

STATUTORY AND EARLY RETIREMENT AGE REGIMES

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Abstract

Statutory retirement age is the most visible parameter of the old-age pension system and one which sets a clear signal for people in making economic decisions. The contribution analyses different concepts of statutory retirement ages under the different welfare regimes. These regimes and models have been heavily influenced by the politics and public choice. Early retirement age regimes became a new phenomenon in the latest half-century, making the retirement more flexible and risky – for the providers. The Czech experience reveals the fiscal risk of the retirement age reforms and of the financial illiteracy of the clients. Actuarial neutrality of the early retirement benefits should decrease the fiscal risk and support the equivalence principle in the Czech pension system. Statutory and early retirement ages play a different role under different pension pillars and products.

Keywords

Public pensions, Private pension savings, Welfare regimes, Statutory retirement age, Early retirement age, Actuarial neutrality.

JEL classification: H55, J32, G22

1 Introduction

The retirement age is a necessary component of every system of old-age pensions – it is an “artificial” age limit for pension entitlement, predestined to become a typical parameter of social policy. This contribution aims at finding typical models of relationships between pension concepts under different welfare regimes and statutory and early retirement ages, taking into account the development of general economic and social conditions. It is a topical issue of the Czech retirement policy.

2 Old-age pension concepts and statutory retirement ages

The statutory retirement age plays the most striking role in the disability concept of old-age pensions, applied in a strict form in the original blue-collar social pension insurance. The old-age pension is understood “only” as a special case of disability pension: it was based on the assumption that there is no point to identify a permanent labour (in)ability of individuals from a given, statutory age, as we may assume disability (presumption of disability). It applied also under the pre-war Czechoslovakia: “An old-age pension is just a disability pension, only it is not necessary to examine the disability.” A consistent disability pension concept also excludes overlapping pensions and earnings – if a pension beneficiary was not disabled and manifested it by a working activity, he/she automatically lost pension entitlement.

A disability pension concept also reflected an overwhelming superiority share of disability pensions in the total number of pensions. In Germany, before the First World War, at the retirement age of 70 years in the blue-collar pension (“disability”) insurance, the share of disability pensions amounted to 92%; old-age pensions were paid on average for the period of about 7.5 years. The ratio of the average old-age pension and the national average wage in 1891 amounted to 18.2% (Coppola, 2014). The old-age pension was understood as a living contribution, e.g. in a family of children at the countryside.

When introducing the German blue-collar pension insurance, even the retirement age of 65 years was considered, eventually, due to the financial reasons, the age of 70 was preferred; a reduction to 65 years occurred in 1916. In our country, this insurance was introduced in 1926, disability was

assumed at a blue-collar worker from the (retirement) age of 65. In 1926, the average life expectancy of a Czechoslovak man aged 65 was 11.37 years and of a woman 12.02 years.

A merit concept of the old-age pension emerged before the disability concept – in the period of commencement of the state provision of civil servants. Under this concept the old-age pension needs to be “earned”: the old-age pension entitlement arises on the basis of working for the relevant number of years or after an appropriate period of insurance. Applying “a presumption of merit” comes from the earned right to retire after a certain number of years of service. Unlike the disability concept, primarily, there is no fixed retirement age, but the vesting period. This does not preclude a pension reduction after fewer years of service. From a logical point of view, this old-age pension concept represents basically transferring the principles of private insurance – working (dis)ability is irrelevant here. The merit concept is also typical for the insurance of white-collar employees.

In our country, the National Insurance Act (1948) unified pension systems and introduced a dual retirement age, depending on the length of insurance: if the vesting period reached 20 years, a person could retire at the age of 60. The retirement age of 65 years was the second alternative, conditioned by the vesting period of 5 years. From 1957 the retirement age of 55 years was introduced for workers in the first category (underground miners and pilots) and women. The world rarity is the differentiation of the female retirement age by the number of children, introduced from 1965: 57 years for childless women, 56 years for women with 1 child, 55 years for women with 2 children, 54 years for women with 3-4 children, and 53 years for women with 5 or more children.

The existence of two retirement ages reflects the combination of the disability and merit concepts of the retirement age in the social insurance system. A higher retirement age (e.g. 65 years) is subject to a short vesting period, which in this respect represents only a “technical minimum” for the entitlement to retire – and, therefore, it is clearly a disability concept of the old-age pension applied in the social insurance system. A lower retirement age (in our country 60 years from 1948) was subject to 20 years of insurance, which in then forthcoming communist regime were not difficult to achieve – therefore, it was a commencement of the transition to the merit old-age pension concept.

Currently, we have two retirement ages in our country:

- 63 years for men, 62 years and 4 months for women without children, ... 58 years and 4 months for women with 5 or more children, subject to a vesting period of 32 years (35 after 2018)
- 68 years, subject to the vesting period of 20 years (15 years without alternative periods).

Today's Czech retirement ages do not reflect a clear concept of old-age pension or a combination of them, not only because of the differentiation of lower retirement age by gender and the number of children, but due to the relatively high vesting period at a higher retirement age. Therefore, we cannot talk about the application of the disability concept and the realization of the merit concept is very complicated. This is mainly the result of mechanical cuts in pension expenditures in the recent past.

Nowadays, a certain combination of disability and merit concepts in the social pension insurance can be found e.g. in Germany, which, in 2016, has the following two retirement ages:

- 65 years and 5 months, subject to the vesting period of 5 years
- 63 years and 2 months, subject to the vesting period of 45 years.

This German combination of two concepts of retirement age has been existing since mid-2014; the lower retirement age increases by 2 months each year. The higher retirement age increases by 1 month for every year. From 2029 Germany shall apply two retirement ages: 67, respectively 65 years. The German version of two retirement ages has – as opposed to the Czech version – at least a certain rational core: putting the emphasis on the vesting period, partially at the expense of the role of the retirement age. And also at the expense of actuarial equivalence, which could apply fully in the social insurance scheme. In general, there should be a single retirement age in the universal pension insurance and, optimally, early retirements should not be tolerated at all. Alternatively, the potential early and later retirements should be provided by an actuarial reduction or increase of the benefit.

In the past 50-70 years, there have been significant changes in the economy as well as the whole society. Currently, old-age pensions are significantly higher on average and they are paid

considerably longer. In relation to the retirement age, prolonging life expectancy in general and specifically of seniors is essential. The pace of ongoing prolonging life expectancy is now approximately two months every year. Today, nobody explains the existence of old-age pensions by the presumption of disability. The number of old-age pensions' beneficiaries is considerably higher than the number of disability pensions' beneficiaries. In addition, present pension systems are considerably more complicated – they have multiple pillars, generally with different retirement ages. A number of authors write about two groups of primary objectives of retirement systems, instead of the disability and merit concepts of the old-age pensions; pension systems should

- Provide insurance against low income and wealth in old age and offer a mechanism for consumption smoothing across one's life („piggybank“ function of pensions), and
- Relieve poverty and redistribute income and wealth („Robin Hood“ function of pensions (Barr and Diamond, 2008)).

From a conceptual standpoint, it is optimal when these two contradictory functions of old-age pensions correspond to two different pension pillars: social (solidary) pension and earnings-related (insurance) pension.

In terms of terminology, the disability and merit concepts of old-age pensions are based on the history of these pensions. In contrast, the solidary and insurance concepts correspond, in terms of terminology, to the current typology of basic pension systems – in terms of construction of old-age pensions, which also includes the issue of retirement age. It is useful to distinguish between basic pension welfare regimes that are also reflected in the approach to the retirement age.

3 Retirement and retirement age regimes

A number of different pension systems has been developed, which are the result of historical development of economic and social policies in the OECD countries. Several typical systems may be observed among them, which can be considered the application of basic welfare regimes, as defined by Esping-Andersen (1990). Thus, we distinguish liberal, conservative and social democratic welfare regimes. We can expand the range of pension models by a neo-liberal regime that has developed since the 1990s. The choice between these welfare regimes is a matter of public choice. Ideally, each pension system should be based on one of these welfare regimes.

The classical liberal regime rejects any significant state intervention in the social sphere, it does not include any public pensions. Not surprisingly, the old age itself is not harmful. As a model, only a general social assistance benefit provided to all people unable to work, respectively, in-kind benefits (food, accommodation or other services) are acceptable. Currently, the classical liberal pension regime does not exist in any of the OECD countries.

The modern liberal regime already recognizes a special, tested old-age pension; which is not understood (only) as a social assistance benefit. The “Age Pension” in Australia is a model of such a means-tested old-age pension, which provides – together with means-tested supplements and rent assistance – the income exceeding the risk of poverty line used in the EU (60% of median income), even with the poorest seniors! In several developed countries, however, we can find a significant, universal (flat-rate) old-age pension, which is considered an expression of modern liberal pension welfare regime. “Superannuation” in New Zealand, tax-financed and providing income beyond the poverty line according to the OECD (50% of income median) is a paradigmatic flat old-age pension. These concepts of solidary pensions also include a fixed, statutory retirement age. The Australian Age Pension is provided to men and women from the age of 65; from July 2017, this retirement age shall increase every 2 years by half a year up to 70 years (in 2035). The New Zealand Super has a fixed statutory retirement age of 65 years; after its increase from the previous 60 years during the period of 9 years: New Zealand consequently experienced a sharp rise in labour force participation rates among older people over the period 1991-2001 (Hurnard, 2005).

Conservative pension welfare regimes represent a mix of various retirement concepts – for different social groups. They include both the civil servants’ security schemes, social insurance schemes, and originally voluntary occupational pensions. These schemes may reflect the specificities of the given social group, in respect of the risks covered by the social security, as well as its power (influence) status. Retirement ages in these regimes – in general – differ, already with regard to different conditions of life of individual social and professional groups.

The original blue-collar disability insurance included old-age pensions based on the disability concept, with old-age pensions at a low subsistence level. This changed after World War II, e.g. in West Germany, during the pension reform from 1957, the conditions of the basic blue-collar and white-collar old-age insurances were unified, the basic amount of blue-collar pensions was also abolished. Instead of the previous prevailing blue-collar concept of old-age pensions as a tool to remove poverty of old people, a concept of the pension as a replacement of the lifetime average (net) wage was announced, respectively, to be more precise, maintaining the previous standard of living, taking into account the reduced needs in the old age; all this under the assumption of a lifelong gainful activity (45 years). A link of the pension to the paid premiums was strengthened significantly, the merit/insurance concept of old-age pensions won completely also in the blue-collar old-age insurance.

The basic system of social pension insurance scheme in Germany includes today more than 85% of gainfully employed persons. Another 9% of these people are civil servants, with their separate pension system. Some self-employed persons participate in social pension insurance, while others have special social insurance systems and others are intended for a voluntary private Rürup pension. Farmers, miners, railwaymen and sailors have separate systems. Overall, we can distinguish about 10 systems.

In numbers, the disability pension in West Germany was until 1972 the major newly granted pension, only after this year the old-age pension relatively starts dominating. The reform of 1972 introduced a “flexible” statutory retirement age of 63 years for those insured for the period of 35 years – the real effect was non-shortening the old-age pension at this (earlier) retirement; a real average retirement age subsequently dropped by more than two years (Boersch-Supan and Juerges, 2011).

Currently, old-age pensions from the German social insurance are higher than full disability pensions. Generally, it applies that a full disability pension amounts “only” to 30-34% of a previous gross earning (Rodenstein, 2015). In a general sense, a subjective risk is the reason. A basic formula for the calculation of both pensions is the same, however in the case of a disability pension not all years up to the statutory retirement age are added, but only up to the age when early retirement is possible (currently 60 years) and yet a discount for retirement before the age of 63 years at a rate of 0.3% per month continues to be applied; the discount may not exceed a total amount of 10.8%. These reductions can be considered system reductions also with regard to the durations of unemployment, taken into account when calculating old-age pensions.

The construction of the German social old-age insurance is now dominated by the merit/insurance concept of the old-age pension. A pillar or another component providing universal or means-tested pensions is not part of the conservative (segmented) social pension insurance. If pension from the social old-age insurance is insufficient to cover the basic living expenses of old or disabled persons, basically, these persons need to ask social assistance of a general type.

The social-democratic welfare regime is often characterized by the dominance of universal benefits. This characteristic would match the universal (flat-rate) pension as a fundamental pillar of the social-democratic regime. That was also originally in the countries with a social-democratic orientation. In this sense, we could formulate a classic social-democratic pension regime as a model based on a (higher) flat-rate pension.

Modern social-democratic policy is to a certain extent focused on the middle class. Indeed, modern social systems in developed countries, in principle, secure the needs of the poor classes of the population, especially in the old age. Differences are more in the forms and in the degree of utilization of more or less graduated social assistance benefits. If the goal of modern social-democratic policy

was to provide workers more than a basic universal old-age pension, then that could happen only in the form of earnings-related pensions. The objectives of the social democracy electorate are easiest to enforce by a uniform, universal social insurance. In practice, then by increasing blue-collar pensions to the level of white-collar pensions. However, an essential component of modern social-democratic pension regimes is also a robust solidary pillar. A flat-rate pension with a “supplementary” earnings-related pension can be considered the original social-democratic pension regime.

The Swedish pension reform implemented from 1999, primarily significantly modernized universal social old-age pension insurance by the introduction of the NDC (notional defined contribution) product, supplemented by a robust “guarantee pension”, increasing low (and zero) NDC pensions. Modernization of this social-democratic regime consists in putting a stronger emphasis on universal social insurance, and also the introduction of automatism of adapting pensions to demographic and economic development. The existence of quasi-mandatory occupational pensions reflects the situation in the labour market, which social-democratic parties need to respect. Trade unionists are predominantly the voters of these parties.

NDC is a modern system of social insurance, recommended since 2003 by the World Bank as a “core” (main pillar) of the “Pan-European pension system”. Solidary pensions and private pensions are two “wings” of this system. NDC assumes the insurance technique of FDC (funded defined contribution) private systems; apart from fully funded financing. The pension saving is the first phase of this social insurance: premiums paid are deposited in a client’s personal account and (collectively) appreciated. The second, “pay-out” phase begins by the transformation of the client’s account balance to the lifelong old-age pension, according to actuarial principles, taking the expected life expectancy of clients of the respective age into account. The statutory retirement age in the Swedish NDC scheme is set within the range of 61-67 years. The system is transparent and understandable, with automatic stabilizers. This insurance concept of the old-age pension can be identified as state-of-the-art. The statutory retirement age plays a secondary role in it – it is set by the interval, in principle, it is not necessary to speak about early retirement.

The “guarantee pension” is a significant complementary pension pillar in Sweden, the statutory retirement age of 65 years applies here; early retirement is not possible. This fully corresponds to the solidary concept of the old-age pension. In practice, the Swedes retire typically at the age of 65.

The neoliberal welfare regime is based on the hypothesis that the (more or less) mandatory private pension savings or insurance are significantly more favourable than the social pension insurance, already due to a general nature of private enterprise. The investment risk, in principle, is borne fully by clients. The basic pillar of mandatory private pension savings should be complemented by a public solidary pillar.

Thanks to the reform launched in 1981, Chile was an icon of the neoliberal pension regime. According to the original ideas a more significant state regulation was not assumed. The Chilean state had to correct these ideas gradually and significantly. Although the basic scenario of the neoliberal Chilean reform seemed to be relatively simple, the practice was quite different simply because the system is unintelligible for the vast majority of clients. Most Chileans have no idea how much they pay in commissions, how their money is invested, or how their benefits would be determined at retirement. Only one-fifth of the participants have the faintest idea about how much money they held in their accounts, even within plus or minus 20%! Financial illiteracy is a big problem, and not one confined to Chile (Mitchell, 2015). However, the problems rest in the neoliberal pension welfare regime, not in “nation’s failure to educate its citizenry about how their pensions work”, as she states. High fees of pension companies represent the major problem, the market mechanism had to be replaced by a robust state regulation and, finally, the state pension company is being established anyway. Former Chilean governments paid no attention to different “normal” retirement age of men (65 years) and women (60 years) and the use of different male and female mortality tables by life insurance companies. It is interesting that normal retirement age is reduced by 1 or 2 years for each 5 years of work in certain specified, arduous occupations, with a maximum reduction in the normal

retirement age of 10 years (Shelton, 2012). A standard solidary pension pillar was introduced in Chile only in 2008; the retirement age here is 65 years.

The disability and merit concepts of the old-age pension originated as part of conservative pension welfare regimes. A “harder” disability concept was applied in the blue-collar insurance, with the level of old-age pensions substantially lower than it was for disability pensions. Moreover, the structure of the benefit in this case reminded more a social assistance than an earnings-related benefit of social insurance. On the contrary, the merit concept was applied in white-collar systems of social insurance in the private sector, not to mention civil servants’ pensions, at which a concept of providing service income even after leaving the active service was originally applied. Those major systems of the conservative pension welfare regime gradually united after World War II, the relative amount of blue-collar pensions increased and in the major social insurance systems, the insurance principle prevailed as a basic principle.

The original disability concept of the old-age pension vanished from blue-collar insurance systems and it appeared in a new form of solidary pension in universal state pensions systems, in the form of a flat-rate and/or means-tested pensions. Solidary pensions are recommended by modern pension theory as one of the (three) basic pension pillars, as an essential complement of universal public insurance pensions (of the NDC form best). A unified statutory retirement age, without a possibility of early retirement is typical for the solidary pensions pillars. In contrast, an actuarial adjustment of the pension amount according to the age of the pension applicant is no problem in the insurance pensions pillar. The statutory retirement age can be defined as an interval. A fixed statutory retirement age, supplemented by the provisions on the scope and terms of early or later retirement represents an older alternative of the interval retirement age (connected with continuous adjusting conversion rates anticipated life expectancy of the individual cohorts). Either way, the statutory retirement age is the most visible parameter of the pension system and one which sets a clear signal for people in making economic decisions (OECD, 2014). The design and concept of the retirement age is of essential significance for both individual pension pillars and the pension system as a whole.

4 Early Retirement Policies

After World War II, under favourable economic conditions, old-age pensions started to grow overall; the retirement upon achieving the statutory retirement age began to be perceived as a standard. In some countries the statutory retirement age for women decreased on the grounds that they could receive pensions at the same time as their husbands, who were 3-5 years older on average (Ebbinghaus, 2000).

Under the conditions of mass unemployment after the first oil shock (1973), the early exit from work of old persons became a tool of (un)employment policy. Both early retirements and disability pensions (softening some conditions for their granting) and, of course, unemployment benefits became the instruments of this policy. „Unemployment benefits or disability pensions provided a common but not always intended ‘bridging pension’ until normal retirement age. In Germany and Sweden, long-term unemployment benefits covered more than a year before preretirement (or disability) pensions at 60 (later up to three years in Germany, 1¾ year in Sweden), while they lasted for several years until normal retirement in the Netherlands (ages 57½-65) and France (ages 60-65 before 1982). In the Netherlands, the disability insurance, which had introduced favourable labour market considerations for older unemployed workers in 1973, became the major exit pathway at least for women. This has led the government to deplore the ‘Dutch disease’ and to cut back on disability rules since the late 1980s. Sweden completely closed its old-age disability pathway in 1992 as it had become too popular and costly during the sudden unemployment surge since 1989. In Germany, nearly half of all men and women received a disability pension until the early 1970s (for women lasting until the early 1980s), and since then about one in five new pension has been based on disability grounds, including a new additional pension for the ‘severely disabled’ at age 61, later already at 60” (Ebbinghaus, 2000). Liberally oriented countries made use of such methods of

employment policy considerably less (Esping-Andersen, 1990). The US introduced early retirements in the basic public system (OASDI), but with substantial actuarial reduction. The UK preretirement program was short-lived.

Average statutory retirement age in OECD countries dropped by nearly 2 years during the second half of the 20th century to 62.5 for men and 61.1 for women – see Fig. 1. [The OECD uses the term pensionable age, which is defined as the age at which an individual with a full career can first receive full pension benefits in the main pension scheme. The term “full” here means that benefits are “actuarially” unreduced] (Chomik and Whitehouse, 2010). At the same time the human life was getting longer. Life expectancy after reaching the statutory retirement age increased in the period 1960-2000 from 13.4 to 17.3 years for men and from 16.8 to 22.1 years for women on average in the OECD countries. Fig. 1 also contains a projection of the statutory retirement age until 2050, according to the legislation in force at the time of the study, according to which life expectancy after the statutory retirement age reaches 20.3 and 24.6 years, for men and women respectively (Chomik and Whitehouse, 2010). Moreover, the effective retirement age was concurrently considerably influenced by the introduction of early retirement regimes after 1973. The era of a decline in the average statutory and effective retirement age ended in the nineties and in the first decade of our century. After a long period of promoting early retirement, OECD countries have started to implement various reforms aimed at fostering a longer working life.

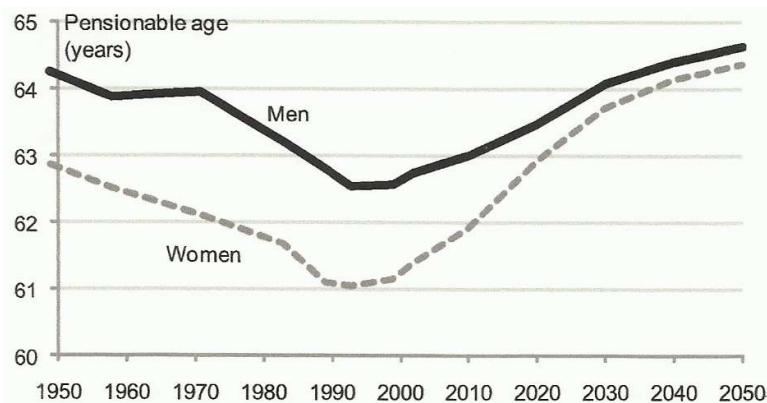


Fig. 1. Average statutory retirement age in OECD countries (Source: Chomik and Whitehouse, 2010)

According to the White Paper of the European Commission pension reforms (also) need to focus on removing unwarranted early retirement options which may apply to all employees or to specific professions. In some countries, the pension insurance system allows people with full contributory periods to retire before the statutory pension age. Some countries are also either reducing the levels of benefits provided by special schemes or closing these schemes. Whenever early retirement options are eliminated, it is important to ensure that the individuals concerned are enabled to work longer or, if this is not possible, can enjoy adequate income security (EC, 2012). Despite a recent reversal of the trend towards early retirement in many countries, the effective retirement age is still, on average, significantly lower than the statutory threshold.

In addition to increases in retirement ages, countries have introduced reforms to reduce incentives to retire early and to increase incentives to retire after the statutory retirement age. 10 OECD countries have mandatory schemes whereby clients contribute to their FDC personal retirement accounts – effectively shifting the risk of them living longer (and receiving a lower pension) – from the state to the individual. Another 4 countries run NDC personal retirement accounts where accumulated contributions and interest are converted into a periodic payment at a rate that depends on life expectancy (OECD, 2011).

In our country, early retirement has been relatively limited by the “small” pension reform. At present, early retirement is only possible at the age of 60 at the earliest, which means that women with more children are not able to retire early at all. In 2013, nearly all early old-age pensions were

granted no longer than one year prior to the statutory retirement age, while in the period 2009-2011, there was a large majority of pensions granted 2-3 years before the statutory retirement age. The small pension reform caused a flow of early retirements, under the influence of information provided in the media. The reform increased the reduction rate for the assessment of early old-age pension where the period between the pension being granted and the person reaching the retirement age is longer than 360 days. The reduction rates for the calculation base are now scaled by 90 days as follows:

- 0.9% for the period of the first 360 days;
- 1.2% for the period of the next 360 days;
- 1.5% starting from the 721st day.

Increased reduction rate for early retirement more than 2 years before the retirement age to 6% per year is certainly commendable; nevertheless, the reduction rate should also be increased for the first 2 years and, in addition, 6% per year is not a sufficient reduction in actuarial terms, also because the reductions do not affect the basic amounts of the pensions. A fundamental reform of early old-age retirements is a must in our country. The actuarially neutral level of reduction rate for early old-age retirement is roughly 7-8% per year (Queisser and Whitehouse, 2006); based on the 2002 mortality data, the necessary neutral reduction rate might be approximately 7.4% per year – see Fig. 3.

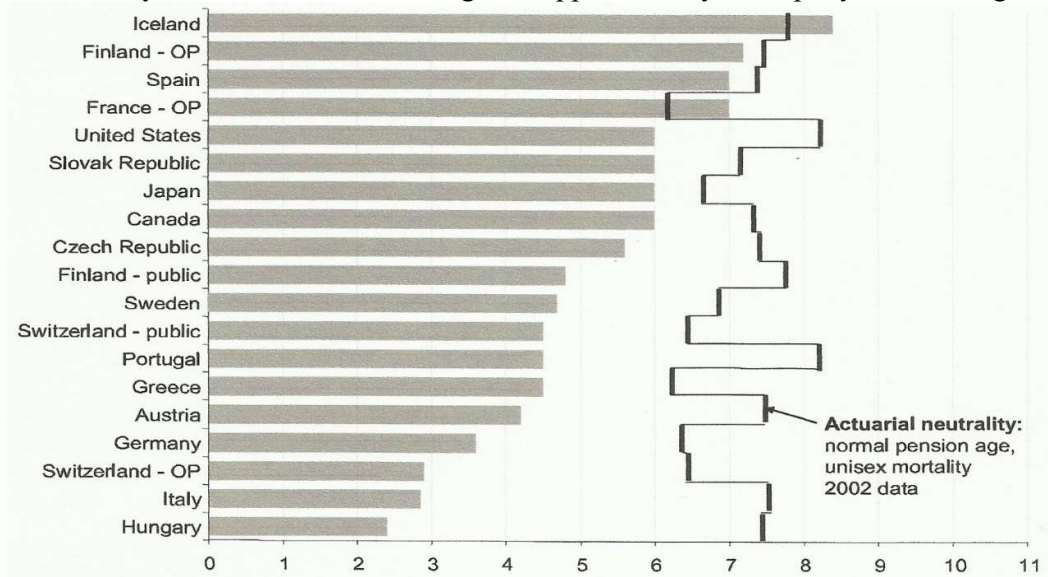


Fig. 3: Reduction of old-age pensions for early retirement, in % per year, 2% discount rate. (Source: Queisser and Whitehouse, 2006)

The MLSA (2014) Actuarial Report simulates the effect of the existing parameters of the Czech “pension insurance” on the generation born in 1965; for most of this generation the statutory retirement age of 65 years shall apply, which also means the possibility of early retirement by up to 5 years. For this cohort, the effective retirement age is being searched, when the individuals shall achieve the best balance between what they get from the system in the form of a pension and what they pay in the system as a premium. Unlike earlier calculations by the same experts, this analysis is not based on standardized individuals, but from specific persons and their expected individual pathways. From the perspective of individuals, a significant utilisation of early and postponed retirements is “effective” for this generation. The authors conclude that for 49% of these people it is “effective” (optimal) to retire before reaching the statutory retirement age and for 43% of the people it is advantageous to serve extra years; the timing of retirement just for the moment of reaching the statutory retirement age is thus effective only for the remaining approximately 8% of those people – for details see Fig. 4. Although the input data and analysis methodology seem to be perfect, on the contrary, the results in Fig. 4 seem quite surprising and difficult to understand. I especially expected from the analysis that the output will include assessing the actuarial neutrality of Czech reduction

coefficients for early retirement. But the percentages in Fig. 4 do not show that and even were not supposed to show. The problem is, in particular, apparently in the fact that the model used by the MLSA optimizes the retirement age of each individual, with full knowledge of the year of his/her death. As if we all know in advance when we die – and we retire optimally accordingly. In reality, individuals may have certain information about their individual risk and accordingly – at least to some extent – to act. The pension system needs to take this adverse selection into account – and regarding the evaluation of Czech reduction coefficients for early and late retirement, I think that they should increase adequately to reduce significantly the mentioned adverse selection – that is what the actuarial mathematics of private and preferably also social pension insurance is about.

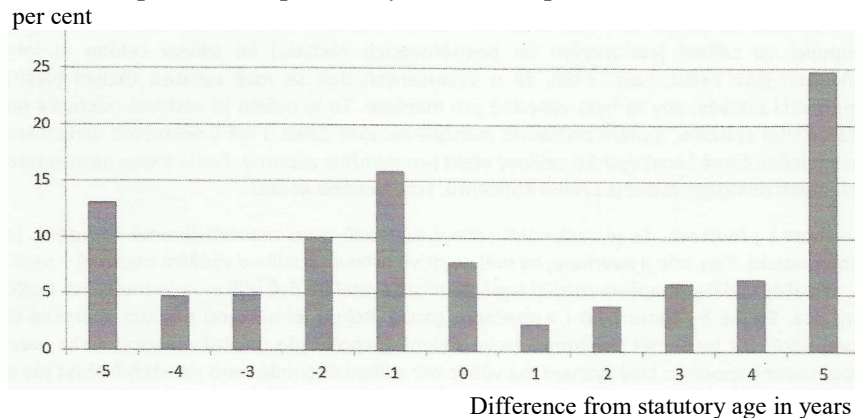


Fig. 4: Percentages of participants with effective retirement age in the given age: Czech 1965 generation. (Source: MLSA, 2014)

In recent years the real retirement ages in our country are significantly different than shown in Fig. 4; the retirement in a year of reaching the statutory retirement age dominates completely. The authors of the MLSA study state the fact of 2012, which was under the influence of the ongoing small pension reform, but even so early retirements by 1 year had a frequency of 30% and the retirement in the year of reaching the statutory age of almost 70%. In subsequent years, a zero difference from the statutory age dominated completely. These facts rather prove that the statutory retirement age is basically the only information that our individuals fully understand. Otherwise, we may rather doubt about the information superiority (and its use) of these individuals (in their deciding about the year of retirement).

The data in Fig. 4 can be taken as an expression of the quality of the entire current Czech “pension insurance” system. In this “insurance”, in fact, – in about two-thirds – the flat-rate pension (Beveridge) prevails over the insurance pension (Bismarck). And early retirements do not belong to the flat-rate pension. In addition, in the Czech practice, only the percentage amount of the pension reduces, and not the so-called basic amount of the pension; perhaps even no one has thought that the total pension (paid from one pension pillar) should reduce.

The MLSA report concluded that “from the perspective of adjusting coefficients governing the early or later retirement amount of the pension, a suboptimal setting of these parameters for early retirements is evident. At retirement two years before reaching the statutory age and especially one year before reaching this age, the applied coefficients are too low and the profitability of retirement in this period is relatively high. Meanwhile it applies that when retiring three or more years before the retirement age, the coefficient is higher than it had to be, and its reduction would not substantially increase the incentives to retire at this time... At the coefficient for serving extra years, even a relatively small increase in this coefficient or setting some form of mild progression, has a significant potential to increase the incentive to postpone the retirement until higher age” (MLSA, 2014).

The issue of early retirement in the Czech “pension insurance” requires further research. One of questions is whether it is possible (or to what extent) to optimize deductions and surcharges for early and later retirement at respective progressiveness of Czech public pensions or at respective financing of such pensions. The premium for today’s implicit pension insurance should be considerably lower,

the premium rate from the wage should be by ca. 11% lower (Vostatek, 2016). The calculation of today's premiums for pension insurance as an individual's cost of acquiring the old-age pension is probably a big problem.

Pokorná (2016) carried out a lay advantage test of early retirement for a man born on 5 January 1953, without taking into account the time factor (interest), pension contributions and pension indexation, and concluded that this man (with average nationwide earnings and life expectancy of 20.4 years after reaching the age of 63 years, 46 years of insurance period) receives, in total, by 425 CZK more in the form of old-age pension if he retires one year before reaching the statutory retirement age. A more accurate calculation would have to take the time factor into account, and we can expect the conclusion that the most favourable option is to opt for early retirement as soon as possible, i.e. now after reaching the age of 60 years in Czechia.

At present, Czech insureds are not informed about the advantages of the early retirement; the lack of information in this regard actually causes financial “illiteracy” of the clients. In the US, the general level of awareness in this respect is apparently much higher. Nevertheless, the American OASDI is very similar to the percentage amount of the Czech old-age pension. Upon early retirement (at the age of 62 years at the earliest), the pension is permanently reduced by 5/9% for each month (ca 6.7% per year) up to 36 months, increased by further 5/12% per month (ca 5% per year) for an even earlier retirement. Bonus rate for pensions for longer gainful activity is set at 8% per year, up to the age of 70 years.

Altogether, our retirement age for men and the increase thereof is set at a level comparable to Germany and other Western European countries. The increasing of the statutory retirement age for women, where we still apply an unfounded differentiation based on the number of children brought up, is a highly topical issue and this problem can also be addressed in the context of a broader or narrower pension reform and family policy. Increased retirement age will also result in increased levels of pensions paid to women – thus reducing the gender gap in this regard. Potential strong motivation for early retirement caused by the low reduction rates for early retirement is a crucial weakness and a potential severe risk for the Czech public pensions. It is our duty to further deepen the analysis of Czech retirement and early retirement policy and subsequently significantly increase the level of awareness of the Czech population on the efficiency of the use of early retirements. Even at the cost of a substantial increase in the related fiscal risk.

5 Conclusion

The merit and disability concepts of the old-age pension are reflected in different ways in the role of the statutory retirement age in particular welfare regimes. The strict statutory retirement age, based on the presumption of disability, arose in the context of blue-collar social disability insurance system in Bismarck's Germany, and found the application also in the Czechoslovak blue-collar pension insurance. In the post-war period, the disability pension concept “moved” in solidary pension pillars, which are typical of the liberal, original social-democratic and, ultimately, neoliberal welfare regimes and which can secure old people also at the level exceeding the EU poverty line. In contrast, the merit old-age pension concept applied in the post-war pension reforms fundamentally in earnings-related pension pillars, which are typical for conservative and newer social-democratic welfare regimes. For more than 10 years, the World Bank has been recommending the NDC as a major pension pillar based on the actuarial equivalence and modern pension technique, which includes the statutory retirement age defined as an interval, e.g. 61-67 years. Solidary public pensions with a strict statutory retirement age, e.g. 65 years, are one of two supplementary pension pillars.

After World War II, medium life expectancy of elderly and the entire population starts to grow. Especially, after the first oil shock, the trends to introduce early retirement as a tool to solve the overall high unemployment without adequate actuarial equivalence were applied considerably. These public policies were applied predominately in the countries with conservative welfare regimes. At the end of the last century, this public policy is turning; it puts a greater emphasis on the employment of

seniors, which also enforces changes in the early retirement policy and separation of the old-age and disability pensions concepts and also in the insurance pillars. Current pension theory recommends the use of early retirement only in these pillars, and only under the rules of actuarial mathematics. The purpose is also to support the extension of seniors' working activities and the interest in higher pensions. In the NDC system, this issue is optimally connected with the automatic projection of population ageing in the amount of pensions in the form of continuous updating of generation mortality tables.

Under the conditions of strongly deformed Czech “pension insurance”, the analysis of the optimum retirement age for both individuals and whole cohorts is difficult. Basically, the only intelligible parameter of our “pension insurance” is the statutory retirement age, which is still significantly differentiated by sex and number of children. Previous research projects also indicate that increasing the awareness of people in pre-retirement age is or may be a significant fiscal risk.

6 Acknowledgement

The paper has been elaborated within the project "Current trends in development of financial markets", with the Institutional support for long-term strategic development of research organization University of Finance and Administration in 2016.

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