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# Economic environment impact on pension system: Case of Latvia

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### Abstract

The goal of the state implemented Pension Reform is to create a financially stable and efficient pension scheme that is based on individual social security contributions which in turn will ensure such amount of pension that depends on the contributions made over the previous period, as well that will facilitate the increase of social security contribution growth.

The objective of research is to investigate whether the existing Pension system in Latvia is working effectively under changing economical environment. It also analyzes the impact of recession and the current demographical situation with a flow of emigration. The research aims at offering several options for the improvement of the situation.

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Keywords: Economic development; demography; pension levels; solidarity principle; retirement age.

## 1. Introduction

The changes in the existing pension system started in 1991 were due to the fact that the soviet style pension system was not viable to run under market economy. The need for Pension Reform was the result of a steadily increasing aging population, instead of keeping the current retirement age. Life expectancy has been gradually increasing. As a result, every year we see the growth in costs for pensions from social security budgets.

The reform envisages the introduction of three level pension system, thus improving better old age financial situation and risk division between the state (future tax payers) and person's savings in compulsory and/or voluntary pension scheme. The aim of the pension reform is to enhance the interest and responsibility of every employee concerning their financial situation in old age.

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The goal of the state implemented Pension Reform is to create a financially stable and efficient pension scheme that is based on individual social security contributions which in turn will ensure such amount of pension that depends on the contributions made over the previous period, as well that will facilitate the increase of social security contribution growth. And the aim of the paper is to investigate whether it is working effectively, to understand and explore activities to maintain the social welfare

In case of Latvia, the demographic situation is extremely important, not only the rate between birth and death rate is negative, but also the "envelope salaries", unemployment and migration to other countries influences pension system as the revenue from taxes reduce. As a result, the state is forced to raise taxes, which slows down the economical development. The government of Latvia changes regularly the ration between Pension Level 1 and Pension Level 2 contributions due to the economic situation of the country.

The major aim of the development pension system is to increase dramatically the compensation level under the condition that the person takes part in all three Pension Levels at the same time.

As qualitative methods there are used theoretical comparison analysis about pension systems, interviews with experts, personal observations. As quantitative research methods the statistical data analysis, forecasting and other financial calculations are used. The paper contains the analysis of statistics of the period from 2001 to 2012.

## 2. Research results

## 2.1. Overview

The application of social security schemes (including pensions) to persons and their family members moving within the EU, European Economic Area and Switzerland is realized according to the principle of equal attitude and taking into account the requirements of EU directives, including the principles of aggregation of insurance and export of benefits. The main financial tool which focuses on elder people welfare is their pensions; except pensions there are also other tools which increase the welfare of elder people, for example, accumulation of money for the years after retirement, also the free public transport for retirees, special discounts for medicines and medical treatment and also other institution help increase the welfare of retirees. Nevertheless generally for Latvian elder people pension is the main source for living.

Origin of the name *pension* derives from mediaeval England term *pension* (payment), which in its turn derives from *pensio, pension, pensus, pendere* (consideration, to consider, payment, to pay) in Latin. Historically, in Latvia pension is defined as a material provision of elder citizens or in case of losing ability of work or losing a supporter (Latvia Soviet Encyclopaedia, 1984).

The following definition of the term *pension* is found in Great Britain Concise Encyclopaedia: a pension is a regular payment to a person retired from work in case of disablement due to age, physical disability or expiration of fixed term service (Britannica Concise Encyclopaedia, 2006). The payment period usually continues till the end of natural life of the retiree, or sometimes the payments are extended and assigned to the widows/widowers of retirees after their death.

During the Latvia independence years the following definition of old age pension was suggested: the old age pension is constant and regular income of society members approaching the age determined within laws and regulations, which provides them with social funding of full value in long term in accordance with the length of service and social insurance payments made during in advance (Volskis, 2011).

Old age pension system is a whole of social protection instruments providing regular receipt of old age pension developed and monitored by government and under delegated management of private sector. In general, the research authors would intend to agree on this definition; however there is a controversial issue on how valuable social security currently is provided by average and below average pension, which is below the subsistence wage in Latvia (Fig. 1).

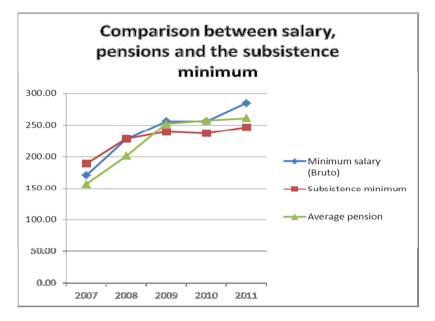


Fig. 1. Comparison between salary, pensions and subsistence minimum in Latvia (EURO), 2007–2011 (Source: Salary, pensions, subsistence minimum, 2012)

Pension system in Latvia determines the order in which the working population may receive the pension, what is the length of service necessary and how the social payments are made. Latvia is one of the first countries among the Post-Soviet states, which, with a support of World Bank.

### 2.2. Analysis of the Current Latvian Pension System

In accordance with the Pension reform Concept, which was approved by the Saeima in 1995, along with the current generation solidarity pension scheme (Level 1 pension scheme) it was proposed to introduce state funded pension scheme (Level 2 pension scheme) and private pension fund (Level 3 pension scheme) (Low "On State Pension", 1996).

Pension Level 1 was introduced in January 1996, it includes generation and gender equal treatment principles. According to the European system it is (PAYG) type of pension which is subjected to huge demographical risks. Pay –as- you-go System (PAYG) envisages that the current retirees are being paid from the contributions of today's working population. It is believed that such a system reduces the savings amount, because the working population is not interested to make additional savings (Ingo, 2003).

Pension Level 3 envisages a free choice for every individual to set up additional accruals for their pension by making contributions into Private Pension Funds. Private Pension Fund is a licensed finance body, which accepts their own private contributions, as well as those made by the third party. They organize their management in order to ensure accruals for those persons in old age.

Taking into account the above information, the major success of pension system reform in Latvia is the set up of Pension Level 2, which is compulsory to the majority of population, it also helps to reduce the effect of demographic risk on pension. However, this Pension level is being subjected to many other risks, which the population of Latvia must take into account when deciding the appropriate Pension Fund.

The main law regulating the pension system in Latvia is Act on State Pensions of the Republic of Latvia. The purpose of the act is to determine:

- Principles of state obligatory pension insurance system based on insurance payments;
- The order in which the state provides social insurance pension in case of old age, physical disability and losing a supporter.

An individual, who simultaneously is authorised to receive both the state pension determined within this law and pension paid from state budget in accordance to another law, receives one pension, considering the individual's choice, unless provided otherwise in other regulations.

Cabinet of Ministers determines calculation of accumulated pension fund within state obligatory pension insurance system, assigning it to European Union pension scheme and receiving from it for an individual, who is authorized to join pension scheme according to the Regulation (EEC, Euratom, ECSC) No 259/68 of the Council of 29 February 1968 on staff regulations of officials and the conditions of employment of other servants of the European Communities.

The main aims of the reform were the following (Verje, 2006):

- To form a three level pension system which would allow to divide the state and every individual's responsibility towards their financial means in old age;
- To create a safe state pension system in which the pension amount depends on their social contribution rates;
- To set up the financial system which can be administered efficiently;
- To increase the retirement age, thus ensuring the ratio decreases between those in employment and on pension, as well as reducing the burden of social security system;
- To stimulate the development of the state economical system, ensuring the opportunities to invest the savings in the economy, thus developing a financial and capital market.

The First Pillar of the pension system ensures pensions for all persons, who had been socially insured for at least 10 years. If the person's insurance period is less than 10 years the state social insurance benefit is granted to him. The Transition Regulations stipulate that for those who have insurance period prior to 1996, the pension benefit is calculated using a modified pension formula: pension capital is the sum of accumulated capital after 1996 and so-called initial capital (OECD, 2004).

The old-age pension shall be calculated on the basis of the following formula:

$$P = \frac{K}{G} \tag{1}$$

where,

P – annual pension, the twelfth part of which is the monthly pension;

K – the insured person's pension capital, which is formed by the amount of insurance contributions registered in such person's account and the annual capital gains.

The pension capital is dependent upon the insurance contribution wage index. The updating of the pension capital and the procedures for the calculation of the insurance contribution wage index shall be determined by the Cabinet.

Pension capital to which the insurance contribution wage index has been applied, taking into account the insured person's choice in requesting an old age pension, shall be supplemented with:

- 1) the funded pension capital that has accrued in accordance to the State Funded Pension Law;.
- 2) G the time period (in years) in respect of which from the year of granting the old-age pension, the payments of the old-age pension are planned.

The registration of the person's pension individual pension capital is carried out since 1996.

The major aim of the developed pension system is to increase dramatically the compensation level under the condition that the person takes part in all three Pension Levels at the same time (See Fig. 2). Compensation in this case is the expected pension ratio against their salary.

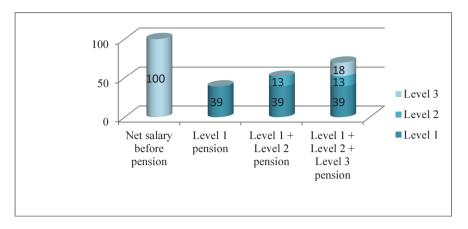


Fig. 2. Compensation volume in case of participating in one of pension levels in percentage. (Source: create by the authors)

Additional accruals to their pensions is formed in Pension Level 2 from their personal savings registered in pension capital which in turn is being invested in stocks, bonds and other securities, as well as bank deposits. Investment is being carried out by an intermediary- licensed wealth manager. Thus, pension capital accrues much faster than inflation and average salary in the country. On retirement Pension Level 2 participant will be able to choose either accrued pension capital to add to their Pension Level 1 accruals and receive both pensions together or Pension Level 2 accrued capital for management by the insurance company of their own choice which in accordance with the insurance policy will make payments of their accrued pension.

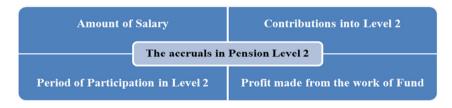


Fig. 3. Factors affecting the accruals in Pension Level 2 (Source: create by the authors)

There are 4 factors affecting the accruals in Pension level 2. The first factor "the amount of salary "affects total social security contributions.

In relation to pensions, the sum equal to 20% of gross salary goes to Pension Level 1 and Pension Level 2. As a result, the amount of gross salary directly affects taxpayers' amount of pension.

The increase of ratio from contributions made into Pension Level 2 is one of the methods how to decrease demographic risk.

As can see from the Table 1, the government of Latvia changes regularly the ration between Pension Level 1 and Pension Level 2 contributions due to the economic situation of the country. As it was previously mentioned, the first level PAYG (pay –as- you- go) system is the system in which taxes are paid by the economically active population, the payments are being made to the current retirees.

The major drawback of existing pension system is its changeable ratio between the working population and the retirees. As the number of working people decreases and the number of retirees' increases, the tax revenue might not be sufficient in order to pay pensions. According to the research data carried out by Deutsche Bank and AEGON Global pensions research, the envisaged reforms were meant to reduce this risk. Such reforms were carried out in the United States and Western Europe, further they were introduced in Central Europe, as well as in Eastern Europe (Life in European Union, 2012). The reforms are being introduced also in Asian countries.

Years	Level 1	Level 2	
2001-2006	18%	2%	
2007	16%	4%	
2008	12%	8%	
2009	18%	2%	
2010	18%	2%	
2011	18%	2%	
2012	18%	2%	
from 2013	16%	4%	

Table 1. Redistribution of the pension capital contributions between the first and the second pillars (%), 2001-2013 (Source: Pension policy, 2013)

## 2.3. Macroeconomic Situation Impact on Latvian Pension System

Pension reforms are needed in every country in order to reduce the risks, however, they are carried out taking into account different conditions and limitations, which are affected by demographic situations. Germany and Southern Europe, namely Italy, Portugal and Spain are affected by the most severe demographic problems. As to the UK and France, this problem does not have such an impact on the population due to higher birth rate (Axel, Karsten, & Hendriks, 2005). In case of Latvia, the demographic situation is extremely important. Not only the ratio between birth rate and death rate is negative, as it was mentioned above, but also the so called "envelope salaries", unemployment and migration to other countries influences pension system as the revenue from taxes reduce, thus making less contributions to the pension fund. As a result, the state is forced to raise taxes, which slows down the economical development.

The first solution was to increase the retirement age because life expectancy of the population also grew (see Fig. 4), so it was necessary not to allow the fast growth of the number of retirees.

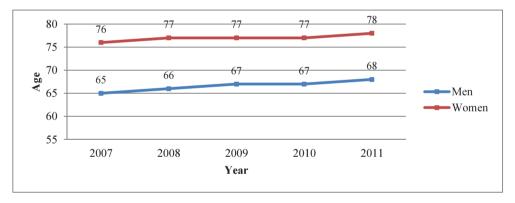


Fig. 4. Average life expectancy of population in Latvia, 2000-2011 (Source: Demographic changes in Latvia, 2013)

Since 2009 the employment rate dropped leading to the unemployment growth in the country. It was followed also by the decrease in salary, thus affecting the amount of tax being paid into the state budget.

Contrary to this statement the government of Latvia decided to reduce the contributions into pension Level 2, thus raising the income for the Pension Level 1 from which the current pensions are being paid. Thus, the country was protected against troubles and criticism made by the population towards the government's unfavourable reform. By decreasing the payments into Pension Level 2 (see Table 1), the state worsened the situation for the future.

The number of population has decreased by 309 thousand or by 13%. The decrease of population has been due to natural population movement (the death rate increased the birth rate), as well as because of international migration. As the death rate over those years has increased the birth rate, it resulted in the drop of population by 119 thousand, but due to international migration the number of population has decreased by 190 thousand.

	TOTAL	Under working age (0–14)	Working age (15–61)	Over working age (62+)
2007	2,281,305	13.96%	65.31%	20.73%
2008	2,270,894	13.75%	65.62%	20.63%
2009	2,261,294	13.72%	66.22%	20.06%
2010	2,248,374	13.75%	66.03%	20.22%
2011	2,067,887	14.11%	64.12%	21.77%

Table 2. Division of population by age groups in Latvia, 2007–2011( Source: Population – key indicators, 2012)

Out of 2.068 million inhabitants more than one quarter, that is 570 000 were retirees in 2011 who receive old age as well as disability pensions. Social tax which fund them is being paid by almost 750 000 inhabitants, that constitutes one third out of all population of Latvia, in accordance with data provided by Ministry of Welfare. On average one third from those tax payers receive their salary from state basic budget because they are employed in state administration, defence, education and health care. Therefore new contributions into the social budget are made on average by 500 000 employees employed in private sector. This is not a common ratio. Economists claim that such a ratio, in which there are so few employees and so many dependants, especially pensioners, cannot sustain long term.

Table 3. Economic Development Key Indicators in Latvia, 2007-2011. (Source: Economic development of Latvia, 2013)

	2007	2008	2009	2010	2011
(Growth, in comparison with the previous year, %)					
Gross domestic product	10.0	-4.2	-18.0	-0.3	5.5
Private consumption	14.8	-5.2	-24.1	-0.1	4.8
Public consumption	3.7	1.5	-9.2	-11.0	1.1
Formation of total equity capital	7.5	-13.6	-37.3	-19.5	27.9
Exports	10.0	2.0	-14.1	10.3	12.7
Imports	14.7	-11.2	-33.5	8.6	22.7
Consumer prices	10.1	15.4	3.5	-1.1	4.4
(% of GDP, unless indicated otherwise)					
General government sector balance	-0.3	-4.2	-9.6	-7.6	-3.4
General government debt	9.0	19.7	36.7	44.7	42.2
Changes in the number of employed	2.9	0.5	-12.2	-4.6	2.5
Unemployment rate	6.0	7.5	16.9	18.7	16.2

By considering the negative tendencies of demography and migration, during the following years and economic development the issue of labor approachability will become more and more urgent in Latvia. Till now improvement of Latvian competitiveness was basically determined by reducing labor costs. However, it should be mentioned, that to maintain the advantages of low cost labor in long term will not be possible under conditions of labor market liberalization and international mobility of the workforce.

One retired person is supported by less than two workers in Latvia. Author's opinion is that this situation will not continue longer, because employees now need to save money for our pensions and help others, but with Latvian salaries it is not possible. Respectively, in order to improve the situation positively, the birth rate should increase two fold from what it is today.

#### 2.4. Pension System: Opportunities of the Future

Nowadays the government of Latvia is highlighting that everyone needs to start thinking about their pension themselves. Now when the situation with the government budget is negative, they start thinking about that. People do not understand and think that it is not fair to give a lot of their income to pensioners now and at the same time they need to save money for themselves.

By implementing the 3 Level Pension system, Latvia started to go in the right direction, because people are having the possibility to increase their pension and take care of it themselves. In Latvia there are now seven private pension funds which offer 27 different pension plans you can invest into. There are also insurance companies that supply the third Pension Level.

The generation that in 5-10 years could be the economically active citizens and become tax payers is very small in number. Demographers of Latvia point out the unwillingness of the government or their inability to tackle the problem.

Latvia has a favourable geographical location, so it will not stay empty, that is why the flow of immigrants could be the only way out of the situation for the future pensioners. It is obvious that the government is not capable of solving this problem.

The problems that Latvia is facing today and will face over the future ten or twenty years such as migration, low birth rate, aging of society and the changes in national economy and economy, in general, as a result of the crisis leads to the fact that the burden on the social security budget will keep growing.

Initially the aim of Pension Level 2 was not only to increase pension capital, ensuring full value pensions in future, but it was meant to facilitate the development of national economy. It had to become the driving force of national economy. Today the accrued Funds in Pension Level 2 contain around 1 billion Lats. If this money were invested in national economy it could serve for the growth.

Currently the money mostly is invested in short term deposit savings where its profitability is much lower than inflation, so money loses it value. Financial means are also invested in state bonds. Bonds accumulate money for the state budget which goes to consumption but not into state investments in the long term.

In turn since December 30, 2008, pensions partly have been paid from money borrowed from IMF. Sustainable growth of social budget is hindered by the "economically booming years" when pension levels reached too high level with their additional allowances. The government of Latvia has 2 solutions, either to raise tax burden or to decrease the pensions. The third solution could be the structural reforms which, in turn could make the state administration much cheaper and more efficient, seems not to be feasible.

In Lithuania the Saeima adopted amendments in the Law on pensions which envisage starting from 2012 to increase gradually the retirement age until it reaches 65. It is planned, that the retirement age for men will be increased every year by two months, but for women for four months. Thus, the retirement age of 65 will be reached in 2027. Currently in Lithuania women retire at the age of 60, but men at the age of 62,5.

As to possibility to use the experience of other countries, Estonia seems to be the most appropriate case. Pension systems in Latvia and Estonia have much in common. They have three Pension Levels, the first two are formed by "savings" on behalf of the state, as to the Level 3, each individual can set aside sums for this level. However, having analysed, the pension system in Estonia, we could notice some very essential differences. The retirement age in Estonia has been increased to the age of 65.

The most obvious difference in pension accumulation has been formed at the initial stage of savings when the rate of contributions in Latvia constituted 2%, whereas in Estonia it was 6%.

Secondly, despite the fact that the three level pension system works in the same way, Estonia is two steps ahead of us in relation to Level 2 pension. It refers to the following:

- 1) In Estonia the Level 2 capital can be inherited by the relatives not taking into account whether the individual reaches the retirement age or dies before it. This motivates individuals to make savings, as well as they are interested in their profitability.
- 2) Estonians are well aware about the profit that each manager has made for their pensions, this is due to the electronic information system being set up in Estonia Central Savings web page. The information can also be accessed in internet banks.

## 3. Conclusions

1) The level of Latvian industrial efficiency significantly falls behind the average efficiency level in EU. Current low absorption of innovation reduces the possibility to achieve rapid improvement of macroeconomic situation. Innovation process must be related to creating comparative advantage, particularly within markets identified as perspective for Latvia.

2) In order to reduce impact of increasing labor costs on competitiveness of Latvian manufacturers, it is necessary to improve competitiveness of tax system. Reduction of tax burden on business and employment must be achieved.

3) In order to reduce the negative impact of demographic changes on production modernization, it is necessary to encourage development of professional education and system of lifelong education, by ensuring accordance between labor supply and demand, through putting emphasis on improvement of employee skills and increasing professional mobility.

4) It is significant to reduce shadow economy by supporting honest entrepreneurs and creating favourable conditions for conversion to official economy, and to continue transformation of State Revenue Service into institution helping entrepreneurs.

5) It is necessary to consider seriously migration issues (immigration and emigration) policy, so that it contributes to a qualified workforce and enhances economical growth. Yes, we might agree, that they help in covering state subsistence costs, but it is unlikely that they will be able to create added value to economy.

6) It is necessary to increase gradually the contributions into Pension Level 2 until it is at the same of Pension Level 1 contributions, making it possible for people to make savings for pensions. Pension Level 2 savings should be invested in more profitable finance instruments in Latvia.

7) The Latvian government has to indicate the specific future for the Pension Level 3 system in the country. The social tax should be decreased gradually by motivating people to apply for the Pension Level 3. The accumulation system should be introduced when working people make contributions into private pension funds and receive later pension from those savings that have been made.

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