

# THE AGING WORKFORCE AND EARLY RETIREMENT

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## Abstract

The impact of an aging workforce on the workplace is a concern internationally. The economic activity of the 50+ workers is influenced by objective factors, i.e., the state policy to obtain retirement rights and employment opportunities. The rise of premature retirement in the EU is attributed to national taxes, social security systems, and recessions. Studies worldwide analyze the Work Ability Index and the Active Ageing Index to identify early retirement factors. It believes that the Work Ability Index decreases with factors such as aging, unsatisfactory working conditions, poor organization management, and lack of freedom. Research has consistently found a need for systematic approaches by employers to prepare and benefit from demographic and labor market changes. The most important way for employers to extend working lives is to look after the health of older employees. The paper analyzes early retirement in the Czech Republic. The methods cover the desk analysis of the Web of Sciences sources and open data from the Czech Social Security Administration. Findings show that workers aged 55-64 prefer early retirement, mainly during economic recessions. However, the risk of unemployment and relatively higher incomes affect their intentions to retire early.

**Key words:** aging workforce, early retirement, workability, health

**JEL Code:** J16, J26, J28

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## Introduction

The aging population in the European Union belongs to one of the frequently analyzed topics in the last decades, as the older workforce represents a growing part of the labor market. Employees aged 55+ in the total number of persons in the EU-27 increased from 12 % to 20 % from 2004 to 2019 (Eurostat, 2020). The EU agencies provide comprehensive approaches to creating working and living conditions that motivate employers to employ 50+ people and a workforce of 50+ to remain at work. It means healthy working conditions, flexible forms of work, life-long learning and mid-career development of older workers, flexible retirement, and combating gender inequalities (EU-OSHA, Cedefop, Eurofound, and EIGE, 2017).

The EU member states have introduced sustainable working and life-course concepts coherently intending to enhance individual flexibility and employability of the aging workforce. For public administration and business, the Active Ageing Index and the Work Ability Index provide tools for monitoring older people's working and living conditions and analyzing their contributions to the economy and society. Both indicators describe factors that influence planned and actual early retirement. The Active Ageing Index is a tool to measure the untapped potential of older people for active and healthy aging across countries. It measures the level to which older people live independent lives, participate in paid employment and social activities, and their capacity to age actively. The Work Ability Index is characterized as a comprehensive assessment of the functional ability of employees (for the evaluation of both groups and individuals). It is used as an indicator of the productivity of current and future human resources. It can prevent and preserve the occupational health of employees. Organizations analyze workability's dependence on the employee's age and subsequently develop health care programs (also aimed at increasing work motivation and reducing the number of early retirements). It believes that the Work Ability Index decreases with factors such as aging, unsatisfactory working conditions, poor organization management, and lack of freedom. On the contrary, the increasing employment of older people improves the Active Ageing Index, which signals a positive trend in society and the economy.

The paper aims to analyze the aging workforce and early retirement in the Czech Republic. The methods cover the desk analysis of the Web of Sciences sources, and open data from the Czech Social Security Administration.

## **1 Literature review**

The demographic development in the country will have a long-term impact on the social conditions of pensioners and a state policy to achieve balanced budgets. Unemployment and higher income are the most significant factors influencing employees' intention to plan earlier retirement and realize this plan. Health affects planning a premature retirement, i.e., better health is promising to later retirement, while weaker health (sickness absences) is conducive to earlier retirement (Nivalainen, 2022). A nationwide study on the aging workforce in Cyprus in 2018 supports this argument. It shows that personal characteristics are more crucial than work demands and working environment for the performance of workers of all age groups and that poor ergonomic conditions and health status mainly affect older workers (Varianou-Mikellidou et al., 2020). Despite various initiatives by governments and legislation in favor of encouraging

the continued labor market participation of older workers, research has consistently found a need for systematic approaches by employers to prepare and benefit from population aging and labor market changes. Egdell et al. (2020) provide findings that employees' age and fitness for work are treated on an individual basis instead of getting benefits from having formal plans to manage the workplace for older workers and, in this way, prevent premature retirement. Nivalainen (2022) argues that the most crucial assistance of employers to extend working lives is to take care of the health of older employees. It incorporates giving older workers an increased sense of control and lowering job demands, supporting continued employment and retention of older workers.

Specific attention focuses on life-long training and mid-career development of 55+ workers. Huiskamp and Vos (2011) analyze practices that can increase individual flexibility and employability over an employee's working life in several EU states. They find that the schemes are mainly used for early retirement or short-term benefits, while the uptake of provisions related explicitly to employability could be higher. Burlon and Vilalta-Buffi (2016) focus on the effect of technical progress on early retirement in the US and believe that the more significant the technical change, the more willing the elderly are to retrain, which has direct policy implications for the design of elderly training programs. As identified by the EU agencies, life-course arrangements and career development for older workers is an emerging challenge to human resource management that can support their employability and mitigate labor and skill shortage problems (Mok, Mackenzie, & Thomson, 2021). COVID-19 significantly impacts older people's ability to work and stay healthy. Pit et al. (2021) show in cases from 15 countries that this global pandemic widens inequalities, especially among older people, because many often have limited education and work in the informal sector. However, solutions for combating the adverse effects of the aging population determine social attitudes towards professional work of the 55+ workforce. For example, Swadzba (2022) analyzes the cognitive, affective, and behavioral attitudes toward the professional work of Poles, Hungarians, and Czechs. Her findings show that the Poles achieve the highest value of a positive attitude towards work, followed by the Hungarians and the Czechs. However, the Czechs exhibit an inconsistent attitude toward work.

The changes in the labor markets determine a need to design various life-course concepts that can utilize the intellectual capital of the aging workforce in favor of economic and social development. Aidukaite and Blaziene (2021) contribute to a better understanding of older workers' situation in the labor market, being active and more extended employed. They analyze the Active Ageing Index of three Baltic countries. They show that in some countries

with less developed welfare states, high employment rates of older employees can provide them with an additional means of livelihood but do not ensure a higher quality of life and act as a factor in reducing both the quality of work and the quality of life. Therefore, policymakers must modernize legislation on retirement rights, support sustainable conditions for employment opportunities to extend working lives, and ensure the sustainability of the social security system (Stiller, Garthe, & Hasselhorn, 2021). As mentioned above about the health effects of early retirement, EU-OSHA surveys define causes leading to sick leave and reduced workability. The workability of aging workers determines cardiovascular, musculoskeletal disorders, and respiratory diseases. For example, 45+ teachers and preserving their health contribute to maintaining their workability and retention in the labor market (Vangelova, Dimitrova, & Tzenova, 2018), which is substantial for the CEE education labor market with the growing number of aging women among lecturers. Musculoskeletal disorders correspond to one of the severe causes, especially among women in Western countries (Rashid et al., 2018). In the last-mentioned study, authors find that those who strongly believe in being back at the same work, pain intensity, and job strain predict work ability. Moreover, the factors like self-efficacy and depression seem to predict well-being.

## **2 Results**

In the Czech Republic, early retirement characterizes old-age pension granted before retirement age (early retirement) permanently reduced for premature for the group aged 50 - 64 from 2010 to 2021. The data source provides an open data catalog on the websites of the Czech Social Security Administration.

The numbers of paid old-age pensions and early retirement pensions for the age group 50-64 are given in Tab. 1. In 2010, 68 279 recipients of ordinary old-age pensions; in 2019, they counted 60 873; and in 2021, showing 38 414. In 2010, 30 087 recipients aged 50-64 received early pensions; in 2011, it counted 76 563. In the last two years, it dropped so that in 2020, they are 30 448, and in 2021 early pensions represented 24 340.

Over a decade, the share of early retirement to ordinary old-age pensions has changed. The most significant shares reached 1,265 in 2011, i.e., during the economic recession in the CR. In 2020, it was 0,681, and in 2021 it reached 0,634, which means a significant share compared with the ordinary old-age pensions for the analyzed age group. The number of early retirement pensions fluctuated from 0,81 to 1,01 from 2014 to 2021 compared to 2010. However, an extraordinary year-on-year increase in early retirement is in 2011 compared to

2010, roughly 2.6 times, when newly granted early retirement pensions exceeded the number of old-age pensions newly granted by 26.5%. The numbers of newly granted early retirement pensions for the group aged 50-64 were boosted substantially by unfavorable economic developments, as shown by their numbers in 2011, 2020, and 2021. From 2015 to 2019, the share of early retirement pensions to ordinary old age ranges from 0.428 to 0.458. A significant increase to 0.681 in 2020 exists compared to 0.458 in 2019 and 0,634 in 2021.

**Tab. 1: Number of old-age pensions for the group aged 50-64 in the period 2010 - 2021**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
S	68 279	60 504	39 173	45 026	52 724	68 797	61 132	55 654	56 245	60 873	44 695	38 414
ST	30 087	76 563	20 815	27 917	30 366	29 443	27 682	26 849	24 702	27 867	30 448	24 340
ST : S	0,441	1,265	0,531	0,620	0,576	0,428	0,453	0,482	0,439	0,458	0,681	0,634
ST <sub>Basic</sub> index	x	2,55	0,69	0,93	1,01	0,98	0,92	0,89	0,82	0,93	1,01	0,81
ST <sub>Chain</sub> index	x	2,55	0,27	1,34	1,09	0,97	0,94	0,97	0,92	1,13	1,09	0,80

Source: Author. Based on CSSA data accessed on 2022-10-28. <https://data.cssz.cz/web/otevrena-data/katalog-otevrenych-dat>.

S - Ordinary old-age pension granted upon reaching retirement age.

ST - Old-age pension granted before retirement age (early retirement) permanently reduced for premature.

The numbers of newly granted pensions cover Tab. 2, showing the ordinary old-age and early retirement in the group 50-64 by the age category. For example, in 2010 – 2012, the number of early retired persons aged 55-59 exceeded the number of early pensioners aged 60-64. However, in the period from 2013 to 2021, the number of early retired pensioners aged 60-64 gradually exceeded the group aged 55-59, e.g., in 2021, the number of persons aged 55-59, who received early retirement, is 2 215, but early pensioners aged 60-64 exist 22 124.

**Tab. 2: Number of old-age pensions in the group aged 50-64 by age category**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
S												
50-54	42	11	1	0	0	0	0	0	0	0	0	0
55-59	30 660	28 382	15 488	17 143	20 586	8 198	5 722	5 375	4 925	515	293	357
60-64	37 577	32 111	23 684	27 883	32 138	60 599	55 410	50 279	51 320	60 358	44 402	38 057
Total 50-64	68 279	60 504	39 173	45 026	52 724	68 797	61 132	55 654	56 245	60 873	44 695	38 414
ST												
50-54	361	513	211	239	197	145	188	211	229	223	2	1
55-59	17 136	42 054	12 943	12 704	13 484	12 592	10 900	8 211	5 309	4 805	3 115	2 215
60-64	12 590	33 996	7 661	14 974	16 685	16 706	16 594	18 427	19 164	22 839	27 331	22 124
Total 50-64	30 087	76 563	20 815	27 917	30 366	29 443	27 682	26 849	24 702	27 867	30 448	24 340

Source: Author. Based on CSSA data accessed on 2022-10-28. <https://data.cssz.cz/web/otevrena-data/katalog-otevrenych-dat>.

S - Ordinary old-age pension granted upon reaching retirement age.

ST - Old-age pension granted before retirement age (early retirement) permanently reduced for premature.

The newly granted early retirements vary according to gender - see Tab. 3. For example, women aged 50-54 do not retire early in 2012-2021. Instead, their departures show enormous numbers in the age 55-59, especially in 2011, early retired women achieved 36 661 persons, then in 2013: 12 507, and in 2014: 13 299. In general, this age group always has significantly higher numbers of women than men who intend to early retirement age 60-64. However, the highest numbers were in 2011: 33 425, then in 2020: 16 395.

**Tab. 3: Newly granted pensions (early retirement) by gender in the group aged 50-64**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>ST</b>												
50-54	361	513	211	239	197	145	188	211	229	223	2	1
55-59	17 136	42 054	12 943	12 704	13 484	12 592	10 900	8 211	5 309	4 805	3 115	2 215
60-64	12 590	33 996	7 661	14 974	16 685	16 706	16 594	18 427	19 164	22 839	27 331	22 124
Total	30 087	76 563	20 815	27 917	30 366	29 443	27 682	26 849	24 702	27 867	30 448	24 340
<b>Man</b>												
50-54	328	451	211	239	197	145	188	211	229	223	2	1
55-59	2 997	5 393	2 912	197	185	220	307	205	130	162	389	415
60-64	12 371	33 425	7 436	14 306	15 353	15 308	13 958	14 324	13 418	15 686	16 395	12 966
Total	15 696	39 269	10 559	14 742	15 735	15 673	14 453	14 740	13 777	16 071	16 786	13 382
<b>Woman</b>												
50-54	33	62	0	0	0	0	0	0	0	0	0	0
55-59	14 139	36 661	10 031	12 507	13 299	12 372	10 593	8 006	5 179	4 643	2 726	1 800
60-64	219	571	225	668	1 332	1 398	2 636	4 103	5 746	7 153	10 936	9 158
Total	14 391	37 294	10 256	13 175	14 631	13 770	13 229	12 109	10 925	11 796	13 662	10 958

Source: Author. Based on CSSA data accessed on 2022-10-28. <https://data.cssz.cz/web/otevrena-data/katalog-otevrenych-dat>.

S - Ordinary old-age pension granted upon reaching retirement age.

ST - Old-age pension granted before retirement age (early retirement) permanently reduced for premature.

## Conclusion

The impact of an aging workforce on the workplace creates a long-term challenge in many countries, especially economically developed ones. The particular concern is the economic activity of the 55+ generation that plans and realizes its early retirement in the context of the national policy to obtain retirement rights, employment opportunities, and higher incomes. The rise of early retirement in the EU depends on national taxes and social security systems. The Work Ability Index and the Active Ageing Index can predict motivation to retire prematurely. They identify factors that influence planned and actual early retirement. It believes that the Work Ability Index decreases with factors such as aging, unsatisfactory working conditions, poor organization management, and lack of freedom. On the contrary, the increasing

employment of older people improves the Active Ageing Index, which is generally and positively accepted.

Governments are encouraging workers aged 55+ to continue their labor market participation. Despite legislative changes in the field, research has consistently found a need for systematic approaches by employers to prepare and benefit from demographic and labor market changes. Unemployment during recessions determines a tendency for early retirement. However, health has a pronounced effect: better health is conducive to later retirement, while weaker health (sickness absences) is conducive to early retirement. The most important way for employers to extend working lives is to look after the health of older employees. Giving older workers an increased sense of control and lowering job demands can prevent premature retirement.

Secondary sources from the Web of Science provide valuable guidance for analyzing the tendencies among the economically active population aged 50-64 in the CR from 2010 to 2021 regarding early retirement. For example, data on the number of old-paid pensions and the number of old-age pensions granted before retirement age show that the recessions in 2011-2012 and COVID-19 have the following implications on workers' decisions:

- a significant increase in the number of early retirements in the group aged 50-64,
- early retirement shows significant differences by gender and age group, i.e., women prefer to retire early aged 55-59 and men aged 60-64.
- a tendency exists leading to an increased share of early retirement pensions to ordinary old-age pensions, mainly for people aged 55-64.

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