Bancassurance itself depends on the market-based (exogenous) and operational-based (idiosyncratic) factors determining more successful or less successful performance (Staikouras, 2006: 141). The research conducted by Dundure E. and Sloka B. (Dundure, Sloka, 2019: 59) about market factors role on the development of Bancassurance shows “the positive impact of regulation environment, globalization and technological advances, negative factors were economic growth, market growth and demography”.

Although operating in the same market still some of the service providers are more successful as others. Academics widly research the operational-based factors like business culture, corporate closeness, management initiative and corporate governance, branch environment, customer relations, range of services (Staikouras, 2006: 146), cross-buying and cross-selling (Soureli, Lewis, Karantinou, 2008: 14), trust in the banks, good financial terms, service quality (Lymberopoulos, Chaniotakis, Soureli 2004: 46); product bundles (Artikis, Mutenga, Staikouras, 2008: 122); solution business (Sharma, Iyer 2011: 728) and finally fees and the level of technology development (Kalotychou, Staikouras, 2007: 261). All the attempts to improve operations can be worthless until the bancassurance partners internal processes are not synchronized and integrated. The critical factor to start integration is management closeness of partner companies (Dundure, Sloka, 2019: 149).

Looking at the development stage of voluntary savings habits in Latvia the role of banks, insurance companies and pension funds collaboration potential has been strenghtening.

Conclusions

Latvia as the one of member countries of Europe Union, NATO and OECD creates its pension system based on local socio-economic situation and so called “three pillar” system: (1) state compulsory unfunded pension scheme, (2) the state funded or accumulated pension scheme and (3) private voluntary pension scheme. Although the first two pillars— public pensions regulated by the government are meant to ensure
sufficient old age income the today’s reality raises concerns. National policy makers call for people more initiative to create voluntary savings in order to ensure secured old age.

There are 6 pension funds and 6 life insurance companies providing people with the possibility to create savings for retirement period in pension funds or life insurance policies (situation in Republic of Latvia in 2019). The results of collected contributions are not significant but shows positive trend. Even more insignificant role private savings play for today’s pensioners. According to authors estimation the total pre-retirement pension replacement rate increase does not exceed 2% and in total is less than 50% from pre-retirement net income.

There are several stakeholders participating in the development of voluntary savings for old age:
1. The framework of the pension system has been created by national government and parliament. Three pillar system regulations are only the bases for the further improvements. In parallel with systemic work on enlargement of effectiveness of public funds the policy makers must strengthen motivation to create pension funds voluntary by maintaining special tax regimes.
2. People willing to share responsibility of retirement income with the state. The duty to create voluntary savings is the question of people financial literacy and is based on the level of cultural as well as economic advancement.
3. Pensions funds and life insurance companies in the cooperation with commercial banks as the financial services providers which should put focus on the potential of private savings market growth and trigger the currently stuck situation.

All three system parts are interconnected and dependant from each other. From authors opinion the critical role in pension system adequacy and sustainability plays national government. People and private corporations take decisions, based on motivators and business interests. Policy makers responsibility is to raise it. Still there is lack of financial literacy for people to contribute more for their private pension funds to ensure better financial stability during the retirement age – this is the next stage for looking of best practices in other countries and suggest possible solutions for Latvia, as well as investigate empirical findings of expert surveys as the voluntary savings for pensions is in the initial stage of development in Latvia.

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SAVANORIŠKŲ PRIVAČIŲ INVESTICIJŲ VAIDMUO PENSIŲ SISTEMOJE LATVIJOJE

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Santrauka

Pensijų sistemos šiandien tapo vii iš pagrindinių nacionalinių vyriausybiių prioritetų. Išsivysčiusių šalių gyventojai sensta, tai turi įtakos valstybių biudžetą ir atvartą darbinto amžiaus žmonių mokesčių natai. Darbintinė pensijų sistema Latvijoje įgyvendinama pagal valstybinės privalomos netiesioginės pensijų sistemą reguliavimo įteisinimą nuo 1996 m. ir valstybės finansuojamą ar kaupiamąjį pensijų sistemos reguliavimą, pradėti vykdyduo 2001ts pPensijų sistemų ramstros − privačios savanoriškos pensijų kaupimo sistemos, įgyvendinamos kaip žmonių įmokos į pensijų fondus ir gryvybės draudimo politai. Visos trys sistemos dalys yra sujungtos ir priklausomos viena nuo kitos. Straipsnis autorijų nuomonė pensijų sistemos adekvatumą me
tvarumą užtikrina nacionalinė vyriausybė. Žmonės ir privačios korporacijos priima motyvuotus sprendimus įsipaidydams įversaisinteresų. Politikos formuotojų parei - – suderinti visų interesut. 

Tyrimo tiksls sniešsai savanorišką savanoriškų investicijų, kaip pensijų sistemų dalies, analizė ir jos plėtros iššūkius Latvijoje. Tyrimo metodai: mokslnės publikacijų ir ankstestų tyrimų analizė, privačių pensijų fondų pokyčių Latvijoje laiko tėkmėje analizė atitinkamas su padėtimi kitose EBPO šalyse.

Autorio siemo atsakyti į klausus, - ar savanoriškos pensijų fondų gati sumažinti atotrūkį tarp Latvijos gyventoio ikipensinio ir paskesnio išėjimo į pensiją pajai. Nustatė, kad vis dėlto menkios finansinės stabilumos žmonės galėtų įmokėti į savo privačius pensijų fondus, siekdami užtikrinti geresnį finansinį stabilumą pensinio amžiaus priei tilpui ir kitų etapų, įgyvendinamas, remianaos geriausia kitų šalių patirtis ir siūlančia galimus sprendimus Latvijai. Be to, reikia ištirti ekspertų apklausų empiriniai duomenys, nes savanoriškos pensijų šaltinių yra pradiniame vystymosi etap.

PAGRINDINIAI ŽODZIAI: pensijų sistema, savanoriškos santaupos, finansinis raštingumas, bankinis draudimas.

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