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NOTIONAL DEFINED CONTRIBUTION PENSION SCHEME EXPERIENCE IN LATVIA: SOME LESSONS[1]

In 1996 Latvia became one of the first countries in the world to adopt the notional defined-contribution (NDC) pension system. The authors have been studying the distribution of old-age pension benefits in Latvia and its dynamics over recent years. They conclude that the Latvian pension formula practically lacks any redistribution mechanism, pension benefits do not have any upper limits, and the minimum level is set as inadequately low. Pure NDC systems are not adequate for countries with a relatively large gap between the rich and the poor (as is the case of Latvia); material stratification is not evened out in old age, and combined with low replacement rates it leads to massive poverty among the elderly. Latvian authorities have recently recognized the need for NDC pension system improvement, and elaboration of the basic pension concept in Latvia should start in 2015. The authors provide a brief comparison with the situation in neighbouring Estonia, where the distribution of pension benefits is much more even.

Keywords: pension reform, notional defined contribution pension systems, inequality

NDC ASSESSMENT: KEY LESSONS FROM INTERNATIONAL EXPERIENCE

The most popular and traditional public pension scheme in modern society is known as the defined benefit (DB) system. Private pensions, in their turn, normally follow the defined contribution (DC) principle. The Notional Defined Contribution (NDC) concept for public pensions was born in the early 1990s and has been put into practice in a number of countries. "'Go for an immediate transition, to avoid future problems' – such is one among key policy lessons formulated by the experts of World Bank" (Holzmann and Palmer 2012: 3).

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One of the first extended analyses of the NDC system was made by American researchers John B. Williamson and Matthew Williams (Williamson and Williams 2003). As they point out:

> NDC systems could actually end up redistributing money from the poor to the rich. Pensions are calculated using a uniform actuarial formula that does not take into account lifetime income or longevity risk classes; however, the rich tend to live longer than the poor, which means that the rich will often end up reaping disproportionately more from the system.

The authors have also noted that another negative effect of an NDC scheme is that, in the absence of a generous guaranteed minimum pension, there will generally be greater income inequality among retirees.

These views were shared by the authors of the collected book *Pension Reform: Issues and Prospects for Non-Financial Defined Contribution (NDC) Schemes*, published by the World Bank in 2006. The World Bank was one of the most active propagators of the NDC approach and this book was aimed at summarizing the initial years of experience of the new system. In the book, prominent pension expert Nicholas Barr stresses that NDC is not the best solution for poor countries: "If the country is poor, the poverty line [...] is relatively close to average earnings. Hence there is little gain from an earnings-related pension in general, and NDC pensions in particular" (Barr 2006: 66). Other researchers add that the most effective mechanism to achieve redistribution in an NDC system "is a complementary noncontributory pension that is reduced as the contributory pension increases" (Lindeman, Robalino and Rutkowski 2006: 303).

In 2012–2013 the World Bank published another two volumes devoted to summing up the lessons from the countries that had implemented the NDC model: *NDC pension schemes in a changing pension world: Volume 1 – progress, lessons, and implementation* and *Volume 2 – gender, politics, and financial stability*. Again, the authors noted that "NDC schemes must be supplemented with special provisions for low-income groups to prevent old-age poverty" (Bovenberg 2013: 496). The gender income disparities are also not evened out (and are even amplified) in old age: "fiscal sustainability was achieved in NDC schemes largely by cutbacks on the benefits that were least connected to contributions – disproportionately benefits for women" (James 2013: 29).

When moving from a conventional pay-as-you-go defined benefit scheme to an NDC scheme, multiple options for coverage during the transition are available. There are three basic cases:

1) only new entrants are required to join the new scheme,
2) only individuals with a short service record under an old scheme are required to join,
3) all are required to join the scheme from its first day.

In the third case, the rights acquired under the old scheme are translated into initial capital in the NDC system and are credited to the individual's personal notional account. Only one country, Latvia, adopted the full, immediate transition. Therefore, let us look at the design and outcome of 18 years of NDC-scheme experience in Latvia.

PENSION SYSTEM IN LATVIA – A BRIEF OVERVIEW

In 1996 Latvia became one of the first countries in the world to introduce the NDC scheme, and the first one to immediately apply it to all retiring persons irrespective of their age. For comparison, other European countries that chose the NDC system extended its coverage only to younger generations. In Sweden, where this system was originally developed, the reformed system applies in full to those who were born in 1954 or later, and part of the pension of elderly people is calculated according to older rules. In Poland, the NDC was applicable only to those born after 1949. In Italy, only new entrants into the labour market who started their working careers in 1996 and later are participating in the NDC, while all others are still having their pension benefits calculated according to the old scheme.

The pension system in Latvia underwent cardinal reforms in 1996–2001 under the mainstream paradigm of a) introducing three-pillar systems; b) closely linking the benefits to contributions, i.e. defined-contribution instead of defined-benefit schemes; and c) privatisation of public pensions via mandatory participation in private pension funds. These reforms were generally designed and supported by the World Bank and were adopted practically without any wide debate in public space.

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 pension value is the sum of notional capital at retirement divided by the projected life expectancy at retirement age. In the case of early retirement that is allowed two years prior to official retirement age, the premature pension benefit makes up 50% of an ordinary calculation (initially before the crisis, i.e. before July 1, 2009, it was 80%). The notional capital for the pre-reform period (years of service prior to 1996) is calculated based on average actual personal earnings in 1996–1999, and this rule is extremely unfair to those earning low wages, unemployed, or employed in the shadow economy (which was quite widespread in the 1990s).

The accrued notional capital is annually valorised (uprated) in line with increases in the covered wage bill. These annual indices imitate the role of interest rates in funded schemes. When the total amount of wages on a nationwide scale drops below the previous year's figure, the interest rate is negative, and all prospective pensioners will suffer from a reduction in pensions. This mechanism was incorporated into the system in order to maintain financial sustainability in times when fewer people enter the labour market than retire from it, and it was anticipated that the constant growth in wage rates and labour productivity would neutralise the effect of a decreasing working population and the index therefore would manage to remain above 1. Massive emigration, accompanied by wage-cuts and a sharp rise in unemployment in the crisis years resulted in negative pension capital indexation in three successive years, 2009–2011, and the average amount of a newly-awarded pension benefit dropped by 15% in the first quarter of 2012 compared to the first quarter of 2009. Abolition of the so-called "supplements" (one euro

per each pre-reform year of service, i.e. prior to 1996) for newly awarded pensions from 2012 had exacerbated this tendency. It was calculated that a person with a 45-year service record receiving the average nationwide wage throughout his/her career retiring in 2009 received a benefit 24% higher than did a similar person retiring in 2012. Pension indexation rules have been recently amended in Latvia. The pre-crisis formula was prescribing annual indexation according to changes in the consumer price index, but it was revoked in 2009, and since then the government has only made ad hoc indexation of small pensions (not exceeding 285 euros) in 2013. In 2014, another ad hoc indexation took place: indexation applied to all pensions, but only to the part under 285 euros. Further on, the threshold amount for indexation will be set at 50% of average insured wage and the indexation ratio is to be based on both the consumer price index (75%) and increase in the covered wage bill (25%).

The second (mandatory) pillar benefit is earned by insured individuals by directing part of their social insurance contributions to the private pension fund chosen by the insured person from among seven private asset managers offering 20 pension plans grouped into 'active', 'balanced' and 'conservative' depending on the investment strategy. 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 number 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 and receive remuneration of 1.15%–1.70% of total asset value per year, the administration cost being deducted from participants' contributions. 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, since the only three insurance companies offering those policies require the applicant to have at least 4,500–5,000 EUR accumulated in a second pillar pension fund (VSAA 2015). Very few Latvian residents have managed to accumulate such money: on 31/12/2013 the average accumulated capital was 1,372.22 EUR and even those with the longest possible record (12 years of participation) had on average 2,120.69 EUR (VSAA 2014: 23).

Although the second pillar was mandatory only for those born after 01/07/1971, in practice the vast majority of all those born between 02/07/1951 and 30/06/1971 who had the right to join the pillar voluntarily have exercised this right.

Taken together, mandatory social insurance contributions to the first and the second pillars make up 20% of the insured person's gross wage. The proportion between the first and the second pillar was 18%:2% respectively in 2001–2006 and in 2009–2012, 16%:4% respectively in 2007 and in 2013–2014, and 12%:8% respectively in 2008 (the year with the highest share of the private pillar). The initial plan was to keep it on the level of 10%:10% since 2010, but the crisis has contributed to the revision of the split between the first and the second pillars and the proportion of 14%:6% has been considered as optimal for the Latvian pension system (this will be in force from 2016).

The third pillar is voluntary, as any person can make contributions to a private pension fund: five asset managers offer 18 pension plans, and then convert the accumulated capital

into annuity. However, this pillar is not yet widespread among Latvian residents; many of those who joined the pillar then became inactive and quit paying contributions.

DISTRIBUTION OF OLD-AGE PENSION BENEFITS BY SIZE

While the role of funded pillars is increasing with the ageing of the population they do not contribute to ensuring compliance with the equitability goal that any successful pension system should pursue (Holzmann, Hinz and Dorfman 2008). Benefits in funded schemes are very much dependent on rates of return produced by the pension plan(s) chosen by a participant and on volatile security markets, thus the rule "same benefits for same contributions" conflicts with the very nature of funded pillars. Neither is any redistribution from the lifelong rich to the lifelong poor provided for in these pillars. Even more, promotion of third pillar voluntary pension plans (by granting tax reliefs on the contributions made to private funds) can be successful only among those persons who have enough extra money that can be directed to long-term savings. Those who live from paycheque to paycheque can hardly afford to withdraw any additional amounts from their household budgets and cannot, therefore, expect any significant third-pillar supplement to their mandatory 1st and 2nd pillar old-age pension benefits. This effect is exacerbated by low levels of financial literacy: as shown in recent international research (Lusardi and Mitchell 2011), persons with higher levels of education – who, as a rule, have higher incomes and therefore make larger contributions to pension funds – are better informed in financial matters and are less vulnerable to the risks of choosing an inappropriate investment strategy. Less educated persons, whose incomes are lower, are more exposed to the risk of making an unwise investment choice. In this context, funded pillars are rendering a disservice to the lifelong poor, causing further distortion in income distribution in old age. The larger share of total pension tax that goes to the second pillar, the higher the degree of inequity the system generates. Therefore, the redistribution task should be solved within the first PAYG pillar formula. In the Latvian case, however, the first pillar is missing such a mechanism as well.

The problem of uneven distribution of wealth is crucial for Latvia, as a very high level of inequality is a constant feature of Latvia's society. The Gini coefficient in Latvia has a stable trend to be among the highest in both old and new EU member states (see Tab. 1).

Table 1. Gini coefficient of equivalised disposable income

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013
EU-27	30.6	30.3	30.6	30.9	30.5	30.5	30.8	30.4	30.5
Poland	35.6	33.3	32.2	32.0	31.4	31.1	31.1	30.9	30.7
Estonia	34.1	33.1	33.4	30.9	31.4	31.3	31.9	32.5	32.9
Latvia	36.2	38.9	35.4	37.5	37.5	35.9	35.1	35.7	35.2

Source: Eurostat, EU-SILC, http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_di12

There is growing understanding among the general public that the level of inequality is unfair: public opinion polls evidence that in 2013, 93.9% of respondents considered income disparities in Latvia as being too high (Bela 2014: 97).

Material inequality is not levelled in old age, but conserved by the NDC formula. Figure 1 shows how the distribution of old-age pension benefits changed from July 2009 (earlier figures are incomparable due to methodological reasons) to March 2014.

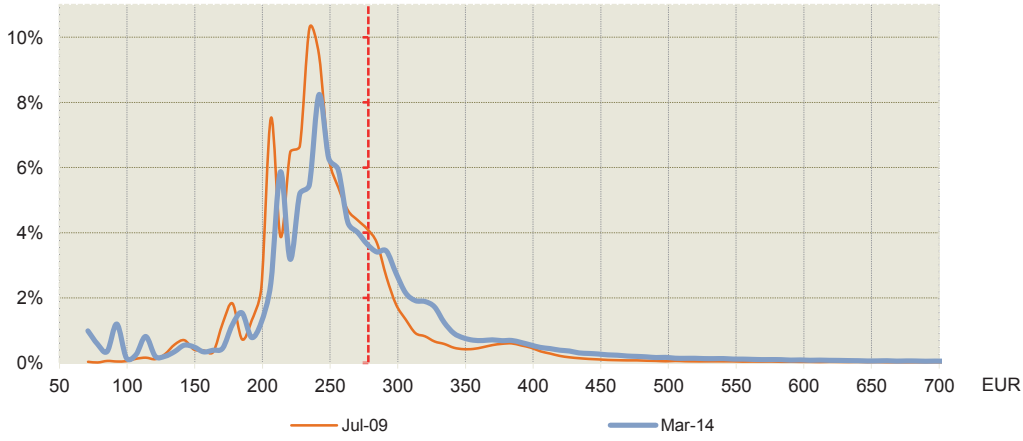

Figure 1. Distribution of old-age pension benefits by size in Latvia (share of pensioners receiving the corresponding amounts in the total number of pensioners)

Source: State Social Security Agency, authors' plotting

The vertical dashed red line marks the amount of average pension in March 2014: 278.24 EUR. 67% of all Latvian pensioners received a monthly benefit below this average then (in July 2009 it was 253.48 EUR and 64% of pensions found themselves below this benchmark). Public pensions have no upper limits (there are pensions of 5,000 EUR and higher), and the distribution curves have a very long right 'tail' not shown on the diagram, as only 1.9% of pensioners are receiving benefits above 700 EUR. Although the average pension during the said period has increased by almost 25 euro, the majority of pensioners experienced much more moderate increases in their incomes. The peaks are lowering, while the left and the right tails are increasing. The left tail is rising because of the growing number of persons to whom pensions are granted in accordance with the international regulatory enactments, i.e., when determining the rights of pension recipients the insurance periods of Latvia and other EU/EEZ Member States are taken into account, but each country grants pensions on its own insurance periods. Regretfully, Latvian statistics do not distinguish such pensioners as a separate group (Rajevska 2014).

It is interesting to compare Latvia to one of her neighbouring countries, Estonia, which has the same starting point after regaining independence, as well as very similar socio-economic conditions. Estonia has introduced a very different first-pillar pension scheme (their II and III funded pillars are functioning very similarly to those in Latvia), and the public pension there consists of three components: a flat basic pension absolutely equal to all retirees, a pre-reform component depending on the duration of service record before 1998, and an insurance component, depending on the person's earnings. Let us look at a hypothetical pensioner, who has been working for 40 years and retires this year in Latvia or in Estonia (Fig. 2). What would be his/her pension depending on his or her former wage? While the pension benefit of a person with an average wage (let us consider he or she had such wage throughout their career) is very close in the two countries – slightly above 300 euro (307 in Latvia and 316 in Estonia), the difference between "poor" and "rich" pensioners is much more pronounced in Latvia: one who had double that salary will receive double the pension, a salary three times higher would result in a pension three times higher *etc*.

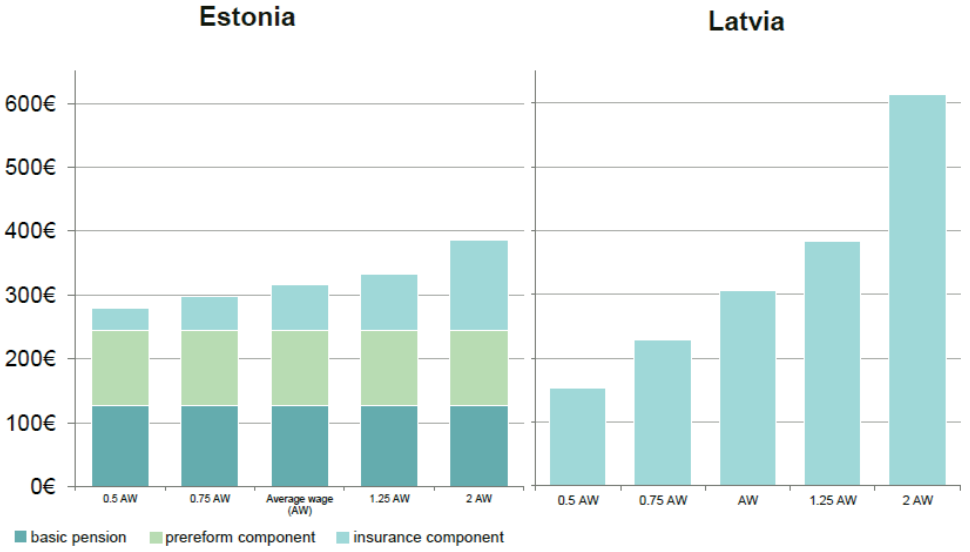

Figure 2. Predicted old-age pension benefit for a person retiring in 2014 with a 40-year service record (in EUR), depending on the previous wage

Source: authors' calculations based on statistical and normative data

The actual statistical data also demonstrate a much higher level of inequality among Latvian pensioners compared to their Estonian counterparts (see Fig. 3). Red dashed lines mark the respective amounts of average pensions in both countries.

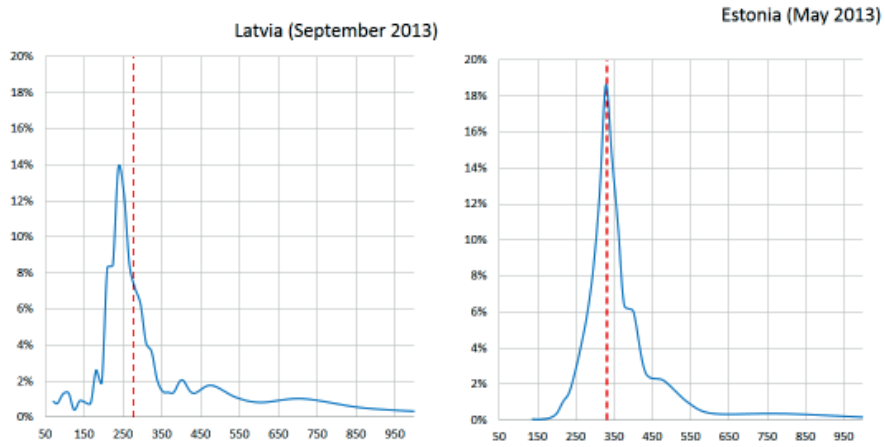

Figure 3. Comparative distribution of old-age pension benefits by size in Latvia and Estonia (share of pensioners receiving the corresponding amounts in the total number of pensioners)

Source: State Social Security Agency (Latvia), Estonian Social Security Board, author's calculations and plotting

Another interesting comparison can be made between distribution of old-age benefits among men and women in the two countries (see Fig. 4). In both countries, women's pensions are lower than men's, and in both countries income stratification among men is more pronounced. However, gender disparities are lower in Estonia.

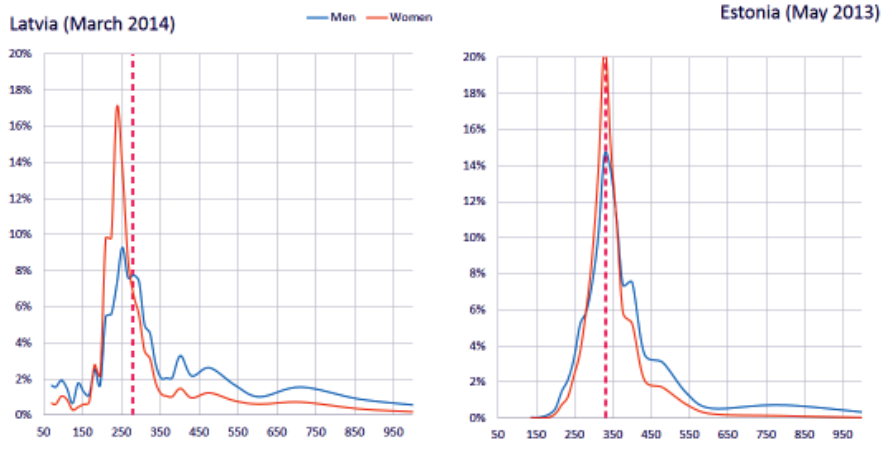

Figure 4. Comparative distribution of old-age pension benefits by size in Latvia and Estonia by gender (share of pensioners receiving the corresponding amounts in the total number of pensioners)

Source: State Social Security Agency (Latvia), Estonian Social Security Board, author's calculations and plotting

MINIMAL PENSIONS PROVISION

One of the main equity objectives in social policy is the guarantee of minimum standards. While the general design of a pension system is mainly focused on the lifetime smoothing of consumption levels, the minimum pension or other forms of guarantees (sometimes called "zero pillar") are aimed at achieving this exact objective. Poverty among the elderly is a problem of vital importance in Latvia, which can be evidenced by an extremely high rate of material deprivation in old age (see Tab. 2). Severely materially deprived persons, according to Eurostat methodology, are those who have living conditions severely constrained by a lack of resources and experience at least 4 out of 9 of the following deprivations: cannot afford to i) pay rent or utility bills, ii) keep the home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) take a one-week holiday away from home, vi) own a car, vii) own a washing machine, viii) own a colour TV, or ix) own a telephone.

Table 2. Severe material deprivation rate among persons aged 60 years and over (% of total population)

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013
EU-27	9.7	8.8	8.2	7.4	6.8	6.6	7.3	7.7	7.3
Poland	35.6	28.4	23.2	20.5	17.2	16.0	14.5	14.1	11.7
Estonia	14.2	7.6	7.9	5.4	5.7	6.3	5.3	7.4	6.8
Latvia	47.8	37.8	34.3	27.1	24.4	27.5	29.6	26.2	26.2

Source: Eurostat, EU-SILC, http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mddd11&lang=en

Elderly people are a group particularly at risk of poverty in any country, especially those persons who have been poor on a lifetime basis and are therefore unable to save enough, either through voluntary savings or through mandatory pension schemes. Statutory minimum pensions are designed to fight absolute poverty in this group of the population.

The eligibility for an old-age social insurance pension is restricted by a minimum mandatory period of work experience. These periods are set equal to 15 years in all three Baltic countries (with a minimum guaranteed amount varying depending on the length of service record in Latvia). The figures in the table below show the minimum amounts in euro, as they were in force at the time of drafting this paper in 2014. Latvian law prescribes an increase in the minimum mandatory period of service to 20 years in 2025.

Apart from social insurance pensions, there are also social assistance benefits for persons of pensionable age who do not qualify for a social insurance old-age pension because of a lack of required service years. In Estonia and Lithuania, these benefits are equal to a minimum old-age pension, and Estonia additionally requires that the recipient of such benefits should have resided in the country for at least 5 years before applying for the pension. In Latvia in addition to the 5-year qualifying period the applicant's age must exceed the normal pensionable age by 5 years, and even in that case the amount of the benefit is only 64.03 EUR (social security state benefit).

Table 3. Minimal amounts of state old-age pension benefit (May 2014)

Estonia	Latvia		Lithuania
	Length of service	Amount	
148.98 EUR	15–20 years	70.43 EUR	93.83 EUR social assistance pension
	21–30 years	83.24 EUR	
	31–40 years	96.05 EUR	
	>40 years	108.85 EUR	

Source: author's compilation from national social insurance agencies data

Latvia's Ministry of Welfare in their proposals for the improvement of the social security system (December 2013) recommended the government to discuss and investigate the possibility of introducing a basic or social pension that should be financed by the state, not a special social insurance, budget. In such way an old age pension should consist of two parts: 1) a basic or social pension – funded from the state budget; 2) a social insurance part according to contribution payments made by the person. In autumn 2014, the Government instructed the Ministry of Welfare to elaborate the concepts of basic pension and guaranteed minimum income in 2015. The introduction of new mechanisms is supposed to commence in 2017.

In Estonia, the minimum amount of state pensions is indexed annually, taking into account the inflation rate and increases in countrywide wage bill. In Lithuania, the minimum amount is set as 0.9 of the so-called basic pension (a component of the general pension formula), which, in its turn, lacks any clearly defined indexation procedure and is revised on a discretionary basis. In Latvia, the minimum is affixed to the amount of the social security state benefit, which also lacks any prescribed indexation and has not been changed since 2006 (see Fig. 5).

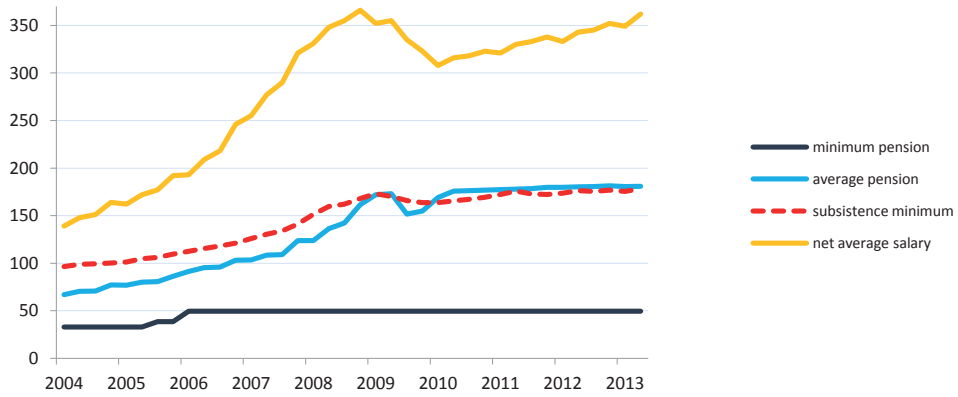

Figure 5. Minimum and average monthly old-age pension benefits compared to minimal subsistence level and net average salary in Latvia (Lats)

Source: Central Statistical Bureau of Latvia, authors' plotting

Poland has introduced a notional defined contribution pension system quite similar to the Latvian one; compared to other types (e.g. the "point system" used by Estonia and Lithuania) of pension systems this one, as has rightly been noted by Polish researchers (Chlon-Dominczak and Strzelecki 2013), almost entirely reduces the income redistribution within the pension system. That means that the minimum pension guarantee is the principal mechanism of income protection of old-age pensioners in the future.

Proposals to make amendments to the pension law concerning pension capital recalculation are on the public agenda in 2014, but the authorities are very reserved on this issue. The pension formula itself includes automatic balancing: as soon as the economic and/or demographic situation worsens, the newly granted pensions react by dropping. That is why the Latvian government did not even have to make any amendments to the essence of the pension system. International experts recognize that Latvia has achieved a very high level of pension sustainability (Finke 2014: 11). It was possible due to the low level of solidarity and redistribution that is immanent to notional-defined contribution pension schemes.

CONCLUSIONS

In 1996 Latvia became the first country to introduce the NDC scheme and it was immediately applied to all retiring persons irrespective of their age. Currently, the design of the Latvian pension system is made up of two mandatory and one voluntary pillars.

The experience of Latvia has proved that an NDC scheme is fair from a long-term perspective and stimulates everybody to provide a basis for their own security in old age, not relying on the state institutions. However, the immediate introduction of the new approach has contributed to a polarisation in pension amounts for new pensioners.

The crisis years taught at least two lessons: this time approve the sustainability of the system, and the necessity to have additional resources to compensate for losses of system self-regulated mechanism for a cohort of new pensioners.

Due to the lack of redistributive effect in NDC, Latvia's experience has demonstrated that it is not necessary to change the system radically, but to amend it with mechanisms providing some basis of security for every person in old age. The amount of this basis depends on economic conditions and agreement in civil society after wide explanation of the rules of the game.

REFERENCES

Barr, Nicholas. 2006. *Non-Financial Defined Contribution Pensions: Mapping the Terrain*, in: Robert Holzmann and Edward Palmer (eds.), *Pension reform: issues and prospects for non-financial defined contribution (NDC) schemes*, Washington, D.C.: The World Bank, pp. 57–70.

Bela, Baiba (ed.). 2014. *Latvia. Human Development Report 2012/2013. Sustainable Nation*, Riga: University of Latvia.

Bovenberg, Lans. 2013. *NDC Schemes Strengths and Weaknesses*, in: Robert Holzmann, Edward Palmer and David Robalino (eds.), *NDC pension schemes in a changing pension world: Volume 2 – gender, politics, and financial stability*, Washington, D.C.: The World Bank, pp. 495–503.

Chłoń-Domińczak, Agnieszka and Paweł Strzelecki. 2013. *The minimum pension as an instrument of poverty protection in the defined contribution pension system – an example of Poland*, "Journal of Pension Economics and Finance" 12 (03): 326–350.

CSP, 2014. *Average wages and salaries are rising accordingly forecasts*, retrieved from http://www.csb.gov.lv/en/notikumi/28022014-average-wages-and-salaries-are-rising-accordingly-forecasts-39488.html [01.12.2014].

Finke, Renate (ed.). 2014. *2014 Pension Sustainability Index*. Allianz SE, retrieved from https://www.allianz.at/v_1396336400000/privatkunden/media-newsroom/news/aktuelle-news/pa-download/20140401studie-pension-sustainability-index.pdf [01.12.2014].

James, Estelle. 2013. *Gender in the (Nonfinancial) Defined Contribution World: Issues and Options*, in: Robert Holzmann, Edward Palmer and David Robalino (eds.), *NDC pension schemes in a changing pension world: Volume 2 – gender, politics, and financial stability*, Washington, D.C.: The World Bank, pp. 3–33.

Holzmann, Robert, Richard Hinz and Mark Dorfman. 2008. *Pension Systems and Reform Conceptual Framework*. The World Bank SP Discussion Paper No. 0824, June 2008. Retrieved from http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Pensions-DP/0824.pdf [01.12.2014].

Holzmann, Robert and Edward Palmer. 2012. *NDC in the Teens: Lessons and Issues*, in: R. Holzmann, E. Palmer and D. Robalino (eds.), *Nonfinancial Defined Contribution Pension Schemes in a Changing Pension World: Volume 1 Progress, Lessons and Implementation.* Washington, D.C.: The World Bank, pp. 3–29.

Lindemann, David, Robalino, David and Michal Rutkowski. 2006. *NDC Pension Schemes in Middle- and Low-Income Countries*, in: Robert Holzmann and Edward Palmer (eds.), *Pension reform: issues and prospects for non-financial defined contribution (NDC) schemes*, Washington, D.C.: The World Bank, pp. 293–324.

Lusardi, Annamaria and Mitchell, Olivia S. 2011. *Financial literacy around the world: an overview*, "Journal of Pension Economics and Finance" 10: 497–508.

Rajevska, Feliciana. 2009. *The welfare system of Latvia after renewing independence*, in: Klaus Schubert, Simon Hegelich and Ursula Bazant (eds.), *The Handbook of European Welfare Systems*. New York: Routledge, pp. 328–343.

Rajevska, Olga. 2014. *Pension statistics in Latvia: resources and weaknesses*, "The Journal of Economics and Management Research" 3: 65–74.

VSAA, 2014. *Pārskats par valsts fondēto pensiju shēmas darbību 2013. gadā*, http://www.vsaa.lv/media/uploads/UserFiles/pakalpojumi/stradajosajiem/2_pensiju_limenis/vfps_2013_gada_parskats.pdf [01.12.2014].

VSAA, 2015. *Valsts fondēto pensiju shēmas darbība 2014. gadā*, http://www.vsaa.gov.lv/media/uploads/UserFiles/vfps_statistika/2_pensiju_limenis/2014_gada_rezultati__majas_lapai.doc [01.12.2014].

Williamson, John B. and Matthew Williams. 2003. *The Notional Defined Contribution Model: an Assessment of the Strengths and Limitations of a New Approach to the Provision of Old Age Security*, http://crr.bc.edu/wp-content/uploads/2003/10/wp_2003-181.pdf [01.12.2014].

DOŚWIADCZENIA ŁOTWY Z REPARTYCYJNYM SYSTEMEM EMERYTALNYM OPARTYM NA ZDEFINIOWANYCH SKŁADKACH – KILKA UWAG

W 1996 roku Łotwa jako jedno z pierwszych państw na świecie przyjęła repartycyjny system emerytalny oparty na zdefiniowanych składkach (NDC). W artykule autorki zajmują się sposobem dystrybucji emerytur oraz ich dynamiką na Łotwie. Dochodzą do wniosku, że w praktyce w łotewskim systemie brakuje mechanizmu redystrybucji, emerytury nie mają żadnego górnego limitu, a próg minimalny jest ustalony na bardzo niskim poziomie. Takie „czyste" systemy NDC nie są odpowiednie dla krajów, w których istnieje duże rozwarstwienie pomiędzy najbogatszymi a najbiedniejszymi (jak jest to w przypadku Łotwy), gdyż ekonomiczna stratyfikacja nie zostaje wyrównana w starszych grupach wiekowych, a wraz z niskim poziomem zasiłku prowadzi do ogromnej biedy wśród starszych ludzi. Łotewski rząd dopiero niedawno zorientował się, że potrzebne są zmiany w obowiązującym systemie, których wdrażanie zaplanowano na początek 2015 roku. Autorki dokonują krótkiego porównania sytuacji na Łotwie z systemem w Estonii, gdzie dystrybucja emerytur jest znacznie bardziej równomierna.

Słowa kluczowe: reforma systemu emerytalnego, repartycyjny system emerytalny oparty na zdefiniowanych składkach, nierówności