Why the share of small amount pensions is so substantial in Latvia?

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Abstract. More than 70% of all old-age pensions in Latvia are smaller than 300 euro, which is close to the monetary value of the at-risk-of-poverty threshold. There is a number of reasons for it: the lack of non-contributory component and inadequately low minimum pensions, the absence of redistribution mechanisms in the mandatory notional defined contribution (pillar I) and funded (pillar II) schemes, an unfair conversion of pre-reform employment record into pension formula, and a high tax burden on pensioners. The authors proposed a package of measures to improve the situation: an introduction of basis pensions, linking minimum pensions to the country average wages, increasing income tax exempt for pensions, restoration of the supplements for pre-reform employment and their regular indexation, removal of the threshold in initial notional pension capital calculation or its reduction from 30 to 20 years.

1 Introduction

Along with many other countries that undertook fundamental pension reforms in 1990s, Latvia went through an essential reform of its old-age pension system in 1995 by introducing the notional defined contribution scheme, later complemented by mandatory and voluntary private pension funds.

It was anticipated that the modern multi-pillar system would strengthen the social security of the elderly and bring decent pension benefits to the population. In reality, after twenty years of the reform being effective, the pensioners in Latvia are among the poorest in the EU.

Leading international experts note that "a primary objective of public pension systems is to provide adequate levels of retirement income to ensure that people are not at risk of poverty in old age" [1]. Meanwhile, the Latvian Ministry of Welfare, sees the objectives of the pension system in the provision of long-term financial stability (in the first instance) and in the adequate replacement rate in accordance with individual contributions [2, 3]. Such goal as the poverty alleviation, regretfully, is not articulated by the architects of the Latvian pension system.
2 Occurrence of small amount old-age pensions

The share of old-age pensioners in Latvia who receive small and very small pensions is disastrously high. According to the data of Central Statistical Bureau (CSB) of Latvia, in 2015, 70.5% of all old-age pensioners had pension benefits below 300 euro, 40.3% had pensions below 250 euro and 12.0% – below 200 euro. The monetary value of the at-risk-of-poverty threshold – specified at 60% of the national median equivalent disposable income – was not available for 2015 at the time of writing this paper (January 2017), while the CSB calculations for the previous past years return to 291 euro in 2014 compared to 260 euro in 2013, so one can expect a figure well above 300 euro for 2015. This means that more than 70% of old-age pensions actually were below the poverty threshold. Surely, some of the old-age pensioners are still working and receiving wages in addition to their pensions and some are receiving their pensions from more than one state, but to the majority of Latvian old-age pensioners public pensions are their only source of income (excluding the financial support from their family members).

The distribution of pensions by size is very much skewed: although the average old-age pension in September 2016 was equal to 296.09 euro, ca. 68% of all pensions were lower (see Fig. 1). On the other side of the scale, public pensions in Latvia have no upper limit. 1% of all pensions (not shown on the figure) are higher than 1000 euro, the highest old-age pension in 2016 being as high as 19 thousands euro per month [4]. Polarisation of rich and poor pensioners is only increasing with the course of time. The S80/S20 ratio for old-age pensions is about 3.0 in 2016, while in 2009 it was ca. 1.8 (for comparison – in neighbouring Estonia this ratio was 1.7 in 2016 [5]).

![Fig. 1. Distribution of old-age pensions by size compared to the average pension in Latvia in September 2016. Source: State Social Insurance Agency.](image-url)

The next figure (Fig. 2) provides the comparison of the at-risk-of-poverty rates in different age groups in Latvia as opposed to the EU averages during the last eight years. Almost in all age groups (except for the young aged 18–24) Latvians are more exposed to the risk of poverty, but the most critical situation is among those of retirement age, where the 2015 rates were twice higher than the EU averages, which is the second-worst result in the EU after Estonia. The surprisingly good rates in 2010–2012 resulted not from the improvement of financial situation of the pensioners, but were due to the exceptional decline in the incomes of the working age population in the crisis years.

With the population ageing and emigration of the employable people the share of pensioners in Latvia is expected to increase, making the issue of old-age poverty more and more acute. The causes of the existing situation and possible solutions are considered further in this paper.
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3 Cause-and-effect analysis

A number of causes contribute to the overweight of small amount pensions in Latvia rooting in the institutional design of the country pension system. Some of them are immanent features of the chosen public Notional Defined Contribution (NDC) pension scheme, while the keys to others lie in ill-considered norms or in unfortunate course of events.

3.1 Lack of non-contributory basic pension

Latvian pension system completely lacks any non-contributory element in the form of basic pension that could be either flat-rate or linked to the length of service record, available to everyone or means-tested.

Guaranteed minimum income provision is not meant for the elderly people. It is not a part of social insurance system and is arranged by local municipalities from general taxes. Indeed, its amount in 2017 is 49.80 euro which is even lower than the minimum old-age pension.

The introduction of minimum income level (MIL) which was supposed to take place in 2016 and improve the situation with the poverty in Latvia has been postponed till 2019 without any political debates.

3.2 Inadequate minimum pension

The eligibility for an old-age social insurance pension is restricted by the minimum mandatory period of work experience – 15 years (will be raised to 20 years in 2025) and the minimum pension amount depends on the length of service (see Table 1):
Table 1. Minimum amounts of old-age pension in Latvia (2016).

| Length of service (years) | Amount (EUR) |
|---------------------------|--------------|
| 15–19                     | 70.43        |
| 20–29                     | 83.24        |
| 30–39                     | 96.05        |
| 40+                       | 108.85       |

These amounts are linked to the amount of the social security state benefit. Although the Cabinet Regulation stipulates that “the Cabinet shall review the amount of the State social security benefit on the basis of a proposal by the Minister for Welfare in accordance with the possibilities of the State budget, as well as by assessing the economic situation in the State and by taking into account the average actual consumer price index specified by the Central Statistical Bureau” [6], this wording is non-committal, and the amount of benefit has not been revised since 2006 in fact.

With the shift to individualised pension accounts the role of the minimum pension in poverty protection is increasing [7]. Latvia has not ratified either ILO Social Security (Minimum Standards) Convention, 1952 (No. 102), or ILO Invalidity, Old-age and Survivors’ Benefits Convention, 1967 (No. 128). Both of them are setting the lower limits of the old-age pension to the average insured wage (50% of the average insured wage according to the Convention No. 102 or 56.25% of the average insured wage according to the Convention No. 128). When we compare the minimum pension amounts to the average insured wage in Latvia in 2015, we obtain the ratios 10.6–16.4% – which are by far lower than the international standards.

According to the data of the Ombudsman of the Republic of Latvia, 11% of all newly granted pensions are minimum pensions [8].

Within the above mentioned MIL concept, it is planned to link the statutory minimum pension to the minimum income level; however, no legislation drafts are available publicly and the introduction of the MIL has been postponed several times.

3.3 Mandatory pillars I and II: No redistribution

Currently, the design of the Latvian pension system is made up of three pillars, two mandatory and one voluntary.

The first (mandatory) pillar pension benefit is earned by insured individuals by “directing” part of their social insurance contributions to the personalised notional pension capital account. No actual money transfer takes place; this capital exists only as a record in the State Social Insurance Agency database, and the whole scheme is known as NDC: notional (or, in another version, “non-financial”) defined contribution. The accrued notional capital is annually valorised in line with increases in the covered wage bill. These annual indices imitate the role of interest rates in funded schemes. The pension amount is the sum of notional capital at retirement divided by the life expectancy at retirement age.

The second (mandatory) pillar benefit is earned by insured individuals by directing part of their social insurance contributions to a private pension fund chosen by the insured person. In this pillar, actual money transfer is made from the state’s special budget, accumulating the social insurance contributions, to pension funds, and the insured person acquires a certain amount of pension plan shares with each transfer. Pension funds invest the money into different financial instruments aiming to increase the net asset value per share. At the time of retirement the accumulated capital made of the insured’s contributions plus accrued interest is converted into a monthly benefit either by adding it to the person’s
first-pillar NDC with further transforming into annuity according to the rules described above, or by purchasing a life pension insurance policy from an insurance company. However, the second option is practically not in use yet, only 6–7% of those who retired in 2015 and who were participating in the second pillar did use the option to buy an insurance in exchange of pension accumulations. At the end of 2016 there were four insurance companies offering these policies, three of them require an applicant to have at least 3000 euro accumulated in a second pillar pension fund, and one insurance company sets the minimum capital requirement at 5000 euro. Meanwhile, on 31/12/2015 the average accumulated capital among those with the longest possible record (14 years of participation) was 2878.78 euro on average [9]. Consequently, the majority of pensioners are not eligible for choosing the option to buy a life insurance.

Neither the first (NDC), nor the second (private pension funds) pension pillar in Latvia includes any redistribution from the rich to the poor. As John B. Williamson and Matthew Williams have aptly noted, such systems “could actually end up redistributing money from the poor to the rich tend to live longer than the poor, which means that the rich will often end up reaping disproportionately more from the system” [10]. In the funded pillar the reverse redistribution from the poor to the rich arises also because of worse financial literacy of the disadvantaged population who are therefore more exposed to making wrong investment decisions. The gender income disparities in funded and quasi-funded schemes are not evened either and are even amplified in old age [11].

### 3.4 Treatment of pre-reform service record (employment before 1996)

In 1995 Latvia became one of the first countries in the world to introduce the NDC scheme, and the only one that extended the NDC to all working population irrespective of their age. Therefore a mechanism was needed for incorporating the pre-reform service period into the NDC formula – i.e. the Soviet times when no social insurance contributions did exist at all, and the early 1990s. The so called “initial [notional pension] capital” was introduced for this purpose.

Three other European countries – Italy, Sweden and Poland – have also adopted the NDC in those years and faced similar problems. However, the approaches used by pension architects in relation to the pre-reform service records differ considerably [12]. In the same year of 1995, a pension reform introduced a NDC system in Italy. But in that country the NDC-scheme fully applies only to individuals entering the labour market from 1996 onwards, while people with at least 18 years of contributions in 1995 continued to be the subject to the previous system and people in between (with fewer than 18 years in employment by 1996) have pension calculated by a mix of the old and the new formula: pension rights obtained in the old system are not converted into the new one.

In Sweden, where the NDC concept was originally developed, the pension reform took place in 1999 and the reformed system applied in full to those born 1953 and later. Those born before 1938 were not included into the reformed scheme; those born between 1938 and 1952 received a mix of old defined-benefit and new NDC pension. NDC was “retroactively” applied to individual earnings histories from 1960 for everyone born 1938 and after to calculate their initial capital.

Poland launched NDC in 1999 as well and applied it to those born in 1949 and later, i.e. to those who were under 50 years at the time of implementation. Those aged 50+ continued to acquire their pension rights and have their pensions calculated according to the old defined-benefit formula. For people born after 31 December 1948, their initial capital was calculated according to the old rules reflecting their pension rights acquired before 1 January 1999.
In Latvia, the initial capital amount is based on two variables: (1) the length of the employment and equated periods until 31/12/1995; and (2) the average earnings during the period 01/01/1996–31/12/1999 (reference period) from which social insurance contributions were paid. Non-productive periods when the person did not get any earnings have the same weight as productive ones: the total amount of all earnings is divided by 48 months. To calculate the initial capital, the individual’s average earnings in the reference period are extrapolated to their whole pre-reform working career.

This theoretically-derived initial capital is then incorporated into the person’s notional capital.

The share of the initial capital in the total notional capital was close to 100% in the first post-reform years and until now the pre-reform service record has made more than a half in the whole employment history for any Latvian pensioner. So the principles of translation into the reformed pension formula are a very important factor influencing adequacy and equity of pensions.

The years taken as the reference period were quite difficult for Latvian economy, when a large share of population suffered from low earnings, long-term unemployment without any benefits, and/or grey “envelope” salaries. In addition, the population was not sufficiently informed of the reformed pension legislation and was unaware of the importance of that period to their future pensions.

It did not take long before the formula started generating a growing amount of very small pensions, so the initial law was amended to improve the situation partially. Should a person have no insured wage in the reference period or should his/her average insured wage in the reference period be lower than the statutory minimum wage, the minimum wage is taken into calculation. Starting from 2002, this provision was amended and split into two separate rules. A special rule of calculating the initial notional capital for people with low wages in 1996–1999 but having 30 or more years of employment record was introduced: Paragraph 33 of the Transitional Provisions to the Law on State Pensions says:

“33. The calculation of the pension initial capital for an insured person, whose length of period of insurance is not less than 30 years and whose average monthly wage subject to insurance contributions, which has been calculated in accordance with Paragraph 13 of these Transitional Provisions, is less than the average wage subject to insurance contributions in the State in the period from 1 January 1996 to 31 December 1999, consideration shall be made of the 48 month average wage subject to insurance contributions in the State within the previously indicated time period. State pensions, which have been granted to insured persons from 1 January 2000 to 31 December 2001, and to whom the previously referred to conditions are applicable, based upon their request, shall be recalculated from 1 January 2002.” [13] (Quoted as per wording in force in January 2017)

For the first time this Paragraph appeared in the Law on 20 December 2001 (in force since 01 January 2002), and the first version of the Paragraph included time restrictions: this rule was intended to be in force “up to 1 January 2010”. The rule was designed as an ad hoc temporary measure. Later on, it became obvious that the number of such people remains high, and on 19 June 2008, the Saeima (Parliament) extended the validity of the Paragraph for two more years – “up to 31 December 2011”. On 8 December 2011, one more two-year extension was granted – “up to 31 December 2013”. Further, on 14 June 2012, it was again prolonged for two more years – “up to 31 December 2015”. And finally, on 3 April 2014, the time restriction was lifted and the duration of this rule is not limited in time. On 18 June 2015, it was also preconditioned that at least five years of the insured period need to be earned after the reform (valid since 1 July 2017).

For those not having 30 years of employment, another benchmark is applied instead of the statutory minimum wage since 2002: the person’s average insured wage in the reference
period upgraded by annual valorisation indices is compared to 40% of the average countrywide insured earnings in the year prior to the year preceding the calendar year of retirement (i.e. in 2017 the benchmark year is 2015). Should the benchmark figure be higher, it is used for calculating the initial capital.

The 30-year boundary is arbitrarily dividing pensioners. The authors, therefore, considered worth of comparing two model cases on both sides of the boundary: 30-year record vs 29-year record.

Using the retrospective simulation method [14] we have compared a number of model cases: a person retiring at the end of 2014 and having either 29 or 30 years of employment record and at different wage levels throughout the career: from 50% of the country average wage to 250% of the country average. The official pensionable age in 2014 was 62 years and 3 months, so the maximum possible length of service record was assumed to be 44 years. The probability of a career interruption in each particular year varies in line with the registered unemployment level in the country in the respective year $t$ (the higher the unemployment – the lower the probability $P$ to have the full year $t$ in personal service record):

$$P_t = \frac{30 \text{ (or 29)}}{44} \times \frac{100 - U_t}{100 - \sum_{1971}^{2014} \frac{U_t}{44}}, \quad \sum_{1971}^{2014} P_t = 30 \text{ (or 29)} \quad (1)$$

The historical unemployment rates for the Eq. (1) are taken from LABORSTA (laborsta.ilo.org – Statistical Office of International Labour Organisation) and Eurostat. The earliest available data for Latvia is for 1992 (3.2%), for the period 1989–1991 Estonian figures were extrapolated to Latvia. As well as the rate 0.6% observed in Estonia in 1989 and 1990 was extrapolated to the whole period 1971–1988. Omitting the interim stages of further calculation, the obtained results are shown in Fig. 3 below.

![Fig. 3. Theoretical net old-age pension and replacement rate for a person retiring in 2014 depending on the wage and length of employment record. Source: authors’ calculations based on statistical and normative data.](https://doi.org/10.1051/shsconf/20184003011)

Due to the arbitrary threshold set at 30 years, the difference in net pension benefit between people with 29- and 30-years’ record among low earners in Latvia is inequitably high: one extra year of service would bring 37.99 EUR for people earning 50% of the average wage and 23.94 EUR for people earning 75% of the average wage. Should a person have no employment in some specific “unlucky” years, these differences are pronounced even stronger. Although Paragraph 33 of the Transitional Provisions of the Law on State Pensions considerably improves the adequacy of low-earners with long service record in
Latvia – the replacement rate in the model case “30 years of employment at 50% of the country average wage” is 53% (which is graphically demonstrated above) in contrast to 36% in the model case “29 years of employment at 50% of the country average wage”, – this approach is far from being truly equitable.

One more mechanism for compensation for the pre-reform employment was introduced in 2006, namely, the monthly monetary supplements to pensions amounting to one euro for each pre-reform year of service. Initially, they were granted only to people with low pensions assigned both before and after 1996, but starting from 2009 (in the course of pre-elective populist package) they were extended to all pensioners. Since 2012 these supplements have been phased out: those who retired before 2012 are still receiving the supplements, but later pensioners are not. In contrast to pensions, the supplements are not indexed, so their amount has not changed since 2006. Both of these factors: different treatment of pre-reform years for those retired before and after 1 January 2012 and lack of supplement indexation, – run in opposition to the fairness principle and need to be reviewed.

### 3.5 Taxation of pensions

In Latvia, the pensions assigned before 1996 (i.e. according to the pre-reform pension law) are not taxed for income tax. The pensions, assigned starting from 1996, are taxed for 23% income tax (this is the current rate, historically the rates varied from 23% to 26%). The non-taxable amount is set at the level of 235 euro (this level has not been raised since its introduction in 2009). As was demonstrated above, this threshold is significantly below the average pension level, and ca. 70% of all pensions surpass the tax exempt.

For comparison, the other two Baltic countries: in Lithuania pensions are not taxed at all, while in Estonia both the tax rate is lower (20%) and the tax exempt is higher (395 euro, which is higher than the average pension), making the tax burden on pensioners much less noticeable for the majority of pensioners [15].

### 4 Conclusions and recommendations

In the absence of redistribution mechanisms in mandatory pension pillars accompanied by high tax burden on pensions, the only systemic element aimed at alleviation of poverty in the old age is the statutory minimum pension, which is not equal to the task.

Therefore, within the existing institutional design of the pension system, the first and foremost way to fight poverty among the elderly population in Latvia is to increase the minimum statutory pension level(s) and to link it to absolute (e.g. consumer basket) or relative (e.g. at-risk-of-poverty threshold) indicators and ensure their annual revision.

The second easy-to-implement measure to address the low income group – is to increase the tax exempt and link it to the absolute (e.g. the statutory minimum wage) or relative (e.g. the average or median pension) indicators and ensure their annual revision.

Our third recommendation relates to the treatment of the pre-reform employment record. Although the very approach of using the short reference period during which serious economic perturbations took place for extrapolation to the major part of working career seems inappropriate, unfair and cannot be recommended to other countries planning their pension reforms, in case of Latvia it would be too costly to re-organise the translation formula fundamentally (like extending the reference period for a longer period; or excluding of non-productive periods from the reference period). Instead, we suggest the measures aimed at the most vulnerable groups: first, the 30-year threshold should be removed and the country average insured wage should be always used when it is higher than the individual’s average insured wage. There are not many people with short service
record, since employment was mandatory in the USSR. Second, we believe that the supplements for the pre-reform years of employment should also be allocated to pensions granted after 2011, as well as their amount should be increased.

We would also recommend starting a discussion on introducing of a non-contributory element into Latvian pension formula, in the form of a basic pension. In order not to increase the total social insurance contributions rate, this would need a split of the current mandatory pay-as-you-go pillar into two components: some part of the pillar I contributions may be directed to the “common pool” for basic pensions, while the rest still be registered on individual notional accounts in the NDC-scheme. Needless to say, that the exact proportion of this split as well as the form of the basic pension should be a subject to a thorough analysis.

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