Reforms of Baltic States Pension Systems: Challenges and Benefits

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Abbrevations

EU – European Union

EUR – euro

LVL – Latvian Lat

LTL – Lithuanian Lit

EEK – Estonian Krona

GDP – Gross domestic product

NDC – Notional defined contribution

FDC – Financial defined contribution

PAYG – Pay as you go

DC – Defined contribution

Abstract

After collapse of Soviet Union in 1991 all three Baltic States Estonia, Latvia and Lithuania inherited their social security systems from the old Soviet Union system, which was characterized by low retirement age (55 for women, 60 for men), high income replacement rates (ranging from 50-100% of previous monthly income) and financing of pension expenditures directly from state budget. Because the systems were recognized financially unsustainable and not properly equipped to face the existing and growing socioeconomic and demographic risks with the aging population and decreasing fertility rates as well as decreasing state budget revenues, the pension systems in all three Baltic States required fast and fundamental changes.

After active public debates as a response to these risks the governments of all three Baltic countries in the end 90's have undertaken systematic reforms of their national pension systems by redesigning the financing structure of systems. Reform programs had in general considered downsizing of public pension pillars in defined contribution plans. They included allocation and distribution of risks and related costs among the participants of the system, establishment of sustainable personal taxation system and introduction of a new state social insurance conception and respective legal framework. Thou these three main areas determined further implementation of reformed multi pillar pension systems in Estonia, Latvia and Lithuania in the beginning of this century. E.g., Latvia implemented a new three pillar pension systems from 2001, Estonia from 2002 and Lithuania from 2004.

To mitigate the growing demographic, social and economic risks one of the key aspects of reforms was introduction of mandatory funded pension pillar (in all three countries in was determined as second pension pillar). Its main purpose was to allocate market risks from government to each private participant of the new pension system through mandatory social contribution payments in a long term perspective and to allocate a certain percentage from social security payments to finance the system and pillar itself. Nevertheless taking into account the age structure of the population in each of the country as well as heritage of previous pension system and previous pre-reform job service of system's participants there was determined also transit period for the systems. Unfunded pension pillar (1st pillar - PAYG) was significantly restructured

into NDC system, accordingly. It introduced a meaning of individual notional pension accounts and which according to solidarity principle of the system, notionally accounted and accrued personal contributions to the individual accounts and from cash flow perspective redistributed all collected contributions to cover current pension expenditures to current pensioners.

However, after the ten years of reforms when reformed pensions systems have reached their first maturity phase, the issues and challenges in respect of payouts as well reliability of the system started to attract more attention from public side and raised a vast of negative attitude towards the system. If the main reasons for non sustainability of the former PAYG systems and introduction of NDC and FDC accounts were mentioned growing risks of low fertility rates, ageing of population and migration working age population, currently, after global financial crisis, which severely impacted Baltic economies, the main reasons should be considered permanently high unemployment rates in all Baltic countries, inadequately high flat administration rates charged by pension plan administrators and restrictions of regulators to invest funded pension assets into long term real economy projects.

The purpose of this document is to provide a brief historic and economic overview of operations and activities of reformed three pillar pension systems in three Baltic States with focus on the second pension system pillar. There will be also provided analysis of the common characteristics of successes and failures of the reformed pension systems in all three countries, because these facets of the reforms are likely to be of interest to a broader audience.

Latvian Pension system reform

Following the experience of Sweden, within the period from 1995 to 2001 there was also undertaken and executed a reform of Latvian pension system. Following, in 2001 the reform was completed and a new three pillar pension system was introduced. A new system was introduced to perceive flexibly the actual growing demographic risks (low fertility rates in 90s of previous century, increase of life expectancy of people born in 50s and 60s of previous century), migration risks of population before and after joining to EU, changes in labor and capital markets as well as progressing disproportions in age structure of the population. Latvia was among the first countries in Central and Eastern Europe, which introduced multi-pillar pension system and a first country in the world, which introduced a NDC solidarity pension scheme, which was based on labor market remuneration growth factors, capital saving and individual contribution principles. Accordingly, the long term sustainability of Latvian pension system is directly dependant on the provision of stable social economic growth. With the implementation of a new system in January 1996, Latvia was a first country to make a complete transition to NDC for the entire working population. The reform considered a total contribution rate of 20% as part of social contribution payments for financing of non-financial defined contribution (notional) accounts from 1996 as well as subsequently for notional accounts (1st pension pillar) and personal funded financial accounts (2nd pension pillar) together from 1 July 2001, with a planned gradual increase of split of the 20% contribution rate between non-financial (NDC) and financial defined contribution (FDC) pension schemes from share of 18%/2% in 2001 to 10%/10% by 2010, accordingly (see further the Table 1 on distribution of payments) . The cost of old age pensions at the time of the reform was well over 20 percent; since a contribution rate of only 20 percent gives total pension rights to current workers. The total state social insurance contribution rate of 33.09% covers the transition from the old to the new regime and also finances a minimum guarantee. The reform promised stability in the face of demographic and economic fluctuations and considered to manage a broad range of possible economic and demographic scenarios that Latvia was expected to face by having process of European Union accession. The conversion to NDC system in 1996 brought also a number of transition issues that had to be resolved; some of these issues had to be revisited in the period immediately following the initial reform legislation. The most important conversion issues involved the questions of how to value rights acquired under the old regime and how to introduce the system in an economic environment characterized by structural upheaval as the country was just beginning the process of transition from a command to a market economy.

The main purpose of new system was to establish personal notional and financial defined contribution individual pension accounts for each qualifying individual and to allocate an administration and custody rights on management of these pension accounts and related assets between government controlled agencies and to licensed private pension funds. Although the system became mandatory for all employed workers in Latvia, the mandatory joining to 2nd pension pillar for workers was determined for the ones borne after 1971 and voluntary from 1953. The ones borne before 1953 were could not qualify to join and have FDC accounts.

The personal NDC pension accounts are financed through compulsory social contribution payments, which were directly levied to the reported wages of workers. However after the establishment of forecasts of growth of Latvia's GDP and increase of workers' wages before and after Latvia's accession into European Union, to retain the whole state social insurance system sustainable from financial perspective the total social contribution rate was reduced from previous 38% to 33.09%. Also employers' share of contributions was reduced from 37% to 24.09% accordingly. In the same time to allocate properly social and economic responsibility between the state budget and private individuals, 20% within social contribution rate were allocated to finance 1st and 2nd pillar of reformed pension system. Subsequently, there were also made reforms to unfunded pension pillar (pay as you go (PAYG) scheme or 1st pension pillar), which considered and introduced solidarity principle between current workers and current pensioners, and establishment of notional accounts for each participant.

Ultimately, to reduce the fiscal burden on 1st pension system's pillar in the future due to already previously forecasted aging of population and observed rapid decrease of fertility rates in 90's of the previous century, the aforementioned 20% of contributions were divided between 1st and 2nd pension by the following portions by the following years (see table 1).

Table 1

Distribution of social contribution payments' pension part between 1^{st} and 2^{nd} pension pillars

YEAR	***1^{st} pillar***	***2^{nd} pillar***
2001. - 2006.	18%	2 %
2007	16 %	4%
2008	12 %	8 %
2009	18 %	2 %
2010	18%	2%
2011 – 2012	18%	2%
2013*	16 %	4%
2016*	14 %	6 %

* According to the projections of Ministry of Welfare

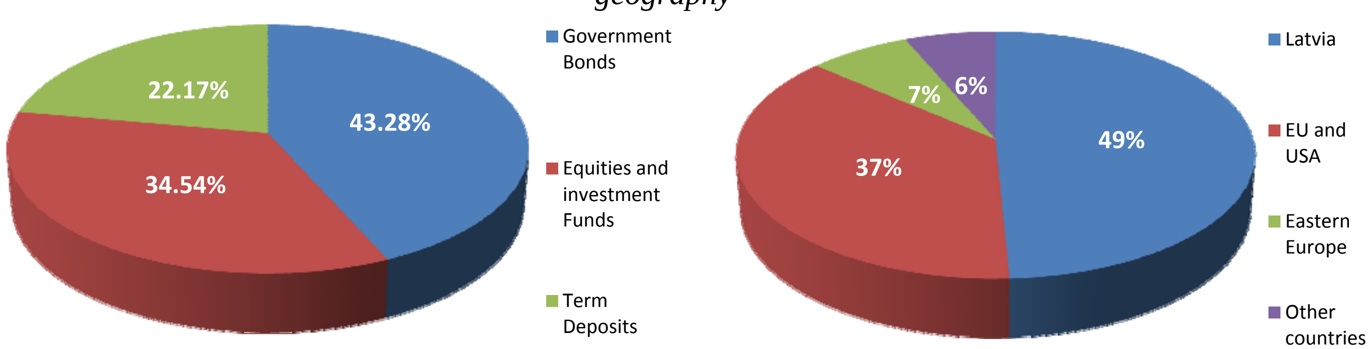
The initial calculations of pension model, which considered and accounted for the aging structure of Latvia's population, migration rates as well as economic volatilities of funded assets, represented and considered an optimal distribution between 1^{st} and 2^{nd} pension pillar that would be 14% and 6%, respectively. Although the management of private pension funds, which overtook the 2^{nd} pension pillar administration rights from State Treasury and which in majority of cases were/are subsidiaries of large financial institutions could lobby the favorable changes in legislation and already succeeded to make the changes in legislation to increase the share of 2^{nd} pension pillar by 10%.

Because of successful launch and further development of the 2^{nd} pension pillar, which resulted in continuous growth of number of participants (mandatory and voluntary joiners) and rapid increase of their contributions as well as attractive legislation for fund managers, which entitled pension fund managers to receive guaranteed administration fees linked just to collected contributions nor reported financial results on funds management, the number of obtained management licenses from regulator by the end of 2011 in Latvia were provided to 9 licensed private pension funds and these assets were allocated within 26 pension plans. The private pension funds also succeeded to incorporate into funded pension legislation 2% ceiling for administration fees out of contributed assets into the pension plans. Although in the average the administration fees in 2011 were in average 1.5%, the administration fees in 2011 in total amounted to 13,082 thsd. LVL and were collected by pension funds irrespective of reported losses or profits of managed pension assets. Nevertheless at initial stage the role of management of financial accounts was also exclusively provided to State Treasury by October 2007, but subsequently within transit period by 2008 the State Treasury terminated these operations and the funded pension assets were transferred to private pension management funds, according to the selection of each individual or equal distribution of remaining funded assets among the private pension funds.

While the total amount of allocated assets in 2nd pension pillar continued to grow due to continuous increase of number participants (275 thsd. at the end of 2001 a year after system was launched, 790 thsd. - beginning of 2006 and 1,171 thsd. at June 2012) of pillar at the end of 2011 value of net assets of funded FDC accounts' assets was already 1,246 million EUR, representing 12% from Latvia' s 2011 GDP. Still in 2012 the second pillar pension funds value continued to increase due to aforementioned reasons and as at 30 June it was already 1,347 million EUR. The dynamics of net assets value increase in 2nd pension pillars in all three Baltic countries is shown in Chart 5. In the same time strict binding regulations in respect of allowed proportions of allowable financial instruments and geographical segmentation, where assets could be invested, as at 30 June 2012 the structure of investment portfolio of 947 million LVL of 2nd pension pillar assets was as follows.

Chart 1

Structure of allocation of Latvia's FDC net assets by the group financial instruments and by geography



The Chart above shows that regulatory bindings on investment types as well as geographical investment limits derived that still vast majority of funded pension assets in Latvia are retained in Latvia. They are invested in short term financial instruments with low interest rate, which lately have been lower than inflation rates (CPI index) and which ultimately in a long term perspective bears a risk of continuous reduction of parity of future pension capital of FDC account holders in Latvia.

Nevertheless in 2009 after commencement of the global financial crisis, which resulted in rapid decrease of total compulsory state social contributions due to drastic increase of unemployment and salary cuts, the government of Latvia had to take unpopular decision and drastically reduce the contribution rate for 2nd pension pillar from 8% to 2% with the purpose allocate the resources for financing of current pension expenditures in 1st pension pillar and retain minimum amount of contributions for 2nd pension pillar due to the aforementioned demographic risks. In addition due to continuous high rates of unemployment the government from 2011 increased total contribution rate to 35.09% by increasing by 2% employee's part to 11%. As can be seen from Table 1 it is expected that in 2013 and 2014 the share of second pension pillar shall be increased to previously mentioned optimal level of 6%, which is argued with recovery of Latvia's economy and stabilization of fiscal indicators.

Estonian Pension System Reform

In the mid nineties of previous century, there were started public discussions in Estonia about the necessity for pension reform and eventually it led to adoption of the 1998 State Pension Insurance Act. The act laid the establishment for a pay-as-you-go (PAYG) system's first pillar of the pension system whose purpose was to provide a very basic retirement benefits. Estonian multi-pillar pension reform was commenced in 1998 with introduction of legislation that as a first step established the third voluntary pension pillar. The second or "mandatory" pension pillar, which funds private retirement accounts with worker contributions and government matching contributions, was legislated in 2001 and became operational on 1 July 2002. Nevertheless the second pillar has been cited as mandatory, in reality it is mandatory only for people born during or after 1983. For people born between 1946 and 1982 the joining to the second pension is voluntary. This approach to provide an opportunity to join to the 2nd pension pillar larger amount of participants differentiated from Latvia and Poland, where older groups of people were excluded from this chance.

To finance the second pillar, Estonia similar as Latvia allocated 20% out of state social contribution payments (total rate in 2012 in Estonia is 37.2%, 34.4% paid by employers, 2,8% are charged to employees), which were directly levied on wages. Allocated funds are split into two parts:

- for those individuals who decided to join the second pillar 16% goes to the state budget to finance the PAYG pensions;
- 4% is transferred to the employee's account in a private pension FDC account.

In addition to this there is used also the extra component for pensions, which means that in addition to the state contribution, employees are encouraged to contribute an additional 2% from their salaries to the private FDC pension account. The total contribution as a percentage of the gross wage is thus 6%. By introducing this extra element, Estonia took a different approach than other Central and Eastern European countries that implemented only the single mandatory contribution approach for financing the individual FDC accounts. Because the introduction of the second pension pillar also reduced the amount of mandatory contributions to finance the PAYG pensions, the amounts of the expected future benefits from the first pillar were reduced as well.

Accordingly these changes to the first pension pillar initiated also some incentives to join the second-pillar system.

Contributions started to accumulate in the second-pillar private pension funds, which legally are contractual investment funds. In the period from 2002 to 2011 the amounts of contributions increased from 11 million EUR to 1,130 million EUR. Six fund management companies obtained the licenses to manage the pension funds and fifteen pension plans were registered initially. Currently these assets are managed by six pension funds in the Estonian pension funds market and together they offer 23 second-pillar and thirteen third-pillar pension plans. As the Estonian legislation allowed pension fund managers to charge administration fees based on flat rates from collected contributions, which averaged to 1.5% in period from 2003 to 2011, pension funds could collect administration fees from 1,065 thsd. EUR in 2003 to 16,308 thsd. EUR in 2011.

Irrespective that currently pension fund managers are seeking for long term financial instruments to invest in, at the outset of the mandatory pension fund system's investment type and limits restrictions, pension funds currently are *only* allowed and restricted to use three different investment strategies:

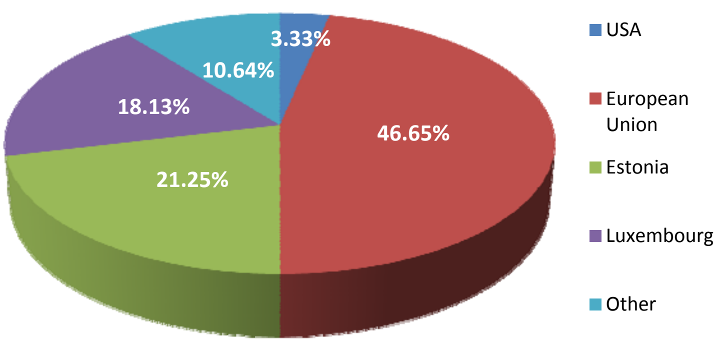
- ✓ Conservative (only fixed income instruments);
- ✓ Balanced (maximum 25% of equity investments exposure);
- ✓ Dynamic (maximum of 50% equity exposure).

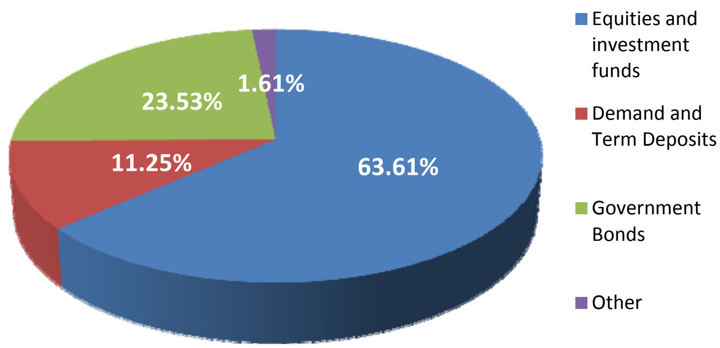
In October 2008, the Estonian parliament made a change to pension fund legislation that enabled the creation of funds that could have a maximum of 75% equity exposure of assets under management. The argumentation was that while the 50% upper equity limit may ensure lower volatility, it also is likely to result in lower long-term returns for pension investors. The second pillar's success in terms of the number of people joining at the introduction phase of second pillar exceeded even the most optimistic of the expectations. Interesting fact to mention is that in Estonia pension plan holders tend to prefer the higher-risk pension plans in comparison to balanced and conservative pension funds. Over 75% - selected the dynamic funds, while only 15% have selected for the balanced fund and only 10% have selected the conservative fund. This selection was considered an outcome of favorable stock market development at the introduction period of 2nd pension pillar as well as of the participants' age structure, e.g., almost 70% were under 40. Similarly, the vast majority of dynamic funds members are younger: 80% are under 40, 16% are between 40 and 50 and only 4% are over 50.

The Chart 2 also represents the structure of Estonian 2nd pension pillar assets by types of investments and geographical allocation on investments by representing trend of changes in investment structure among equities, bonds and cash equivalent investments in term deposits, which also can be considered as a subject of pension plan holder economic behaviors and investments preferences through volatile economic trends. The Chart also shows that downturn of Baltic economies from 2008 to 2010, still remaining financial risks and lack of allowable real investment projects for pension plan managers lead that only 21.25% of FDC assets are invested in Estonia, while 63.61% are invested into equity type of investments, whose vast majority are outside of Estonia.

Chart 2

Structure of allocation of Estonia's FDC net assets by the group financial instruments and by geography





The early success of the Estonian 2nd pillar launch has been rewarded due to various factors. As one of the main, which can be mentioned is strong incentives created by the government at the introduction and subsequent operational stage of 2nd pension pillar. As the example the 2% personal contribution matched by the government's 4% "carve out" contribution. Market participants and the government succeeded in framing this match as the second pillar's key value proposition, and it resonated with the Estonian people. Also another success factor to mention was the timing of the launch of the Estonian second pillar. It corresponded with the period while there were very strong global equity markets with rather high and growing returns and it was rather crucial for the first years of the second pillar as it created a positive track record and encouraged people to join the system and as a result Estonian funded pension assets were allocated into higher risk instruments like equities, investment funds and money market funds. Nevertheless after financial crisis the share of such investment was reduced.

To depict the success of the new system in figures the statistics reported that in 2002 right after the introduction of 2nd pillar, 207,000 people or 27 percent of the working-age population immediately joined to the system according to Central Register of Securities data. During the first two years after the system became operational, already 426,000 people or 58 percent of the working-age population were in the system. This trend had successfully continued and in July 2012 already 628,780 people had opened FDC accounts within the second pillar. Despite the large number of people joining the second pillar, the net value of assets, which were under management in Estonian mandatory pension funds amounted to just 8% of GDP at the beginning of 2011. The complete dynamics on second pillar participants and their contribution growth as well as increase of net assets value and respective comparison with other two Baltic countries are presented in Charts 4 and 5. To quantify this relationship, in 2010 Estonian GDP amounted to EUR 14.5 billion and assets under management in second-pillar funds amounted to net asset value of EUR 1.067 million.

The 2% plus 4% system remained in act until 2009, by the peak of economic downturn in Estonia. Alongside with Latvia and Lithuania, where second-pillar contributions from the government were reduced respectively from 8 percent and 10 percent to 2 percent, Estonia decided to use second-pillar contributions to bolster decreasing public finances. Nevertheless in the period from June 2009 to January 2010 state contributions into second pension pillar were terminated, there was still retained a possibility to make private contributions of 2%.

From beginning of 2012 when Estonia's public finances had recovered and returned to positive balances, the previous 2% plus 4% system was again returned in place to support the further development of funded pension NDC accounts to mitigate the previously recognized demographic risks.

Lithuanian Pension System Reform

The first significant pension reform in Lithuania started in 1995 by introduction of principles of social insurance, by establishing a classical PAYG system, which considered linkage of future pension size of each individual with his/her length of previous job service as well as with the amounts and the periods of social contribution payments made into the system. The system was financed by employees and employers and their social insurance contributions that are accumulated in a separate state social security fund of the state budget (VSDF). The social security system is administered by the State Board of the Social Security Fund (hereinafter "Sodra"). Nevertheless the necessity for further reform of the pension system in Lithuania was required by such social and economic reasons as volatility in labor market, declining fertility rates, ageing of population, state budget deficit as well as risk of emigration of working age population before and after Lithuania's accession into EU. Due to growth of these social and economic factors the second phase of the reform began in 2003. It established and implemented a system that working age people from 2004 were provided with mandatory requirement to participate in the system of the individual insurance pension accumulation, i.e. to transfer defined part of the social contribution payments into individual financial pension accounts (FDC), which were managed by private pension investment funds. Similar as in Latvia and Estonia, this pillar was classified as 2nd level of pension system.

The employed people, which were covered by state social insurance rate in respect of total pension, had the right to transfer 2.5 % from 2004 of the mandatory installments to the 2nd level of pension system with determined contributions (every year this contribution part was increased by one percent up to 5.5% in 2007). The pensions of 2nd pension pillar have determined contributions, thus, their rate would depend on the contribution amount made, the payment period, investment return rates of the selected pension fund assets and the fund management administration fees deducted from contributions made as by flat rate. From beginning of 2009, when Lithuania's public finances similarly as Latvian ad Lithuanian were hit severely by global financial crisis, to keep sustainable 1st pension pillar, the contributions from the social security payments by SODRA were decreased from 5.5% to 3% and subsequently from mid 2009 it capped at 2%, a level, to which it had been decreased over the past years to help Lithuania manage and overturn with a public finance deficit in social insurance budget.

Table 2

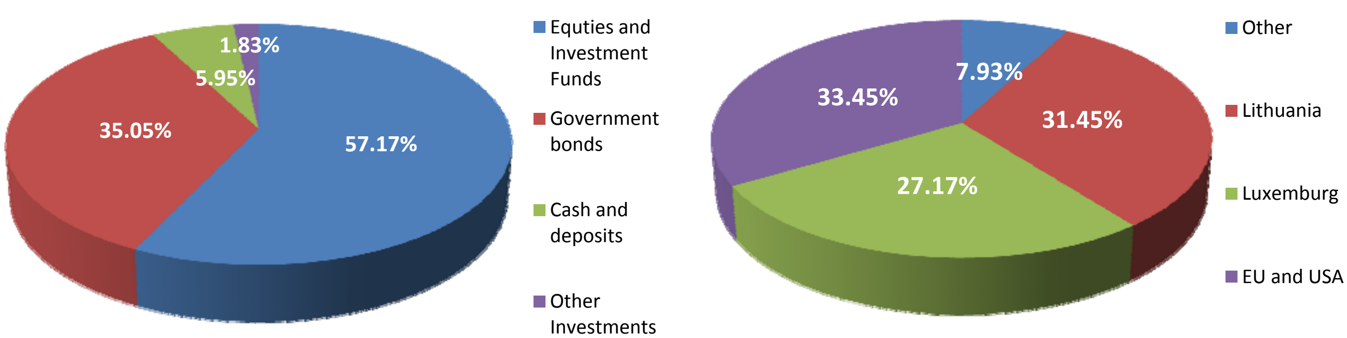
Development of State Social Contribution rate and 2nd pension pillar contribution share in Lithuania

Year	***2004***	***2005***	***2006***	***2007-2008***	***2009.01-2009.06***	***2009.07-2009.12***	***2010-2011***	***2012***
Total contributions paid to „SODRA”	31.5%	30.5%	29.5%	28.5%	31%	32%	32%	32.5%
Contributions to individual FDC account in a pension fund	2.5%	3.5%	4.5%	5.5%	3%	2%	2%	1.5%

An increase of contribution level is only planned after 2020, when it is expected to rise to 3.5%. In addition, people will be allowed to pay additional 1% of their wages into pension funds from 2013 and 2% from 2016. To encourage these private contributions, the state will pay another 1% and 2%, respectively, of an average wage into a pension fund. Through introduction of new government program and imposing the adequate means for the performance of current liabilities of the State Social Insurance Fund, the rate of the part of the state social insurance contributions allocated to pension funds remained to 2% of the salary of an employee in 2011 as well. According to the applicable legislation, the Government of the Republic of Lithuania, following the recovery from economic downturn, would have to submit proposals to the Republic of Lithuania parliament in respect of the increase of rate of the accumulated contribution and gradual recovery of it into the previous 5.5% from each private individual salary. However, assessing the existing liabilities of the State Social Insurance Fund to the present recipients of benefits, the reduced number of insured persons within the period of economic difficulties and the level of the insured income, the need of the budget to serve and cover debts, the possibility of suspending the increase of the pension accumulation tariff in the future is discussed. Such decision would allow for using more of the collected social insurance contributions for the needs of the present pensioners. But such decision would not be favorable for the participants of the pension accumulation system, in particular senior persons and individuals receiving lower income, because, as a result of a low rate of the contribution, the accumulated amount of means in the pension fund will not be sufficient to ensure future pension. One of the proposals to be discussed yet before taking the decision is to leave the currently applied 2% rate of the accumulative contribution; if an individual himself would undertake to transfer to the pension fund an additional contribution in the amount of 2% from the gross income, then the state could transfer for such person an additional incentive contribution of 2% from the average wage to the pension fund. Such funding procedure would be introduced gradually, i.e. it is suggested to start (from 2013) with 1% contribution paid by an individual and with similar contribution paid by the state from the average wage of the country. Later (from 2016) it is suggested to introduce the earlier discussed allocation of funding (2%+2%+2%). Such proposals were approved by the Government of Lithuania in at 27 June 2011. The adoption of such decision would lead to creating of the possibility for the participants of the accumulative pension system for accumulating more means for the future pension and ensure an adequate amount of the annuity of the pension, when considering selection of pension fund manager. In the same time the amount of benefits is mostly dependant of external factors, which rarely fund managers are able properly control from perspective of sustainable returns in a long term perspective in overseas market in volatile financial instruments.

Chart 3

Structure of allocation of Lithuanian FDC net assets by the group financial instruments and by geography



The Chart 3 shows that Lithuanian 2nd pension pillar managers the same as Estonian had been more proactive in comparison with their Latvian colleagues and allocated assets more outside Lithuania and less in cash deposits, while the period of low returns from such instruments. Instead the investments were allocated into equities and investment funds in

Luxemburg, which holds further investments in growing economies irrespective of recent financial crisis.

The pension accumulation system, which started in 2004, covered 442 thousand participants and increased to 1,054 thousand participants in 2011. They all are entitled to contribute for their future pensions through 29 pension plans of the 2nd pillar FDC accounts, which are managed by 9 asset management companies. The dynamics of signing new agreements in the previous years showed the number of new applications has decreased and remained steady. Reduction of the signed new agreements was related with the fact that the majority of individuals, who could participate in the pension accumulation system, have signed pension accumulation agreements during the first four years; new agreements in recent years are signed by individuals joining to the labor market. Simultaneously with increase of number of joining new participants also the contributions continued to accumulate in the 2nd pillar private 29 pension plans. In the period from 2004 to 2011 the amounts of contributions increased from 37 million EUR to 1,129 million EUR.. Lithuanian legislation allowed pension fund managers to charge not only administration fees based on flat rates from collected contributions, which averaged to 1% in 2011, pensions fund managers according to legislation were allowed to charge additionally 10% of subscription (although by fact this charged averaged to 3% in 2011).

As each year before, new pension accumulation agreements would be signed before 1 July, and for the newcomers to the labor market – until 1 October. According to the legal procedure such agreements shall come into force from 1 January 2013. Considering the amounts of emigration and the level of unemployment in Lithuania, approximately one third of all pension accumulation agreements had become inactive, i.e. about one third of 2nd pension level members are either officially unemployed or emigrated from Lithuania to other EU country and do not pay state social insurance contributions in Lithuania, which means there are no any transfers into their individual pension accounts.

Discussing the future pension reform and aiming at reducing the risk of participants in the pension accumulation system resulting from the wrongly chosen pension fund (e.g. in the case young persons selected a pension fund with conservative investment structure, there is risk that means in the pension fund will increase poorly, and if participants in the pre-retirement age chose pension funds with aggressive investment schemes, they may lose substantially as a result of the economic cycle), the possibility of introducing the life cycle fund model is discussed. Introduction of such model would allow the participants of the pension accumulation system to participate in the pension fund corresponding to their age, i.e. pension funds would 'get older' together with the participants: managers of pension funds would gradually change the management strategy of the funds towards more conservative investment. Such model would allow for increasing the management efficiency of the pension funds, since the capital of younger participants should be managed in such a way as to increase it, and of senior persons – as to protect what has been accumulated during the life time. Accordingly Lithuanian Ministry of Social Security and Labor plans to submit to the government of Lithuania an amendment to the Law on the Accumulation of Pensions, which would allow the improvement of the funded system of pensions and it would suggest the following:

- provide for the possibility of receiving benefits from pension funds to persons, to whom early retirement pension is granted and paid;
- pursuing for more rational use of the cumulated means in the accumulative pension system and regulating the process of selling annuity pensions, define clearly the conditions under which an individual would be entitled to get a lump sum, a periodic benefit or an annuity;
- introduce an electronic system for selling annuities, which would allow a person, who has reached the retirement age, to compare by standardized types of annuities the products offered by life insurance companies and choose the most appropriate. Such system would make the procedure for acquiring annuities rather simple, transparent and acceptable for the participants.

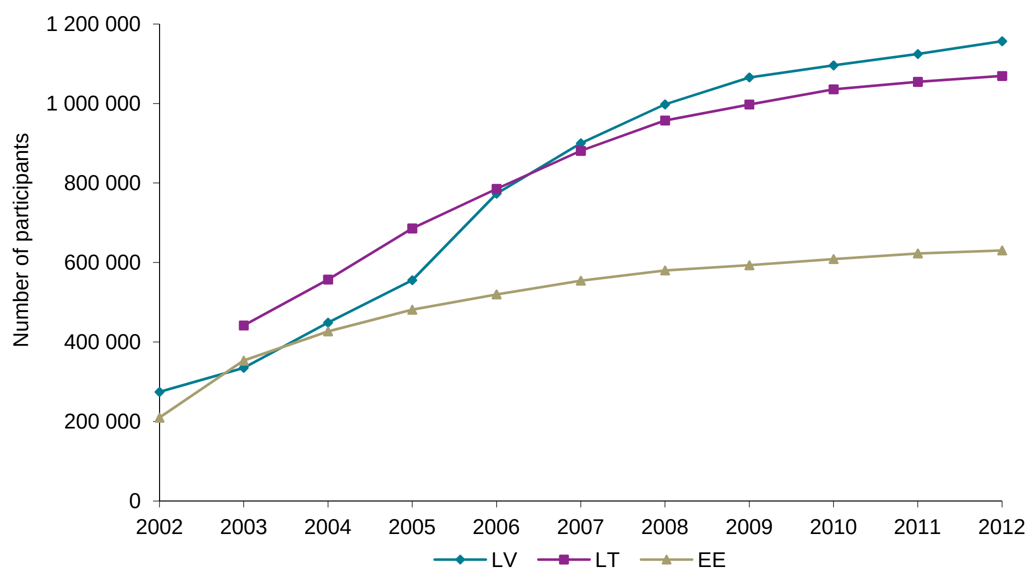
Common Success Stories and Failures of Funded Schemes of Three Baltic States

Three-pillar systems in Estonia, Latvia and Lithuania have been working for almost ten years and have experienced both outstanding successes and failures. The launch of the new system created a positive atmosphere for reforms and reliance of people on a new system as well as it had a positive impact on participation rates, which resulted in continuous increase of contributors and participants for the new system. The first years of implementation of second pension pillar in all three Baltic countries were mainly successful due to:

- Positive public government social campaign about the social and economic necessity to reform the system and explanatory public work on why people should be involved and contribute to the system. It ensured that the number of people joining to the second pillar was increasing rapidly and participation rates were surprisingly high (see Chart 4).

Chart 4

Dynamics of participants' growth of 2nd pension system pillar in Baltic countries



- introduction of the 2nd pillar coincided with period when the rates of return in global markets on financial investments were high and had continues trend for many years to increase, which ensured positive growth of pension funds' net assets value before and after Estonia's, Latvia's and Lithuania's entering into EU.

- the number of people joining to the system were increasing due commencement of job service of young people, which were born during the period of high birth rates in Soviet Union in 70s and 80s of previous century.

- The amounts of contributions in monetary means in the period from 2002 to 2008 continued to increase due fast growth of all three economies as result of EU pre and post accession, increase of FDIs and inflow of EU funding in the beginning of this century that consequently led to increase of people wage's and simultaneously also increase of inflation rates.

- Increase of 2nd pension pillar contribution rates, which increased from 2% to 8% in Latvia, to 6% in Estonia and 5.5% in Lithuania were basis for this tremendous growth.

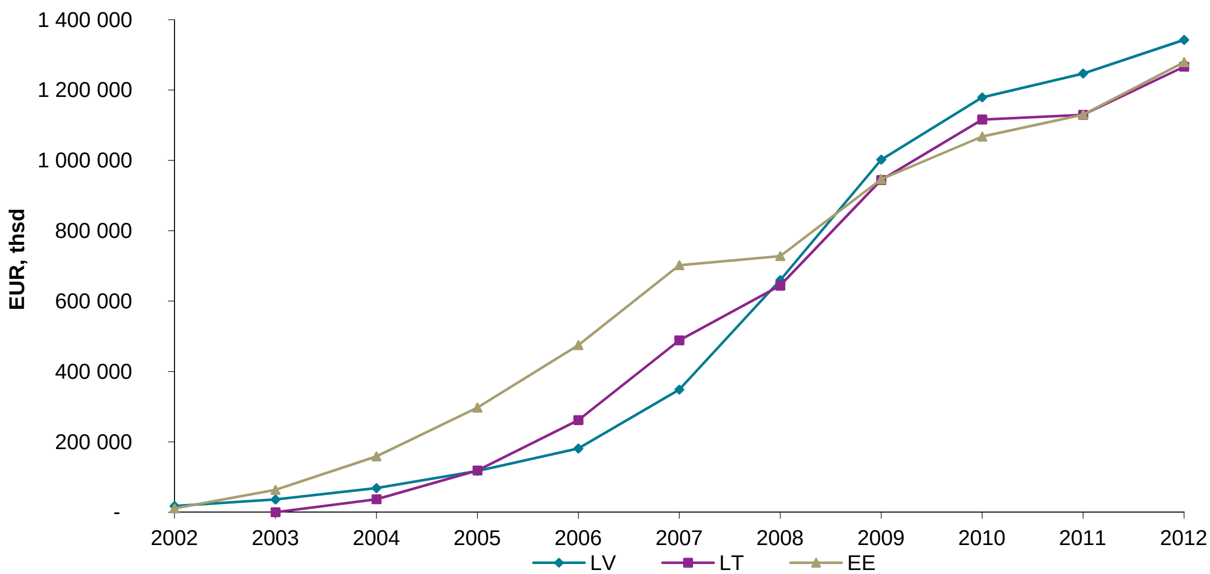
Later in 2009 and 2010 because of global financial crisis, which severely hit public finances of all three Baltic countries, the main argument from governments' side of the drastic reduction of contribution rate allocated to 2nd pension pillar (Latvia from 8% to 2%, Estonia from total 6% to 2% (with carve-out considerations), Lithuania from 5.5% to 2%) was retaining sustainable social insurance budgets to keep current pension payments. Also worth to mention: Latvian government under recommendation of International Monetary Fund in 2009 executed 10% cut of current pensions at PAYG level, which was retrospectively legally reversed through verdict of Constitutional court. Following the reverse payments from social budget were incurred and as result from 1 January 2011 total social contribution rate was increased by additional 2% from 33.09% to 35.09%. In the same time nor of the governments did not consider an important characteristic of NDC scheme or 1st pension pillar. By retaining higher contribution rates for 1st pension pillar the governments were able to clear current pension liabilities to current pensioners. However in the same time NDC accounts continued to accrue higher notional pension capital in NDC accounts, which continued to increase governments' notional liabilities against current contributors. Although it worth to mention that these notional long term liabilities against NDC accounts holders never had been recognized from public finance perspective in national treasuries.

Increase of contribution rates, monetary contributions, number of participants and flat rates for administration fees led to the process that those largest financial corporations as SEB, Swedbank, Citadele (formerly Parex) succeeded to take over the largest share of the markets through its client base and supported termination of government involvement into this business.

At the end of 2009 at the commencement of financial crisis close to 90% of total funded assets were concentrated within pension plans managed by these aforementioned financial corporations. Nevertheless the pension plans continued to experience rapid recurring growth of net assets due increasing of absolute contributions, in 2009 when the financial crisis severely hit public finances, the governments made significant cut of 2nd pension pillar contribution rates and kept them to minimum level of 2%, due to high public and industry debate and pressure instead of harder scenario by termination of 2nd pension pillar. For sure it raised high level of dissatisfaction of the industry, which articulated severances of such decisions from social perspective in respect of negative impact of future pensions of the systems current participants-holders of FDC accounts and not mentioning minor impact of such decisions on the operating cash flows of fund managers as number of participants joining to the system.

Chart 5

Dynamics of 2nd pension pillar net assets in Baltic countries



Thou contributions still continued to increase and administration fees as not results' based where still collected through flat rates by pension plans managers.

In the same time during 2008 and 2009, major pension plans by means of participant number and amount of net assets at SwedBank, SEB and Citadele, which concentrated largest amount of funded assets at FDC accounts, reported significant decrease of returns on net value of pension plans in the range from 5% to even 25% (see Chart 6), which was mostly a result of high concentration of invested assets into financial instruments with high volatility like equities, shares of investment funds, government bonds. While mostly the decreases of returns as well reduction of contribution to 2nd pension level FDC accounts were mostly explained and publically presented as a result financial crisis, there were also the other non-publicly presented reasons that caused that caused these processes. They were:

- High activity of fund managers to involve people in higher risk pension plans without professional explanation of potential risks of investments value volatility versus promoting only growth perspectives based on former historic developments in global capital markets;

- Lack of public and administrative support to reallocate timely pension assets in less volatile financial instruments during global financial crisis period and subsequent reinvestment activities before capital markets recovery period;

- Limited local capital market opportunities as well regulatory restrictions for the investments of 2nd pension level assets into local equities and derivatives through national stock exchanges (OMX) or risk capital funds as well as into direct infrastructure or energy development projects, which could provide into long term perspective higher and sustainable returns.

- Lack of preventive financial and legal measures that would limit or even cancel pension plans' rewards (administration fees) in case of negative returns reported (as mentioned before fund managers were entitled to receive flat rate based administration fees from collected contributions). Such mechanisms could be implementation of the system, which shall determine result based fees, establishment of pension protection fund, which would be financed from pension fund management companies;

- Inconsistency of political decisions on social insurance system and lobbying of interests of private financial institutions during period from 2004 to 2006 that led to modifications of overall pension system and fast spending of formerly accrued social insurance budget surplus (around 900 million LVL) whose prehistoric purpose was to close social insurance deficit gap in the period from 2009 to 2012 and not make radical decrease of 2^{nd} pension level contribution rate and increase a total rate of state social insurance contributions.

Future Perspectives

After global financial crisis in 2009 and 2010, when public finances of three Baltic countries were hardly hit, Baltic economies were one of the first in EU, which subsequently could quickly and effectively restructure their public finances and from record high decrease of GDP indicators within aforementioned years, economies of three countries could recover and return to positive growth trend of GDP (in 2011 in Estonia 8.3%, Latvia 5.5, Lithuania 5.9%). In the same time euro zone big economies like France, Spain, Italy, Greece as well as Germany due to large scale and protected economies, subsequently were significantly impacted by crisis only at later years in 2011 and 2012, which resulted either in stagnation of economic growth ratios or even severe recession of economies (average euro zone EU17 2011 average 1.4%, 2012 6 months average -0.3%). The latter situation with large scale EU economies due to pension plans' assets investment structure by external margin dependant (e.g. EURIBOR) type of instruments and their geographical exposure into stagnating markets makes subsequently more vulnerable private pensions' accounts in all three Baltic countries in 2^{and} and 3rd pillars due to the following reasons:

1. *Consistent and non-recoverable trend on decrease of returns on Euribor related financial instruments.*

   Euribor rates has had retained constant trend to decrease and for 12 months rate moved from 4.711% in 2007 to 0.631% at the September 2012 and currently there are no reasonable indications that these rates could return to previous levels neither in short or long term perspective.

2. *High unemployment rates had still retained in Baltic States for rather long periods.*

   There had been lately a trend in Baltic States that a large portion of people, which remained unemployed for more than 1 year. Historically the main arguments for pension system reform and introduction of funded pension level (2nd pension level) in all Baltic countries were considered low fertility rates and ageing of society. Today after financial crisis in 2008 and 2009 high unemployment rates in Baltics and stagnation of EU economies that leads low returns in equity and money markets are the main reasons that jeopardize long term sustainability on pension systems. These obstacles might severely damage the pension system even in few years as it outskirts the system not to collect sufficient amount of the contributions to cover current expenditures at PAYG level as well allocate sufficient contributions at FDC accounts and earn sufficient returns to accrue capital for future pensions to provide reasonable replacement rates. See table 3 below.

Table 3. Unemployment rates in Baltic countries (%)

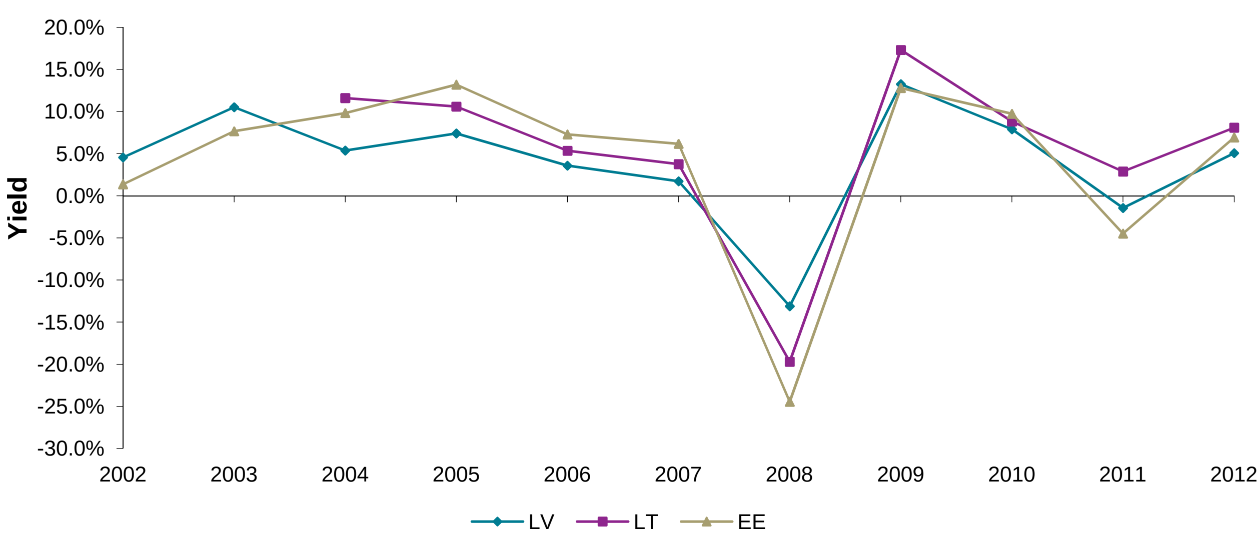
Country/Year	*2008*	*2009*	*2010*	*2011*	*6M2012*
Latvia	7.5	17.1	18.7	15.4	15.9
Lithuania	5.8	13.7	17.8	15.4	13
Estonia	5.5	13.8	16.9	12.5	10.1
EU – 27	7.1	9.0	9.7	9.7	10.4

In addition it is worth to mention that in 2010 and 2011, the average unemployment rate in the European Union was 9.7 %, while by June 2012 it continuously increased and achieved already 10.4%, which is the highest rate recorded since the start of the series in 2000. This had been remaining as a signal for continuous stagnation of euro zone economies and risk non-recovery of low Euribor rates for the long term perspective. The latter would still remain as continuance of ongoing low returns risk factor for Baltic's state funded and voluntary pension funds, with equity investment exposure into aforementioned financial markets.

3. Volatile returns on invested pension assets

Chart 6

Dynamics of FDC pension assets returns



As seen in the 6 chart the FDC accounts and pension plans have been rather volatile and had been directly linked to the changes in global equity markets. During 2008 and 2009 2nd pension pillar as well as 3rd pillar plans experienced record high decreases of net assets value due to geographical exposure of equity investments in EU and US investment plans and allocation of assets in national governments' treasury bills and term deposits whose rates decreased significantly in these years as well as has trend to be low also in 2011 and 2012.

4. *No performance based, flat rate management fees charged by fund managers*

While median level of total administration fees globally charged by pension plans averaged from 0.16% (lower bond) to 0.70% (upper bond) in 2011, covering account management, collection, customer service, custodian, brokerage, portfolio management expenses in Baltic countries these rates very higher and varied from 1% in Lithuania to 1.75% in Latvia. In Lithuania also in addition subscription fees of 3% were charged.

5. *Low participation in voluntary schemes due to lack of financial literacy of pension accounts holders in Baltic States.*

Financial literacy of population can be closely linked to pension planning. There is a simple methodology that is widely used in a number of countries in order to find out the level of financial literacy of the population. It shows that only half of Americans aged 50 years and over are able to answer simple questions about inflation and other basic financial concepts, and that only one third has ever tried to develop a personal savings plan. Within this one third, only 2/3 are able to manage and supervise properly their developed investment plan. Also, the researchers proved that people who display high financial literacy are able to develop a pension plan and adhere to it better that those who do no. These findings are strengthened by a more recent piece of research conducted in Germany, which confirmed the positive impact of financial knowledge on the pension planning using a similar but more complex methodology. Another stream of research found that deliberate financial education has a larger positive effect on participation and savings rates than a mere publication of information about existing savings and pension programs. Unfortunately, financial literacy of Baltic State's population is still a largely unexplored topic; we haven't managed to find any thorough piece of related research. However, some indirect evidence shows that, on the whole, Latvians severely lack the knowledge about available pension options and the ability to assess them and make an educated choice.

Latvia's 2nd pillar pension system is administered by the VSAA (State Social Insurance Agency), in Lithuania SODRA, In Estonia - The Estonian Central Register of Securities. The main (and only) instruments of communication with citizens are the websites called for personal account portal www.latvija.lv or www.manapensija.lv, in Estonia www.pensionikeskus.ee and www.pensijusistema.lt in Lithuania. The websites provide information about available pension funds and pension plans, their historical and latest returns (updated daily), and enables its users to download their individual pension statements. However, real-life evidence shows that the majority of Latvians, Lithuanians and Estonians are still ignorant about their pension options. The attitude of 2nd pillar participants towards the future wealth that had been accumulated in their state funded pension schemes shows that approximately majority of people discloses that they don't believe that the government will be able to provide them with an adequate pension and only today's earnings matter. The age group aged 25 to 45 years in 2011 will be the first generation whose pension would mostly depend on their 2nd and 3rd pillar savings; therefore, it is crucial to provide them with sufficient information about investment opportunities and related risks. Because assets of Latvian pension funds were severely hit by the recent financial crisis, people started paying more attention to their investment behavior; however, without a more active state support via information campaigns, it will be much more difficult to ensure the adequacy of retirement income. Overall, it is evident that people in Baltics do not rely on the new pension system and therefore do not pay sufficient attention to it as well as they do not have knowledge about how to increase the benefits from long term investing in pension funds. Thus, it is vital to improve people's financial literacy in order to increase the participation rate, thereby enabling Latvians, Lithuanians and Estonians to reap the maximum amount of benefits from it. Ultimately the pension reforms initiated in Baltic States during the last decade were relatively successful and helped the country address its demographic problems. However, experience from other countries indicates that, without sufficient level of financial literacy, people tend to over-rely on government and not to consider their long term financial savings in favor of their future pension benefits after 30 to 40 years. Moreover, there are significant differences within the population in terms of people's general attitude towards money and financial information as well as their willingness to plan for retirement. Therefore, future pension reforms should not only increase the general level of financial literacy and familiarity with the pension system, but also account for those people that fail to behave in line with the "planner model".

Conclusions and recommendations

1. As response to growing demographic risks due to low fertility, life expectancy increase, risks related to migration of working age population and shortening of employment services period all three Baltic countries have introduced successfully the new pension systems, which established good pre-conditions to mitigate aforementioned risks.

2. Nevertheless financial crisis in 2008 and 2009 and currently ongoing crisis in euro zone countries indicated that the pension systems in Baltic countries were not properly protected against the real economic risks, which were related to long term unemployment and decrease of return rates below inflation rates, for instruments such as term deposits and government bonds, which historically were considered no risk financial investments with stable returns of 4-5%.

3. Irrespectively of high people participation rates in 2nd pension pillar funds system at the introduction stage of new system due to positive government campaigns and high returns in global capital markets, after financial crisis the reliance of people into new system significantly dropped due to regular political unfavorable decisions by decreasing contribution rates into 2nd pension pillar in favor of resolving current fiscal deficits as well as rapid decrease of value of funded pension assets due to double digit negative returns of investments.

4. To diminish oligopoly incentives of industry and increase competition among the pension plan managers the system and levels of management fees charged on administration and subscription of pension plans should be reconsidered by replacing flat rates on contributions collected to performance based fees on yields earned. Performance based fees also have be supplemented by capped fees fixed fees to cover portfolio and account management costs by not exceeding 0.5% of contributions collected.

5. Due to legislative restrictions Latvia in comparison with its Lithuanian and Estonian colleagues had been most conservative and least competitive in respect of geographical allocation of funded pension assets outside of national economy as well as investing these assets in national economy mostly in low risk investment instruments such as term deposits and government bonds (see Charts 1, 2 and 3).

6. As subsequent response to newly faced economic risks the governments of all three Baltic countries should reconsider legislation on investment restrictions and subsequently facilitate the long term investment initiatives in local economies by allowing more investments of funded pension assets into real economy sectors with sustainable increase of capacity and value of investment project, increase of productivity, restructuring, competitiveness and by guaranteed long term returns, which should at least in double would excess the net wage growth ratio of FDC pension account holders. Such investment types should be:
   - Infrastructure Projects;
   - Renewable Energy and Natural Resources;
   - Risk and Venture Capital Investments.