

Silver Population – The New ‘Gold’ for Our Society

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Abstract

Global demographic trends show an ageing population, concentrated mainly in Europe and Asia, in countries such as Italy, China and Japan. This can be seen either as an issue, considering the social protection system, either as a big opportunity in keeping elders active. In both cases, the importance of modernization of social policies has become crucial around the world. In order to avoid major economic issues or social tensions, it is required to identify main areas with big impact for ageing population and consider benefits for them. The purpose of this research is to investigate the opportunities of ageing population in the context of quality of life, based on the nine dimensions proposed by Eurostat, showing that silver (population) is the new gold for society. As a preliminary research, ageing will impact material living conditions, health, leisure and social interactions. For instance, in medicine there will be a challenge to switch from traditional medical checks to tele-medicine based on gadgets that monitor health or can assist persons in their daily life and fight with illness.

Key words: silver population, silver economy, quality of life, active ageing

J.E.L. classification: A13, I10, J14, J00

1. Introduction

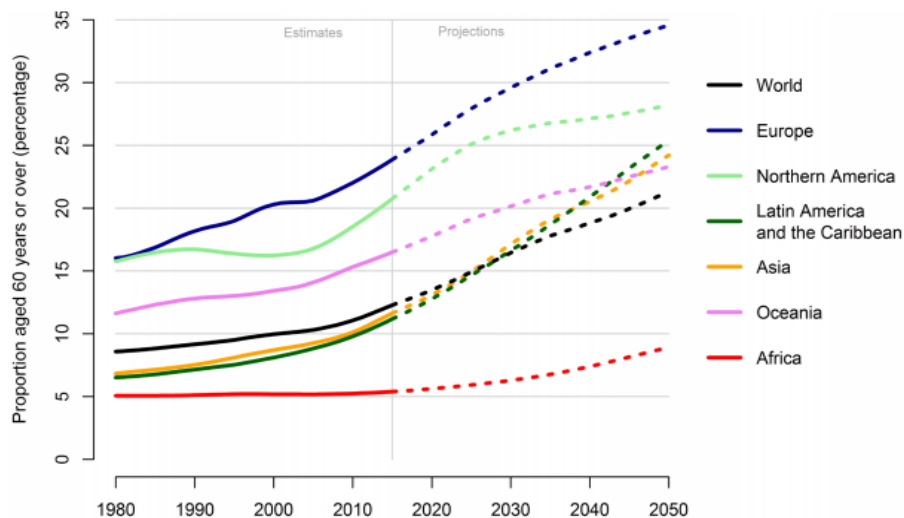
Silver Tsunami also known as age wave, or silver wave is the metaphor used for population ageing. Population ageing is seen as a major success story in terms of medical advancements and social development. As a tsunami, strong wave, this demographic reality is often perceived negatively and toxic from an economic standpoint. The wave has different intensity across the globe and has been fastest in Eastern and South-Eastern Asia. Public spending, workforce and consumption patterns are not only a major challenge, but also an opportunity for growth, new jobs and a more adaptable and flexible society with well-chosen policies.

This trend is being driven by declines in fertility, increased level of education among youngsters, life expectancy increment and overall tendency of reshaping our lives. At global level, countries are seeing population ageing in different ways (Barusch, 2013, p.181-184): Japan is bracing for it, Hawaii is preparing for a coordinated effort, France anticipates ageing society through new legislation laws, Italy is promoting awareness for long term care for elderly and China is facing first warnings of one-baby policy introduced in 1979.

According to data from World Population Ageing 2020, globally there are 727 million persons aged 65 years and over in 2020 (United Nations, 2020). Over the next three decades, the number of elders worldwide is projected to more than double, reaching over 1.5 billion in 2050. All regions will see an increase in the size of the older population between 2020 and 2050. Globally, the share

of the population aged 65 years or over is expected to increase from 9.3% in 2020 to around 16.0% in 2050 (United Nations, 2020).

Figure no. 1. Percentage of population aged 60+ years by region, from 1980 to 2050



Source: United Nations (2017). *World Population prospects: the 2017 Revision*

By 2050, in Europe, based on the population projection done by Eurostat in April 2020 using baseline projections method, top three countries impacted by grey population growth will be Germany, France and Italy.

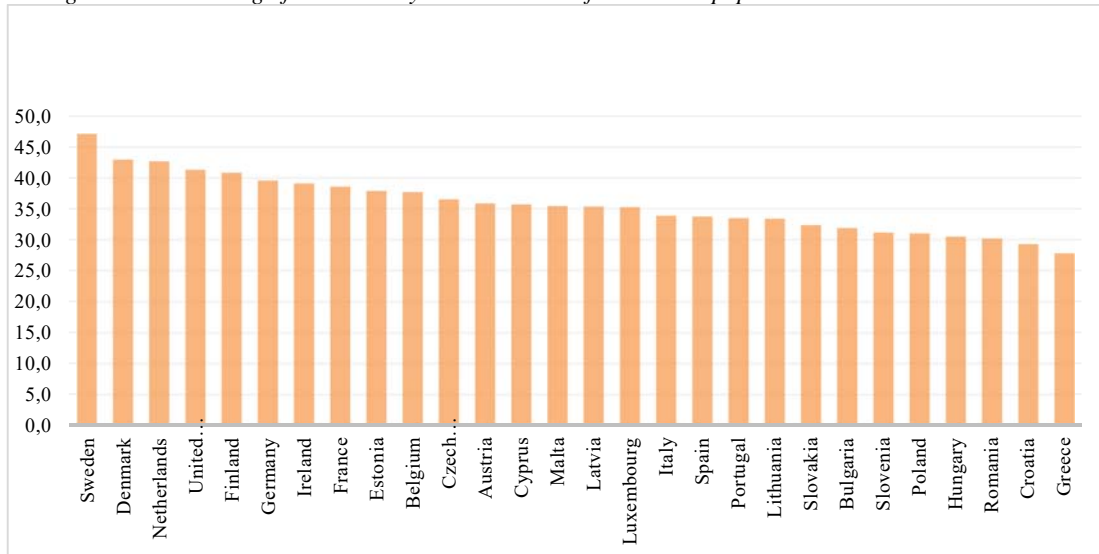
Table no. 1. Population on 1st January by age, sex using baseline projections

| Country | Population on 1st January 2050 by age, sex and type of projection |
|-------------|---|
| Germany | 82.669.724 |
| France | 70.010.903 |
| Italy | 58.125.032 |
| Spain | 49.348.530 |
| Poland | 34.102.204 |
| Netherlands | 18.142.292 |
| Romania | 15.502.837 |

Source: Eurostat (PROJ_19NP)

In this context, European Commission introduced the Active Ageing Index (AAI), a tool to measure the potential of older people for active and healthy ageing assuring in the same time comparability in time and space across countries. The Active Ageing Index is an aggregation representing four domains: participation in society, employment, independency, healthy and secure living and capacity and enabling environment for active ageing. Sweden obtained the highest overall score of 47.2, followed by Denmark, Netherlands and United Kingdom. At the bottom of the ranking with values around 30 are Greece, Croatia and Romania.

Figure no. 2. Ranking of countries by the overall AAI for the total population in 2018



Source: United Nations Economic Commission for Europe

With the increase in population, there will be an increase in the demand and the senior living industry will need to expand in order to meet the demand, in this context increasing also the care for elderly people quality of life. Quality of life is defined by various factors and aspects and in order to be better comprehended was divided in nine dimensions (Eurostat, 2020). The relationship between age and quality of life is important but not well understood yet.

Silver economy is an economic system oriented on adjusting the spheres of production and distribution of goods and services to the needs of older people and younger generations that are entering the ageing process (Klimczuk, 2012, p.52-56).

Figure no. 3. Quality of life indicators for European Union



Source: Eurostat

According to the official definition given by European Commission (European Commission, 2018), silver economy represents the amount of economic opportunities arising from the public and consumer expenditure related to population ageing and the specific needs of the population over 50 years. Basically, silver economy is not a stand-alone economy, but it is a component of the real economy with a well defined target group and clear overview about opportunities and expansion.

2. Literature review

A valuable contribution to understand current challenges by increasing the number of elders across the globe is by seeing the economic dimension of the trend not just the demographical one (Clark, 2004).

Borzaga et al. (2017) define silver economy as being the sum of all economic activity serving the needs of seniors 50+ from both perspectives, products and services they buy direct or the potential of the economic activity that this spending generates.

Eitner et al. (2011) consider 14 market segments which may be recognized as “silver”. In this way, silver economy is analyzed as a topic of production with an adaptable design and marketing. Also, Kryńska (2012) underlines the concept of silver economy as being a bottom-up initiative to approach ageing modern societies. Silver economy is one of the contemporary megatrends and may be recognized as the third world economy after USA and China (Gordon, 2017). In a broad sense, “silver economy” is a sector of the economy focused on satisfying the needs emerging from an ageing population (OECD, 2014)

There are multiple examples of successful international projects or initiatives aimed to improve the quality of life of the elders in Canada (Active Living in Alberta), Spain, Italy (Wellness project), Portugal (In Porto life is long), Germany, Japan, purpose being to promote a healthy ageing.

The widely accepted definition of successful ageing by Rowe and Kahn contains three components: low risk of disease and disability; high mental and physical function; and active engagement with life (Rowe et al, 1997, p.433-440). Gamberini (2006, p.285–308.) mentions a set of objectives that connect technology with seniors.

3. Research methodology

To analyze the influence of development of silver economy concept on quality of life are considered the principal domains of quality of life, the framework for the measurement of well-being developed by Eurostat. The aim for this research is to develop a model of consumer behavior in the segment of silver population using the most relevant domains for quality of life in order to highlight the opportunities for silver tsunami.

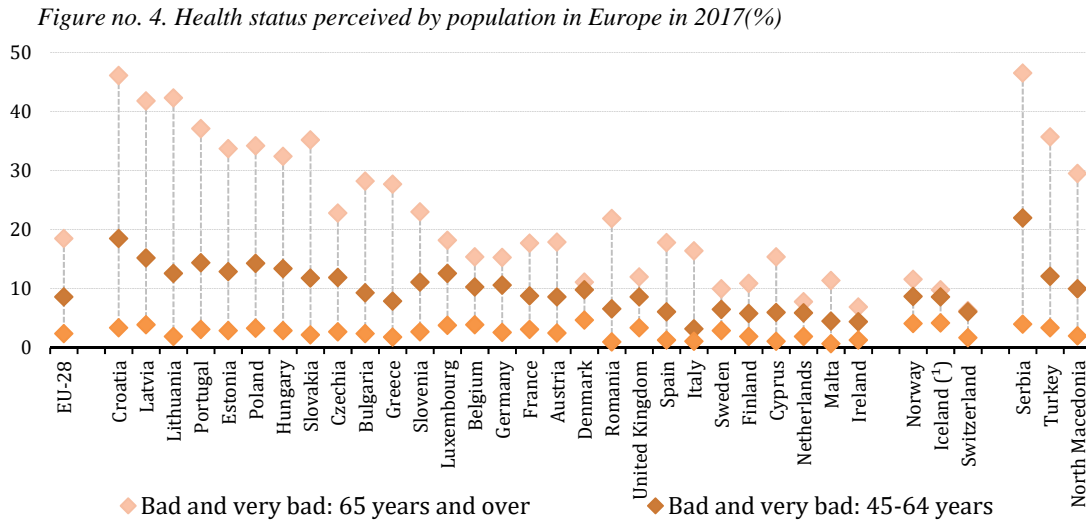
4. Findings

4.1. Living conditions

Material conditions are the most important element of a quality life. Good quality housing is an important determinant of health in older people as it is for the population as a whole. In addition, there are particular factors relating to the impact of housing on the health of older people taking into consideration that they are being forced to spend more time at home. Smart technology is helping them at home longer, give them a more dignified retirement and also bring multiple opportunities from economic standpoint.

4.2. Health and technology

Health is a fundamental human right and an important factor contributing to well-being. Sustainable economic development is based on a well-balanced workforce for young people and the elderly. As this balance shifts in favor of the elderly, productivity tends to suffer, on the one hand, and the older group demands more health services, on the other.



Source: Eurostat

Despite the gloomy forecasts, the future of ageing population is not without hope. More digital technologies already in the healthcare space will become more widespread in the coming years to help reduce costs, making health one of the key areas of quality of life for the elderly. Thus, the embrace of technology is strongly supported by solid arguments in the direction of making everyday life easier with the help of robots.

Pearl's functions:

- Reminding people about routine activities (eating, taking medicine)
- Guiding people through their environment

Paro's functions:

- Sensors, stress reduction, stimulation of interaction

iCat's functions:

- Facial expressions, functional assistant, help with various simple actions such as turning on the light, reading messages, TV guide

Figure no. 5. Different types of robots for enhancing elder life experience



Source: Broekens et al (2009)

Market research companies are forecasting dramatic growth over the next 10 years, largely driven by the public sector in search of efficiency savings, however private consumption is also expected to become more prominent.

4.3. Labor market and education

Work affects the quality of life not only because of the income it generates, but also because of the role it plays in giving people their sense of identity and opportunities for social contact with others. For the elderly, retirement is a turning point in terms of professional life, which is usually

considered the end of working life. Education is the key for both the present and the future, giving to the elders the knowledge, abilities, to participate in society life, to expand the actual skills, to successfully activate, integrate and reintegrate on the labor market. In this way, two dimensions for life quality are overlapping.

Entrepreneurship among older people is an opportunity. In Europe was launched in 2015, 50+ Entrepreneurship Platform Europe, highlighting the importance of elders as an invaluable asset and must be used for the benefit of individuals, economies and society. The benefits are multiple: from the importance of mentors and role models to boosting social-economic development.

4.4. Leisure and social interactions

Participation in leisure activities for seniors is a mean to build social relationships, feel positive emotions, acquire additional skills and knowledge, and therefore improve their quality of life. One of the most interesting activity for elders up to 2020 was tourism. Globally, the 50+ population spend €109b per year on sectors directly related to tourism, close to 3% of GDP, and contributing to 100,000 jobs and inducing further economic growth in other sectors of the economy. Usually, seniors are more flexible with regards travel time, make longer trips, but in the same time are more demanding, need more information and spend rationally.

Thus, we can conclude that the quality of life for silver consumers can be described by the following model, based on the relation with the dimensions described in the J. Stiglitz, A. Sen and J.P. Fitoussi Report on Measurement of Economic Performance and Social Progress.

Table no. 2. Modelling the relationship between silver population and quality of life domains

| Area of quality of life | The potential consequences of aging | Needs and changes in consumer behavior |
|---------------------------------|---|---|
| Living conditions | Decrease in income Loss of mobility | Smart homes Home automation Personal and autonomous transport Banking applications |
| Health | Loss of ability to self-service Decreased physical strength General deterioration of health | Global wearable technology (medical devices, fitness trackers) e-Health services |
| Labor market | Retirement | Entrepreneurship |
| Education | Knowledge and new skills developing Desire for self-fulfillment | Age-friendly universities Education stimulates real growth Social contact |
| Leisure and social interactions | Lack of communication Loneliness Free time Change the usual circle of friends | Travel, Hobbies Creativity |

Source: Authors' own research

The model of the relationship between silver population and quality of life domains was proposed on the basis of the analysis of the specific needs of older people. They are willing to pay for products or services that can enhance quality of life. Consideration of the major elements of the model needs will allow for personalized and focused goods and services, which will generate high value to the global economy in the future.

5. Conclusions

To benefit from ageing and make a positive experience, it must be accompanied by continuous opportunities for good health, participation, and security. It's clear that in the future the structure of real economy will involve goods and services production dedicated to ageing people. At the same time it is important to emphasize that the silver economy is not just for the seniors, but also for younger generations and it has the potential to prepare them for old age.

Many challenges are coming with the silver tsunami, but also a lot of new opportunities with potential to reshape private consumption patterns over time with the potential for differential growth rates within and between wide market sectors. An important role in meeting the challenges of ageing are the new technologies. For example, more active and healthy seniors may lead to higher expenditure in areas like technology, digitalization, leisure or smart homes.

The paper highlights the relations between the main dimensions of quality of life and the silver population increase, the major characteristics of the silver market participants and the different experiences across the globe in developing opportunities.

6. References

- Amanda S. Barusch, 2013. The Ageing Tsunami: Time for a New Metaphor? *Journal of Gerontological Social Work*, 56:3, 181-184, DOI: [10.1080/01634372.2013.787348](https://doi.org/10.1080/01634372.2013.787348)
- Andrew E. Clark, Andrew J. Oswald, 2006. *The curved relationship between subjective well-being and age*. 2006. ffhalshs-00590404
- Blanche Le Bihan, 2016. EUROPEAN SOCIAL POLICY NETWORK APRIL 2016, France anticipates ageing society through new piece of legislation, ESPN Flash Report 2016/18
- Broekens, Joost & Heerink, Marcel & Rosendal, Henk, 2009. Assistive social robots in elderly care: A review. *Gerontechnology*. 8. 94-103. 10.4017/gt.2009.08.02.002.00.
- Cylus J, Figueras J, Normand C. Will, 2019. *Population Ageing Spell the End of the Welfare State? A review of evidence and policy options* [Internet]. Sagan A, Richardson E, North J, White C, editors. Copenhagen (Denmark): European Observatory on Health Systems and Policies; 2019. PMID: 31820887.
- Delafuente J. C., 2009. The silver tsunami is coming: will pharmacy be swept away with the tide? *American Journal of Pharmaceutical Education*, 73(1), 1. <https://doi.org/10.5688/aj730101>
- Eurostat, *Quality of life indicators measuring quality of life*
- Bran Florina, Popescu Maria-Loredana, Stanciu Pavel, 2016. “Perspectives of Silver Economy in European Union,” REVISTA DE MANAGEMENT COMPARAT INTERNATIONAL/REVIEW OF INTERNATIONAL COMPARATIVE MANAGEMENT, Faculty of Management, Academy of Economic Studies, Bucharest, Romania, vol. 17(2), pages 130-135, May.
- Frolova, Elena & Malanina, Veronika, 2016. *Social Wellbeing of Elderly People in Russia*. SHS Web of Conferences. 28. 01038. 10.1051/shsconf/20162801038.
- Gamberini, L., Raya, M.A., Barresi, G., Fabregat, M., Ibanez, F., Prontu, L. Cognition, technology and games for the elderly: An introduction to ELDERGAMES Project. *PsychNol. J.* 2006, 4, 285–308.
- Gopalakrishnan Netuveli, David Blane, 2008. Quality of life in older ages, *British Medical Bulletin*, Volume 85, Issue 1, Pages 113–126, <https://doi.org/10.1093/bmb/ldn003>
- John W. Rowe, Robert L. Kahn, 1997. Successful Ageing, *The Gerontologist*, Volume 37, Issue 4, Pages 433–440, <https://doi.org/10.1093/geront/37.4.433>
- Katarzyna Maj-Waniowska & Agnieszka Wałęga & Grzegorz Wałęga, 2018. *Silver economy, poverty and social exclusion in the European Union countries*. Proceedings of Economics and Finance Conferences 6910223, International Institute of Social and Economic Sciences.
- Klimczuk, Andrzej, 2012. *Supporting the Development of Gerontechnology as Part of Silver Economy Building*. MPRA Paper 61886, University Library of Munich, Germany.
- Lawton, M.P., 1991. “A multidimensional view of quality of life in frail elders. In Birren J, Lubben J, Rowe J, Detchman D (eds) *The Concept and Measurement of Quality of Life in the Frail Elderly*. San Diego, CA: Academic Press, 3–27.
- Liudmila Zasimova & Maria Sheluntcova, 2014. *Measuring active Ageing for government policy planning: a case of Russia*. HSE Working papers WP BRP 11/PA/2014, National Research University Higher School of Economics.
- Los Angeles Daily News, Successful Aging: Seniors’ positive effects on the economy, 2014

- Margareta Venera BUCUR, 2012. *The concept of active ageing (English version)*, Social Research Reports, Published by Expert Projects and indexed by Lumen Department of Economics on Behalf on Social Research Reports, vol. 22, pages 28-35, July.
- Miranda LC, Soares SM, Silva PA., 2016. *Quality of life and associated factors in elderly people at a Reference Center*. Cien Saude Colet. Nov;21(11):3533-3544. Portuguese, English. doi: 10.1590/1413-812320152111.21352015. PMID: 27828586.
- Netuveli, Gopal & Blane, David., 2008. Quality of Life in Older Ages. *British medical bulletin*. 85. 113-26. 10.1093/bmb/ldn003.
- Pollack, M., Brown, L.E., Colbry, D., Orosz, C., Peintner, B., Ramakrishnan, S., Engberg, S., Matthews, J.T., Dunbar-Jacob, J., McCarthy, C.E., Thrun, S., Montemerlo, M., Pineau, J., & Roy, N., 2002. Pearl: A Mobile Robotic Assistant for the Elderly.
- Sovárióvá Soósová, Mária, 2016. Determinant of quality of life in elderly. *Central European Journal of Nursing and Midwifery*. 7. 484-493. 10.15452/CEJNM.2016.07.0019.
- Stiglitz, Sen, Fitoussi, et al., 2009. *Report by the Commission on the Measurement of Economic Performance and Social Progress*, p.24
- The Longevity Economy, 2016. *How people over 50 are driving economic and social values in the US*, Oxford Economics
- UN, 2019. *World Population Ageing 2019 Highlights*, UN, New York, <https://doi.org/10.18356/9df3caed-en>.
- UN, 2020. *World Population Ageing 2020 Highlights*, UN, New York, ST/ESA/SER.A/451
- Wałęga, Grzegorz & Maj-Waśniowska, Katarzyna & Wałęga, Agnieszka, 2018. *Silver economy, poverty and social exclusion in the European Union countries*. 10.20472/EFC.2018.010.023.