

Elwira Leśna-Wierszolowicz

West Pomeranian University of Technology Szczecin
e-mail: elesna@zut.edu.pl

SILVER ECONOMY AS A RESPONSE TO DEMOGRAPHIC CHANGES

SREBRNA GOSPODARKA JAKO ODPOWIEDŹ NA ZMIANY DEMOGRAFICZNE

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Summary: The aim of the article is to present the essence of the silver economy, which means economic activity aimed at satisfying the needs of ageing society. The article describes the ageing process of the Polish society which is the result of decline in fertility and lengthening of life expectancy. The phenomenon of demographic aging can be a great opportunity for business and economy. The article introduces the concept and main assumptions of the silver economy. The main idea of the silver economy is that supplying goods and services for the growing sector of elderly consumers can stimulate economic growth and create new jobs. According to the silver economy principles, older people are perceived as an active, productive and socially useful group. In Poland undertaking activities in the field of the silver economy may be a positive economic stimulus, which will contribute to the expansion of services and products offered to the elderly, especially those that remain in a favorable financial situation. The key element of the silver economy is gerontechnology. Gerontechnology is an interdisciplinary field combining gerontology and technology. Gerontechnology concerns matching technological environments to housing, health, mobility, communication, leisure and work of older people.

Keywords: aging of society, demographic changes, silver economy.

Streszczenie: Celem artykułu jest przedstawienie istoty srebrnej gospodarki, czyli działalności gospodarczej mającej na celu zaspokojenie potrzeb starzejącego się społeczeństwa. Artykuł opisuje proces starzenia się polskiego społeczeństwa, będący wynikiem spadku płodności i wydłużenia średniej długości życia. Zjawisko starzenia się społeczeństwa może być doskonałą okazją dla biznesu i gospodarki. Artykuł wprowadza koncepcję i główne założenia srebrnej gospodarki. Główną ideą srebrnej gospodarki jest to, że dostarczanie towarów i usług dla rosnącego sektora starszych konsumentów może stymulować wzrost gospodarczy i tworzyć nowe miejsca pracy. Zgodnie z zasadami srebrnej gospodarki, starsi ludzie są postrzegani jako aktywna, produktywna i społecznie użyteczna grupa. W Polsce podejmowanie działań w sferze srebrnej gospodarki może być pozytywnym bodźcem ekonomicznym, który przyczyni się do rozwoju usług i produktów oferowanych osobom starszym, zwłaszcza tym, które pozostają w korzystnej sytuacji finansowej. Kluczowym elementem srebrnej gospodarki jest gerontech-

nologia. Gerontechnologia to dziedzina interdyscyplinarna łącząca gerontologię i technologię. Gerontechnologia dotyczy dopasowywania środowiska technologicznego do warunków mieszkaniowych, zdrowia, mobilności, komunikacji, wypoczynku i pracy osób starszych.

Słowa kluczowe: starzenie się społeczeństwa, przemiany demograficzne, srebrna gospodarka.

1. Introduction

Nowadays the ageing of the population takes place in many countries. Over the last dozens of years also in Poland we have been observing significant changes in the age structure of its inhabitants. The ageing process of the Polish society is the result of decline in fertility and extension of life expectancy. Rapid progress in the field of medicine that allows earlier and more accurate diagnosis of diseases, and thus more effective treatment, as well as a healthier lifestyle, affects the improvement of the health of Poles and their longer life [Leśna-Wierszołowicz 2017, p. 160].

The main idea of the silver economy is that supplying goods and services for the growing sector of elderly consumers has the potential to stimulate economic growth and create new jobs [Schulz, Radvanský 2014, p. 7]. The silver economy is therefore a form of business adaptation and economic development to an aging society. It focuses on developing strategies related to the ageing population, mainly in terms of special technology services. These services generally aim to support well-being through health monitoring, robotic assistance, electrical mobility or sport activities including health tourism, green care and web based home care solutions [Zsarnoczky 2016, p. 105].

The aim of the article is to present the essence of the silver economy, which means economic activity aimed at satisfying the needs of aging society.

2. Demographic changes in Poland

In Poland, from the time of political transformation, a progressive aging process of the population can be observed, which is mainly the result of decline in fertility and extension of life expectancy.

The factors that contributed to the reduction of fertility in Poland include: changes in the economic functions of the state, increased household responsibility for their economic situation and changing conditions for participation in the labour market (caused by economic reforms, globalization and high unemployment). These factors also include those that affect the shape of the modern family, regardless of the economic situation of the state. Among them, mention is made of development of women's educational opportunities and their professional activation, conflict of gender roles in family relations resulting from equalizing the professional status of women and men and changes in the process of population reproduction (fertility

control thanks to the development of medicine and pharmacology) [Grodzka 2016, p. 79]. Transformation processes generally created new career opportunities and related changes to the socio-economic position of individuals and households. Household welfare became more dependent on household resources, such as personal income, skills, and the ability to act in new circumstances. Simultaneously, growing labour market competition resulted in growing job requirements. For these reasons, more effort had to be made by individuals to get and to maintain a job. Therefore, to find a job and to stay in the highly competitive labour market became of crucial importance for the younger generations. Moreover, changes in the institutional setting made it more difficult for women to be flexible and mobile and to adapt to increasing employers' requirements [Kotowska et al. 2008, p. 824].

Lowering the birth rate is one of the main reasons for the aging of Polish society. The low number of births does not guarantee – for 25 years already – a simple replacement of generations. Since 1990, the total fertility rate (TFR) has been below 2, while the optimal value – described as advantageous for stable demographic development – is 2.1-2.15, i.e. the average number of children per 100 women aged 15-49 vary from 210-215 in a given year. In 2016 the total fertility rate (TFR) was 1.36, which means that for every 100 women of reproductive age (15-49 years), there were about 136 children born. Initiated in the 90s of the last century the demographic transformations are the result of choice, which is often made by young people, to reach a certain level of education and economic stability firstly and then (about the age of 30) to start and expand a family. The observed changes caused a shift of the highest women fertility from the group aged 20-24 to the group aged 25-34, where there was a significant increase fertility rate. The consequence of all the changes in procreation behaviors (since the beginning of this century) is the increase of the median age of women giving birth to a child. In 2016 this was 29.9 years – compared with 26.1 years in 2000 (in 1990 it was slightly less – 26 years). During this period also increased the average age of the women giving birth to their first child from 23.7 years to 27.8 years (in 1990 amounted to 23 years) [GUS 2017, pp. 14-15].

The new demographic situation also results from the prolongation of the average duration of human life. As predicted by the Central Statistical Office, over the years, the aging of Polish society will systematically progress. In the following years, a significant increase in the percentage of people aged over 65 is forecasted. In the years 1990-2016, the number of people aged 65 and more gradually increased (by over 2.4 million). In 1990, the share of older people in the general population was 10.2%, and at the end of 2016, it increased by more than half – to 16.4%. Currently, the number of elderly people is about 530 thousand greater than the number of children [GUS 2017, p. 25]. By 2030, the share of people in the discussed age group will amount to 22.6%, while in 2050 – 29.7%. The demographic forecast prepared by Eurostat shows that in 2060 the percentage of people over 65 in society will amount to 36.18%, and their number will exceed 11 million [Giannakouris 2008, pp. 7, 10]. This means that Polish society will be one of the fastest aging societies in the European Union [Russel 2016, p. 2]. Long-term forecasts show that by 2050 the

percentage of people aged over 80 will also increase significantly. While in 2013 the share of people in the discussed age group accounted for less than 4% of the total population, in 2050 it will be 10.4% [GUS 2014, p. 164]. In 2050, men will live an average of 83 years, while women will live for 88.4 years – table 1.

Table 1. The average duration of human life in Poland in the years 2015-2050

| Year | Men | Women | Year | Men | Women |
|------|------|-------|------|------|-------|
| 2015 | 73.5 | 81.5 | 2035 | 79.1 | 85,6 |
| 2020 | 74.9 | 82.5 | 2040 | 80.3 | 86,5 |
| 2025 | 76.3 | 83.6 | 2045 | 81.6 | 87,4 |
| 2030 | 78.0 | 84.8 | 2050 | 83.0 | 88,4 |

Source: GUS 2014, p.78.

Among European countries, Poland is relatively demographically young. In 2013, the median age of Poles was 37.4 years for men and 40.9 for women, while in 1990 it was lower by 6.5 years for men and 7.2 years for women (30.9 and 33.7 years, respectively) [GUS 2014, p. 81].

3. The main assumptions of the silver economy

The silver economy can be defined as the economic opportunities arising from the public and consumer expenditure related to population aging and the specific needs of the population over 50 [European Commission 2015].

According to S. Golinowska [2014, p. 18], the silver economy consists in directing supply in accordance with the changing needs of various groups of older people, so that they become a source of economic activation. Piotr Szukalski [2012, p. 7], on the other hand, writes about the silver economy that “this term covers all economic activities aimed at satisfying the emerging needs from the aging process of the population”.

The main idea of the silver economy is that supplying goods and services for the growing sector of elderly consumers can stimulate economic growth and create new jobs. Older people are perceived as those with low economic status or as a group which is most vulnerable to poverty. It should be noted, however, that although they have lower income (in the form of pensions), they also incur lower expenses than those working with higher incomes (in the form of remuneration for work). Pensioners usually do not incur expenses on [Jurek 2012, p. 158]:

- keeping the offspring – their children (if they have one) are already adults and financially independent,
- financial liabilities (e.g. mortgages) – most people already own a house or flat equipped with appropriate equipment,
- goals related to the performance of work – commuting, further education.

In 2015 the average monthly disposable income in retirees' and pensioners' households amounted to PLN 1,366.47 per person (retirees' income – PLN 1,433.24, and pensioners' income – PLN 1,063.77). In relation to the previous year, the real disposable income in 2015 increased by 4.5% (in retirees' households it increased by 3.9%, while on pensioners' households by 4.6%). It should be noted that the average monthly income of retirees' households was higher by PLN 95.37 than the average family income of all households in Poland, which amounted to PLN 1,337.87 [GUS 2016, p. 31].

In 2015 the average monthly total expenditure in retirees' and pensioners' households amounted to PLN 1,180.53 per person. Funds earmarked for food and non-alcoholic beverages and for housing, including energy carriers, accounted for the largest expenditure group and absorbed 26.6% and 23.5%, respectively. For comparison, in total, these expenditures accounted for 24% for food and non-alcoholic beverages and 20.1% for the use of the flat. Retirees' and pensioners' budgets to a much lesser extent included expenditures on: clothing and footwear (3.5%), alcoholic beverages and tobacco products (2.4%), restaurants and hotels (2.8%) or education (0.2%). However, health-related costs were higher for them (8.1%). A large share of resources allocated, among others on medical-pharmaceutical products, medical devices and equipment presents the specifics of households of pensioners (in households in total they amounted to 5.3%). Much less money was spent on transport (5.6%), connectivity, including internet services (4.6%) and recreation and culture (5.2%). Retirees and pensioners collectively allocate nearly 25.4% of spending on consumer goods and services related to culture and recreation, health, education, transport, purchase of clothing and footwear, restaurants and hotels. This proves that despite the specificity of this age-related group, retirees and pensioners still have high purchasing potential. It is also worth noting that it is a group with fixed monthly incomes from pensions and disability benefits [GUS 2016, p. 78].

In the silver economy the following areas should be taken into account [Sobolewska-Poniedziałek 2016, p. 60]:

- information technology (IT) that is used in medicine,
- adaptation of housing and services that make life easier, based primarily on IT,
- promoting independent living also with an increasing share of IT,
- gerontology relevant to health economics – technologies supporting hearing and eyesight, prosthetics and orthopedics,
- education and culture,
- mobility and promotion of its elements, e.g. car traffic safety,
- rest, travel, communication and entertainment,
- fitness and wellness – increasing awareness of a healthy lifestyle,
- clothing and fashion – a manifestation of striving for social integration,
- insurance services – related in particular to risk forms characteristic of older age,
- financial services – capital protection, maintaining wealth and preventing the loss of savings.

According to the stereotype, people over 50 are treated as a group with low purchasing potential, leading a passive lifestyle, with modest financial resources. In addition, very often seniors are perceived as sick, losing strength and not having a passion or desire to live. Therefore, they are credited with the lack of higher requirements as to the products and services they purchase. Contemporary seniors are not always hard and chronically ill people. The development of health protection affects not only the extension of life expectancy, but also its quality. In the group of people over 50, there are more and more active units and those who want to develop. Seniors more and more often want to actively participate in social life, but also to follow the development of technology. Therefore, they learn to shop online, create accounts on social networks and actively use the Internet. According to CBOS surveys, around 47% of people in the 55-64 age group use the Internet, while in the 65+ group, Internet users account for 23% [CBOS 2017, p. 2].

Nowadays older people are not only mature people, but also mature consumers. Contrary to appearances, these are demanding customers who often value the quality of the products offered much more than the younger buyers, as well as elegance, class and convenience. Seniors are more and more open to changes, including new ways of communicating or shopping. Currently, older people, if only health and financial situation allow, want to enjoy their lives. They want to do what they could not before due to their professional or home duties. Another sign of changes in attitudes towards older people are Universities of the Third Age, of which there are about 350 in Poland with a total number of nearly 100,000 listeners [Badowska, Rogala 2015, p. 15]. These universities are nothing more than didactic facilities for the elderly, whose aim is to improve the quality of life of older people. Their growing popularity is due to the favor of seniors for this form of activity. Classes at the third-century university are an opportunity to leave the house, meet new people, acquire new skills [Bondos 2013, p. 33]. Currently, seniors live longer, are healthier and show a greater inclination to a more active lifestyle.

Many studies emphasize the key importance of gerontechnology as an element of the silver economy. Gerontechnology is an interdisciplinary field combining gerontology and technology. Gerontechnology concerns matching technological environments to housing, health, mobility, communication, leisure and work of older people. Changes in the physical and intellectual skills of older people mean that many products cease to fulfill their functions in relation to seniors. For instance, these may be foreign terms, symbols, complicated instructions, too small buttons, letters, access codes and passwords, bulky items or architectural barriers.

The goal of gerontechnology is to improve the everyday life of older people. There are already many products adapted to older people. These are among others: adapted telephones, tablets, websites without functional barriers, hearing aids, stair lifts, automatic lighting systems, lowered handrails, door handles, curbs and benches. What is more, the aging process affects the development of new segments of the services market, such as cosmetic services, aesthetic medicine, tourism, wellness, culture, etc.

4. Potential benefits from the implementation of the silver economy

Some experts claim that demographic trends will lead to a drop in GDP per capita, investments and will increase budget expenses for purposes related to financing benefits for a large post-working age population. A low employment rate of older people leads to lower productivity of the society, lower tax revenues and a smaller number of people paying premiums for health and social insurance.

Others admit that the aging process of the society can be an opportunity for economic growth. According to S. Golinowska [2014, p. 20], the economic benefits of implementing the silver economy concept are based on the activation of demand and supply factors in the older part of the population. Demand factors include purchasing power and the consumption of seniors, which variables play an important role in shaping economic growth. In turn, supply factors represented by older people include longer work, higher qualifications, experience and life stabilization. In the search for a new path of socio-economic development, more and more often the attention is focused on the concept of the silver economy, which assumes a positive look at the consequences of the aging process of the population. It is based on the conviction that a rapidly growing population of older people can be a source of potential benefits for the economy and society. From the economic point of view, older people represent an increasingly important group of potential consumers with significant purchasing power.

5. Conclusions

The demographic trends in Poland for over a dozen years have included the decline in the number of births and the extension of the average life expectancy. The extension of life expectancy is the consequence of limitation of consumption of unhealthy food and alcohol, increase in physical activity, greater access to medical services, as well as the improvement of the quality of these services and the greater universality of preventive examinations.

According to the silver economy principles, older people are perceived as an active, productive and socially useful group. In Poland undertaking activities in the field of the silver economy may be a positive economic stimulus, which will contribute to the expansion of services and products offered to the elderly, especially those that remain in a favorable financial situation. By definition, most of the products and services offered by the silver economy are based on new technologies.

Nowadays seniors are interested in an active lifestyle, therefore companies should increase their offer, among others in the field of lifelong education and rehabilitation services, and support the development of cultural, educational, recreational and tourist infrastructure. It is also reasonable to invest in public transport, organization of space without unnecessary architectural barriers and support for groups of older people (e.g. Universities of the Third Age).

The aging process of the population has a direct impact on the economy, which is primarily the result of changes in the volume of labor supply, the emergence of

new sales markets, and rising social expenses for pension and disability purposes. The growing burden of maintaining older people and satisfying their needs may raise concerns about productivity, competitiveness and the state of public finances in the economy. Foreign experience, however, indicates that by recognizing the silver economy as a field of strategic activities, the strength of the economy and its competitiveness may be strengthened, ensuring sustainable socio-economic development in the future [Boruta 2017, p. 33].

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