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Silver economy and agricultural sector

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Abstract

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The silver economy addresses the problems of an ageing population and the associated changes in the economy, social, health and labour market sectors. An ageing population leads to labour shortages and slowing economic growth, pressure on pension and health systems, and deepening poverty and social exclusion.

This study explains the essence of the silver economy and its manifestations on both the supply and demand sides of the economy. It examines the challenges facing the silver economy in the European Union. Special attention is paid to the importance of the silver economy for agriculture and the problems that the silver economy can solve in this sector. Data and forecasts show that the development of the silver economy in rural areas has the potential to contribute to agriculture both in Bulgaria and in other EU countries.

Keywords: silver economy; agriculture; elderly people; employment; demographic crisis

Introduction

The beginnings of the silver economy can be found in Japan with its concept of an economic system that focuses on the needs of the elderly (Klimczuk, 2013). Nowadays, research in this independent economic field is mainly done in Europe and Asia. Increasing average life expectancy and declining fertility rates are leading to population ageing. This is beginning to be observed globally. The development of the silver economy will be one of the major trends in many economies around the world. The silver economy aims to help turn demographic problems into development opportunities. On the one hand, the silver economy takes into account the needs of the ageing population and contributes to improving their quality of life. On the other hand, it aims to stimulate the economy.

Projections show that the proportion of people aged 65 and over worldwide will increase from 10% in 2022 to 16% in 2050. This trend is mainly due to two factors: the first is lower mortality rates and increased life expectancy, and the second is the steady decline in fertility rates. These processes are estimated to have reduced the per capita GDP growth rate by 0.3% per year over the period 1980–2010 (Bojanić et al., 2024). Population ageing threatens countries with labour shortages, slowing economic growth, pressure on pension and health systems (fewer workers will have to take responsibility for financing a greater number of pensioners), deepening poverty and social exclusion.

Nature, scope and trends of the silver economy

The generally accepted lower limit of the silver economy is assumed to be the age of 50. The needs of different age groups change as they get older. Research on the silver economy considers different age groups, dividing them into: active, vulnerable and dependent. Each group has its own needs. Disability by age is distributed as follows: 32% for people aged 55–64, 44% for people aged 65–74, 60% for people aged 75–84, 70% for people aged 85+ (European Commission, 2015).

Publications in the silver economy address a variety of economic issues that affect the older population: from tradi-

tional sectors (healthcare, housing and services) to innovative sectors (technology, communications and artificial intelligence). For example, home care services for older adults. Demand for home care services is forecast to increase in the coming years due to two separate factors (Iwanski, 2024). One is the ageing population, and the other is the declining potential of families to care for older adults. In Poland alone, the elderly in need of care are expected to increase from 2 million to 3 million between 2022 and 2060. There is a lack of publicly funded or co-funded services in this area that could significantly contribute to the development of the private sector. The lack of labour is an obstacle to the development of this segment of the silver economy. This is due to unsatisfactory wages that do not match the burden and responsibility of this type of work. The purchasing power of the average pension can be expected to decline in the coming years. The rising costs of providing care services require the creation of additional mechanisms for co-financing services.

These problems are not unique to developed countries. For example, the People's Republic of China is reported to be moving from the mild ageing stage to the moderate ageing stage. This will challenge both the labour market and the pension system (Zhang and Ren, 2021). In this regard, the Chinese government has identified the silver economy as a priority, recognising its potential to stimulate growth in various sectors and improve the lives of the elderly population (CGTN, 2024).

The silver economy also includes research on the financial situation of older people. A comparison between three countries in Europe shows that in Denmark, pensioners are generally better off financially (Jajko-Siwek, 2024). This is due to higher household incomes and strong welfare systems. In contrast, pensioners in Poland face financial difficulties, while in Spain, they are between the two extremes – moderate challenges. In Denmark, housing costs represent the most serious difficulty for pensioners, accounting for 29% of the budget of Danish pensioners. In Spain and Poland, food-related costs play a more significant role. Polish pensioners spend more on eating at home, while Spaniards spend a higher share on eating out. A crucial factor affecting financial security is found to be the state of mental and physical health of pensioners.

The silver economy has the potential to impact every sector of the economy: investments in medical services for age-related diseases, smart homes with assisted living systems, driverless vehicles, dietary products, voluntary retirement, building age-friendly housing, making public places accessible, web-based home care solutions, and more (Zsarnoczky, 2018). In this regard, the silver economy faces various challenges. For example, integrating information and communication technologies to support the elderly population is proving challenging. There is resistance to change and digital incompetence among older adults. Creating a user-friendly interface can assist the elderly population to adapt (Butt et al., 2021).

In order to attract investment in this area and in the silver economy in general, information is needed about the potential for the development of this economy. In a survey conducted, 62.5% of respondents indicated that they did not have enough information about the silver economy (McGuirk et al., 2022). Developing business models and services for the silver economy market is still a relatively new phenomenon with many unknown factors. Research on business models and consumer behaviour in the silver economy market is needed to identify solutions and promote the potential of the market (Kuosmanen, 2020). For smaller enterprises, access to information about the silver economy is essential.

The silver economy has points of contact with many other areas of the economy. Integration between different strands of the economy is generating technological and social innovations for ageing societies, such as: subsidies in Singapore to encourage children to move and live closer to their elderly parents to help them; outdoor fitness zones for the elderly in cities in the European Union; mobile self-help apps for household repairs; and human resource centres in Japan that offer temporary work for older workers (Klimczuk, 2016).

The European Union and the silver economy – challenges

Since the beginning of the 21st century, the institutions of the European Union have begun to address the problems associated with an ageing population. This is conditioned by ageing population trends, which are even more pronounced in Bulgaria (Fig. 1). The share of the population aged 65 and over in Bulgaria (upper curve) is higher than the average in the European Union (lower curve), but in both places it has risen steadily over the years. A study commissioned by the European Commission (Technopolis and Oxford Economics, 2018) predicts that in 2025, EU citizens over 50 will reach 43% of the total population. The silver economy is expected to grow to €5.7 trillion and 32% of EU GDP in 2025. The importance of the silver economy will continue to grow in the coming years as a result of the continuing ageing of the population, contributing to sectors such as real estate, retail, tourism, hospitality, leisure, health and social care.

The European Commission aims to make the European Union a leading example of a silver economy (Eatock, 2015). To meet the needs of the ageing population, the European Union is developing and implementing a variety of policies: from improving the urban environment, promoting

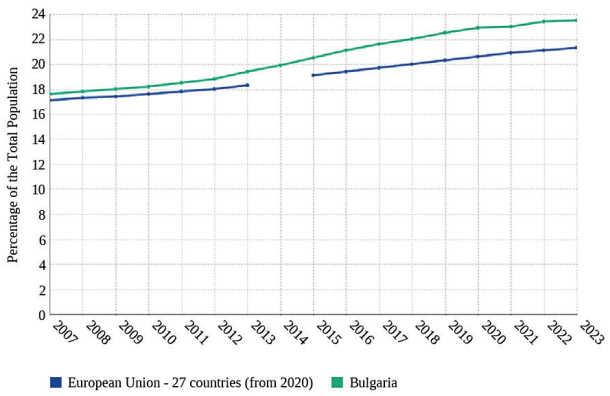


Fig. 1. Percentage of population over 65 years of age in the total population in Bulgaria and the European Union

Source: Eurostat

employment for the over 50s and prevention in healthcare to new technologies improving the lives of the ageing population. EU policies are aimed at promoting healthy lifestyles. Better health of the elderly leads to longer participation in the labour market and reduced state spending on benefits and treatment. Health prevention includes early diagnosis, better diet and smoking cessation. Attention is also paid to workplace safety and occupational health.

The main challenges facing the silver economy in the European Union can be divided into several groups: the health of older people, their financial situation, their access to information technology and their access to the labour market. These challenges are interlinked.

Health status determines the quality and length of life of older people. Average life expectancy in the European Union is rising, and so are the numbers of people at risk of ill health. Healthy older people are, all other things being equal, more active and consume more goods, while at the same time they are not a burden on the health and social system. Unfortunately, around 60% of older people in the European Union do not exercise (Technopolis and Oxford Economics, 2018). Sport and active lifestyles are important for body and mind, for preventing chronic diseases and for independent, healthy living. It is beneficial for individuals themselves and for the economy for governments to promote healthy lifestyles that ensure longer healthy lives.

Society in the European Union is divided into two groups: those with Internet access and those without. There is a natural resistance to change among older people, including to information technology. This prevents them from improving their quality of life and their employability (Niemczyk et al., 2023). Table 1 shows the prevalence of the Internet on average among the population aged 55–64 in the European Union and in Bulgaria in particular. Over the ten-year period (2013–2022), adult internet users in the European Union have risen by over 30 percent to reach nearly 90 percent. The gap between Bulgaria and the European Union is narrowing from 24% to 10%, but the gap is still significant. One in five adults in Bulgaria does not have internet access (Table 1).

A report commissioned by the European Commission (Technopolis and Oxford Economics, 2018) sets out various policy directions for the silver economy. It recommends supporting the concept of healthy ageing by raising awareness of the benefits of sport, active, healthy lifestyles and tackling bad habits. Silver tourism should also be promoted in the future. Attention needs to be paid to all persons who are already over 40 years of age. Support for the digital revolution in health and social care is recommended to continue by developing training and digital skills directly among older people and their caregivers in their homes and specialist care settings. This will reduce costs and improve the quality of care.

To improve the quality of life of older people, the development and innovation of products and services aimed at ensuring independent living in an age-friendly environment is crucial. The automation of daily activities is of great benefit to older people. Smart homes have so far failed to enter mainstream housing, but this development is imminent. Older people also benefit from advances in automation of automotive technology. They are expected to improve their mobility. The goals of developing age-friendly built environments, smart home solutions and automation of automotive technology are not only a benchmark for the need for political action. They provide information on the market niches that will be occupied by the private sector in the coming years.

Particular attention has been paid to promoting the active participation of older people in the labour market (Technopolis and Oxford Economics, 2018). Activities are recommended in three key areas. The first is creating conditions in higher education for older people. Higher education is

Table 1. Percentage of the population aged 55-64 with individual Internet access

Country	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
European Union (27) od 2020	58.02	62.32	65.52	69.48	72.78	75.83	80.32	83.54	86.41	88.14
Bulgaria	34.76	37.28	37.59	42.87	48.56	49.80	55.71	62.86	69.82	78.83

Source: Niemczyk et al., 2023

geared towards young people but needs to adapt to the needs of older people. The European Commission, through European programmes, is a supporter of investment in lifelong learning, retraining and career change. The second strand is the promotion of entrepreneurship for the over-50s. The third strand is improving working conditions for older people. Employers must adopt flexible working practices. The specific needs of the elderly population must be considered to tackle age discrimination. It also requires adapting tax and pension policies, adopting flexible retirement rules for workers who can and wish to stay in work, providing teleworking options or flexible working hours outside peak hours (Technopolis and Oxford Economics, 2018).

The silver economy and entrepreneurship in the agricultural sector

In paragraph 1 we saw that, like any other economic theoretical concept, the silver economy contains both sides of the market: both demand and supply. On the one hand, the elderly have their own specific needs that must be met from the demand side, with the development of different industries. On the other hand, from the supply side, the elderly are human capital, a factor of production with qualifications and experience that can be useful for individual industries and for the economy as a whole. (Golinowska, 2011; Sikora et al., 2019). The development of the silver economy in rural areas can stimulate the sustainable and multifunctional development of these areas. In this case, it is necessary to take into account the social context of culture in local communities, because these are usually small family enterprises, in which the functions of owner, manager and workers are performed by the same persons. Behaviour within such enterprises is mainly subject to informal norms, but on the other hand, the knowledge and experience of older people in them contribute to the realisation of the values of sustainable and social development (Sikora et al., 2019).

The question of entrepreneurship among older people after the end of their careers is an interesting one. The concept of silver entrepreneurship refers to seniors who start new entrepreneurial activities either after retirement or at a later career transition. There is evidence that seniors tend to behave entrepreneurially, volunteer, return to work or even become self-employed, using money from retirement as an investment (Zsarnoczky, 2018). The values of the elderly also give them strong advantages for entrepreneurship in rural areas (Sikora et al., 2019). Overall, work needs to be done towards changing the perception of entrepreneurship in the third age. Older adults have the potential to actively contribute not only to the demand side of the economy, but also to the supply side (Joensuu-Salo et al., 2022).

Many people over working age are willing and interested to work for economic reasons but often face discrimination from employers and society (Zencaka et al., 2019). Employment of pensioners is very often a necessity due to relatively low pensions. Trends in some countries such as Poland reveal that the economic situation of the elderly is deteriorating (Knapinska, 2023). In these countries, the average pension is set at minimum wage levels. Activities to promote the employment of pensioners should be stepped up. This could be done, for example, by offering financial incentives to employers who hire pensioners, encouraging part-time work for seniors, and developing other flexible forms of employment. Work can provide pensioners with additional income, and it is also a way for older people to keep in touch with the world and fulfil social roles other than within the family.

The traditional three phases of life – education, work and retirement – no longer necessarily follow one another and often run in parallel. Thanks to advances in medicine, health and social care, and technological progress, today's generation of adults is becoming healthier and more active, smarter and happier, thereby becoming an important economic force (Bojanić et al., 2024). Adults aged 50 years and older account for approximately 34% of global GDP in 2020, amounting to $45 trillion. The contribution of this demographic group is projected to grow to 39% of global GDP, reaching $118 trillion by 2050 (AARP, 2022). Demographers refer to this transition as a silver tsunami, while economists call it a silver economy. The key players in this economy are older workers, older entrepreneurs, older consumers, and older investors. The silver economy sees older people as a productive and economically and socially important group, and seeks to realise their potential to drive economic growth.

Entrepreneurship is a risky activity, unlike working under a contract of employment. Many new businesses fail, and older people are cautious about investing their savings in their own business. The propensity for entrepreneurship among the elderly population (over 65 years of age) in the European Union has remained relatively constant over the years. Between 2011 and 2021, around 12% of the economically active adult population was an employer. Over the same period, the share of those employed by other employers increased by nearly 20% at the expense of those employed in family businesses and freelance occupations (Niemczyk et al., 2023).

Most often, seniors who start their own businesses turn to personalised services or crafts that are based on their personal hobbies and interests. According to an OECD report for the countries of the European Union, older self-employed persons, unlike younger ones, are more likely to work in ag-

riculture, forestry and fishing, wholesale and retail trade, motor vehicle repair, real estate, etc. (OECD, 2014). In 2012, the largest share of self-employed older people (aged 50 to 64) worked in agriculture, forestry and fisheries (20.5%), followed by: wholesale and retail trade and motor vehicle repair (16.9%); construction (11.0%); and professional, scientific and technical activities (10.3%). Nearly 60% of self-employed older people worked in these four industries in 2012. Current data from 2023 confirm the interest of the older population in entrepreneurship, especially in agriculture, 60% of all working older people in agriculture, forestry and fisheries are self-employed (OECD, 2023). This is the highest share among professional activities (professional, scientific and technical activities with 43% and other service activities such as hairdressing and computer repair with 31%). Compared to the rest of the population, self-employed adults in agriculture, forestry and fishing are 9% more. The difference can be explained by the nature of the work and administrative requirements, including social security opportunities.

From a market demand perspective, in Ireland national agriculture and food sector development strategies, such as Food Harvest 2020 and Foodwise 2025, aim to create a smart food industry with some focus on areas related to the 'Silver Economy' (Department of Agriculture, Food and the Marine, 2015). It is estimated that new jobs can be created by promoting the production of products in areas such as healthy nutrition for the elderly. These products are generally associated with higher prices, provide opportunities for new market development and represent the potential for sector development to contribute to future economic growth of the Irish economy.

An example of the role of the silver economy in agriculture from the point of view of market supply can be given with Poland. In 2016, 13% of senior citizens in Poland owned their own farms, while from 2005 to 2016, the number of farms in the country decreased. The reasons for the latter can be attributed to the processes of industrialisation of agriculture and the decreasing labour resources in agriculture, especially those based on family members of working age. Against this background, it should be noted that the development of additional entrepreneurial activity that is based on the resources of agricultural holdings, such as agritourism, crafts and processing of agricultural products, is associated with the support of elderly people in farm families (Sikora et al., 2019).

The American non-governmental organisation supporting the elderly AARP conducts research based on 76 economies, on six continents, covering 79% of the world's population and 95% of the world's GDP on the economic impact of the elderly (50+). The contribution of older adults to the Agriculture, Forestry, and Fisheries sector is projected to grow from $3.2 trillion in PPP (42% of output) in 2020 to $7.8 trillion in PPP (52%) in 2050 (AARP, 2022). In high- and middle-income economies, where the population is older and spends much more on food, the impact of 50+ year olds on the sector is much stronger.

In terms of employment, agriculture is the most labour-intensive sector in the world, with 42% of jobs in the sector or 344 million jobs in 2020 held by older people (AARP, 2022). Approximately one in three adults worldwide in 2020 were employed in the agricultural sector. Although the agricultural sector provides the most employment, in terms of jobs, incomes remain relatively low, and it ranks third in total labour income in 2020 ($2.1 trillion), compared to wholesale and retail trade at $3.6 trillion and manufacturing at $3.3 trillion. According to the forecast, jobs for adults in the sector will grow to 378 million in 2050, but as a relative share of the total employment of adults will decrease to 25%. Global trends are in the direction of gradually moving away from this type of employment.

The projections for Bulgaria are that the elderly population (50+) will decline between 2020 and 2050 in absolute terms from 2.9 million to 2.6 million, but its relative share of the total population will increase from 41.8% to 48% (The Global Longevity Economy Outlook, 2025). The contribution of this population to consumption will increase both in absolute terms and as a share, respectively: from 50.8 billion USD to 109.2 billion USD and from 51.4% to 59.5%. In absolute terms, the number of employed elderly people will decline from 1.1 million workers in 2020 to 1 million in 2050, but as a relative share of the total number of employed people, their share will increase from 35.5% to 40.4%. Specifically in the agriculture, forestry and fisheries sectors, the contribution of older people to production is projected to fall from USD 3.4 billion to USD 1.9 billion in absolute terms. However, their relative weight in the sector will increase from 55.1% to 62% of production. The demand-side impact of older people on the agricultural sector can be seen in terms of food and non-alcoholic beverage consumption: it will increase both in absolute terms and as a relative share: from USD 11.7 billion to USD 18.4 billion and from 55.4% to 64%.

Conclusions

The relative share of the elderly population in the European Union will continue to rise. The silver economy will become increasingly important both from a consumption-side and a supply-side perspective. The silver economy is turning demographic change into development opportunities, exploring ways to improve the lives of older citizens

and the impact on the economy. This branch of economic science looks at the need to develop solutions to extend the working life of the population, which would solve not only the problems of the labour force in the economy, but also poverty among the older population, and the pension and social security system, which is also under increasing pressure.

The inclusion of the elderly in the labour market is one of the main challenges, both to improve their active lifestyle and to improve their financial situation. This can be done in two main ways: by improving employment conditions or by promoting entrepreneurial activity. A major challenge for the employment of older workers is the extension of the working life of the population. Creating better working conditions for the elderly, an appropriate legal framework and sufficient economic incentives are not adequate preconditions. The elderly population needs to be in good physical and mental health. In countries such as Bulgaria, characterised by low life expectancy, high morbidity rates, unhealthy lifestyles and a lack of preventive health care, this is a major problem.

Low birth rates and high mortality rates lead to demographic problems common to the entire economy, which are particularly pronounced in Bulgaria. Forecasts indicate that older people will make up an increasingly large share of the population in EU countries and in Bulgaria. They will have an increasingly greater weight in employment, consumption, and entrepreneurial activity. In rural areas, however, the problem is further exacerbated by migration to other countries and to the country's large cities. A very good solution to this problem, in the interest of the entire society, can be found in the development of the silver economy in rural areas. The data in the study confirm that older people have the ability and desire to engage in agricultural production. To encourage this tendency, it is necessary to implement appropriate public policies aimed at improving the lives of older people in rural areas. This policy, aimed at older people, may include measures to improve their financial situation, access to quality healthcare, building social infrastructure, opportunities for the development of cultural activities, etc.

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References

AARP (2022). The Longevity Economy Outlook: People aged 50 and older are making unprecedented economic contributions and creating opportunity for every generation, Washington DC, https://www.aarp.org/content/dam/aarp/research/surveys_statistics/econ/2022/global-longevity-economy-report.doi.10.26419-2Fint.00052.001.pdf

Bojanić, I., Erceg, A. & Sekuloska, J. (2024). Silver entrepreneurship: A golden opportunity for ageing society, *Economics and Business Review*, *10*(1), 153–178.

Butt, S. A., Elhadjamor, E. A., Pappel, I., Õunapuu**, E. & Draheim, D.** (2021). A knowledge map for ICT integration in the silver economy. *Procedia Computer Science*, *181*, 693–701.

CGTN (2024). China calls for boosting silver economy to improve well-being of elderly, CGTN. Available from: https://news.cgtn.com/news/2024-01-05/China-calls-for-boosting-silver-economy-to-improve-well-being-of-elderly-1q7ArfUWbpS/p.html (Accessed 09.12.2024).

Department of Agriculture, Food and the Marine (2015). Food Wise 2025, A Vision for Growth for the Irish Agricultural Economy for the next 10 Years. Available from: https://faolex.fao.org › docs › pdf › ire179119. (Accessed 09.12.2025).

Eatock, D. (2015). The silver economy: Opportunities from ageing. EPRS, Briefing.

European Commission (2015). Growing the European silver economy. *Background Paper*.

Golinowska, S. (2011). "Silver Economy" and its place in the health sector. Concept and examples of regional application. *Public Health & Management*, *1*, 76–85.

Iwanski, R. (2024). Growth Prospects for the Silver Economy in the Market Segment of Residential Care Services Provided to Dependent Elderly People. *Economics and Business Review*, *10*(2), 165 – 186. https://doi.org/10.18559/ebr.2024.2.1255

Jajko-Siwek, A. (2024). Unveiling Financial Wellbeing: Insights from Retired People in Third Age Group in Poland, Spain and Denmark. *Economics and Business Review*, *10*(3), 7–33. https://doi.org/10.18559/ebr.2024.3.981

Joensuu-Salo, S., Viljamaa, A. & Kangas, E. (2022). Part-time entrepreneurship in the third age: wellbeing and motives. *Small Enterprise Research*, *29*(1), 20–35.

Klimczuk, A. (2013). The silver economy as the private sector's response to an aging society. (Po). Available from: http://odpowiedzialnybiznes.pl/artykuly/srebrna-gospodarka-jako-odpowiedz-sektora-prywatnego-wobec-starzenia-sie-spoleczenstwa/ [Accessed: 03.03.2024].

Klimczuk, A. (2016). Comparative analysis of national and regional models of the silver economy in the European Union. *International Journal of Ageing and Later Life*, *10*(2), 31–59.

Knapinska, M. (2023). Is the Silver Generation Still on the Labour Market or Already Inactive? The Situation of the Elderly on the Polish Labour Market. *Journal of Law, Economics and Sociology*, *85*(4), 199–219. DOI 10.14746/rpeis.2023.85.4.10

Kuosmanen, K. (2020). Business Model Development for the Silver Economy Market. *The Silver Economy Project*, Karelia University of Applied Sciences.

McGuirk, H., ConwayLenihan, A. & Lenihan, N. (2022). Awareness and potential of the silver economy for enterprises: a European regional level study. *Small Enterprise Research*, *29*(1), 6–19.

Niemczyk, A., Szalonka, K., Gardocka-Jałowiec, A., Nowak, W., Seweryn, R. & Gródek-Szostak, Z. (2023). The Silver

Economy: An Ageing Society in the European Union, London, Routledge, https://doi.org/10.4324/9781003377313

OECD / The European Commission (2014). The Missing Entrepreneurs: Policies for Inclusive Entrepreneurship in Europe, OECD Publishing. Available from: http://dx.doi.org/10.1787/9789264213593-en [Accessed: 05 March 2024].

OECD / The European Commission. (2023). The Missing Entrepreneurs 2023, Policies for Inclusive Entrepreneurship in Europe, OECD Publishing, Paris. Available from: https://doi.org/10.1787/230efc78-en [Accessed: 23 December 2025].

Sikora, J., Kaczocha, W. & Wartecka-Ważyńska, A. (2019). Axiological foundations of silver economy in rural areas in the context of sustainable development in Poland. *Economic science for rural development, 2019,* 177.

Technopolis & Oxford Economics (2018). The silver economy, Available from: https://op.europa.eu/en/publication-detail/-/publication/a9efa929-3ec7-11e8-b5fe-01aa75ed71a1 [Accessed: 05 March 2024].

The Global Longevity Economy Outlook. Available from: https://www.aarp.org/pri/topics/work-finances-retirement/economics-aging/global-longevity-economy/ (Accessed 27.12.2025).

Zencaka, A., Senfelde, M. & Pavlova, I. (2019). Opportunities for the formation of high-quality human capital in the conditions of a "silver" society. In: *20th International Conference* "*Economic Science for Rural Development"*, 260–266.

Zhang, X. & Ren, M. (2021). Research on the Characteristics of Home and Community Elderly Service Products: From the Perspective of Silver Economy. *Smart City Challenges & Outcomes for Urban Transformation*, 52–56.

Zsarnoczky, M. (2018). The new hope for the EU – silver economy. https://www.regionalstudies.org/wpcontent/uploads/2018/07/Martin_Zsarnoczky_-_The_New_Hope_for_the_EU_eng.pdf

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