



Senior Eco-Nect Market Study

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PARTNERS:



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Senior EcoNect Market Study

WP4 - ECOSYSTEMS SWOT ANALYSIS AND STRATEGY BUILDING

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1. Highlights of The Market Study

- ▶ The population in the EU has shown an obvious trend of ageing. The projected median age will reach to 49 years by 2100. Moreover, the population structure will transform into a “top heavy” shape pyramid due to an increasing percentage of older people and very older people in the population. The member states which were used as examples in the Market Study all present a similar moving trend in the next decades.
- ▶ Even though the average retirement age in EU is 64 years, older people who are over 65 years still contribute to the labour market in diverse ways. Self-employment and part-time working are two working status that suit older people. Moreover, there is an increasing number of older people involve in voluntary activities and services.
- ▶ Older people are facing challenges and difficulties that are brought by health issues, such as obesity, mobility and access difficulties. Living alone is another challenge for older people.
- ▶ Older people mainly travel for leisure and visiting purposes. However, health and financial reasons could often obstruct them to travel. The member states which were selected as example also show a similar pattern on tourism.
- ▶ Increasing numbers of older people in the population bring challenges in the labour market. It also means the public expenditure on health care and long-term will be increasing. The shrinking size of available labour together with the increasing pressure on public expenditure pose a challenge to the fiscal position of the government, and to the development of a sustainable silver economy.
- ▶ SMEs, as the capillaries in the economy and the ecosystem, are significant in developing a robust silver economy. SILVER SMEs, an INTERREG Europe project aimed to support existing SMEs and emerging SMEs to explore the undeveloped potential and opportunities of the silver economy.
- ▶ A SWOT analysis was made based on 108 responses from our four partner regions. Respondents from different regions shared similar concerns about the future silver economy development and shared their valuable opinions on what could be done for developing an inclusive and interconnected silver economy.

2. Introduction

This Market Study is produced for Senior Eco-Nect Project. Senior Eco-Nect project is a project by the EC and Horizon Europe. It aims to support the emergence and the development of the silver economy in the European system. It aims to involve the stakeholder groups from different sectors to prepare a joint action plan to establish an inclusive and interconnected silver economy.

The Senior Eco-Nect Project has five pillar objectives to accomplish.

Objective 1: Support the emergence, growth, efficiency, and interconnection of at least four European ecosystems dedicated to active and health ageing.

Objective 2: Unlock the full potential of the silver economy sector by integrating key transversal areas targeting the ageing population beyond the scope of health and care.

Objective 3: Ensure inclusiveness and interconnectivity between the key innovation players from across the quadruple helix around the sector of silver economy at the local, regional, national, and European levels and beyond.

Objective 4: Increase the efficiency and innovation potential of silver economy innovators and projects by addressing key challenges and exploiting the opportunities offered by this sector.

Objective 5: Encouraging synergies and complementarities between Senior Eco-Nect Joint Action Plan and the innovation programmes of public authorities.

The Market Study will investigate the current status and performance of different sectors in the silver economy at the EU level and at selected member state level.

The structure of the ageing population, the current situation in the labour market, employment, the status of health, living, and transportation which are relevant to the wellbeing of older people and the entertainment activities, such as travelling and tourism will be discussed and analysed in Section 3.

Section 4 will present an overview of the silver economy and related markets.

Section 5 will present a sketch of the current development of the silver economy at EU level and at the selected member state level. The challenges and opportunities that the healthcare

and non-healthcare sectors are facing or possible will face in the future, will also be discussed in the section.

A summarised review of the SWOT analysis will be presented in Section 6. The detailed SWOT analysis and composite findings are available to view in the SWOT composite report (Robinson and Xiong, 2023).

The research methods and survey methods were used for the SWOT analysis will be explained in section 7, Research Methodology.

The Market Study will also provide an outlook of the silver economy at EU level, in section 8, based on the analysis of the available secondary data. Good practice cases from several member states will also be presented and discussed in this section.

The examples included for the member states are France, Slovenia, Spain and Ireland. The order of the selected countries is following an ascending alphabetical order. The reason for choosing these four member states is because they are also survey regions that are covered in the SWOT survey. The content of analysis in the Market Study for the regions and countries, and sectors is subject to the corresponding data availability. It would be helpful if the audiences could compare the performance of each indicator in these four countries and the collected perceptions and opinions in the SWOT analysis and explore the similarities and differences between regions.

This Market Study aims to provide a general overview of silver economy development in the EU and in the four selected member states to present audiences the current progress of different sectors in different regions. It also aims to help the audiences understand the needs of older people and the supports which are necessary for different sectors operating in the silver economy. This Market Study may also shed a light on the needs and concerns of stakeholder groups regarding the silver economy development.

3. Definitions

- ▶ Older people and very older people: In this market study, the definitions of older persons and very older people will follow the definitions that are conducted European Commission. Older people are defined as the people who are 65 years or over 65 years. The people who are 85 years or over 85 years are defined as very older people (European Commission. Statistical Office of the European Union., 2020).
- ▶ Young people: this refers to the people who are between 0 to 14 years old (Eurostat, 2023a).
- ▶ Working-age people: this refers to the people who are between 15 and 64 years old (Eurostat, 2023a).
- ▶ Silver economy: The term silver economy is defined as a vast and diverse range of economic activities that serve and satisfy the needs and wants of older people (Varnai et al., 2018). Public and private goods and services which are produced and supplied to, and demanded and consumed by the older people, are also considered as part of the silver economy ecosystem. Moreover, the silver economy also includes associated economic activities and their direct and indirect influences and outcomes that are generated in the circular flow.
- ▶ Adaptable housing: The accommodation that that can satisfy different varieties of growing needs (Femenias and Geromel, 2020). It aims to make accommodations can meet a wide range of needs (Nielsen and Ambrose, 1999), for example, the accessibility in housing. In this market study, the focus on the needs of the residents who are older people.
- ▶ Housing cost overburden rate: it is defined that the over 40% of the disposable income is spent as total housing costs (Eurostat, 2020a). This rate is applied to every age class.
- ▶ Population pyramid: it is also called age structure diagram. It illustrates the distribution of age groups for each gender in the chosen analysing area or region (Eurostat, 2020b).
- ▶ Accessible tourism: Accessible tourism aims to allow everyone to be able to access tourism experience via facilities and design adjustment, comprehensive and accurate information provision, and genuinely understanding of varied needs of people (European Commission, n.d.).

- ▶ Age dependency ratios: by comparing the relative share of younger and/older people in working-age people (age between 15 and 64 year old), the ratio could indicate the level of contribution that made from younger and/older people (Eurostat, 2023a). Based on the age group the ratio focuses on, it can be categorised as young-age dependency ratio and old-age dependency ratio.
- ▶ Healthy life years (HLY): it refers to the number of years that a person is expected to live in a healthy and disability free condition continuously (Eurostat, 2015).
- ▶ Severe material deprivation rate: it indicates the share of population that unable to afford at least four of nine essential items for living, which are housing cost, utility bill/hire purchase, unexpected expenses, regular consumption on meat or other source of proteins, holiday, television set, washing machine, car, and telephone, and heating of the accommodation (Eurostat, 2020a).

4. Market Overview

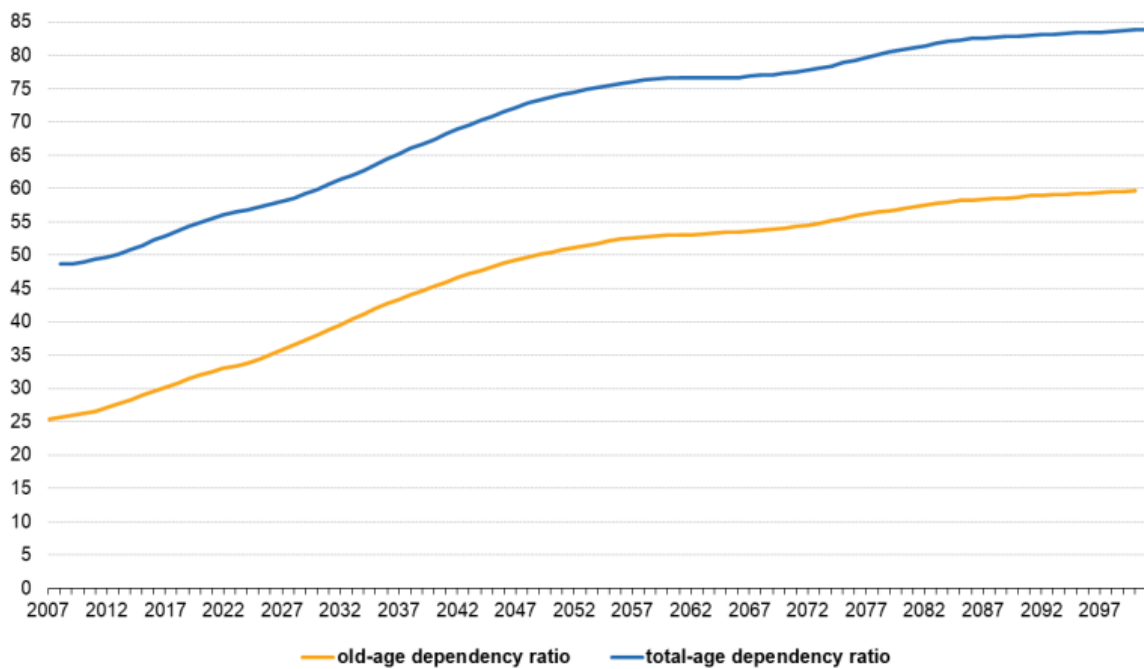
4.1 AGEING POPULATION

4.1.1 Ageing Population Status at EU Level

In the last decade, the percentage of older people in the EU has increased by 3.1% (Eurostat, 2023a). Currently the share of older people in the EU has reached to 21.1%. Moreover, the median age has rose from 41.9 years to 44.1 years between 2012 and 2022 (Eurostat, 2023a). The estimation on the median age in EU is also moving upward. By 2100, the projected median age will increase to 48.8 years (Eurostat, 2023a).

In 2022, EU level old-age dependency ratio has reached to 33.0%. This ratio has climbed by 5.9% in the past 10 years. It is reasonable to believe that the projected share of older people in the working-age population will still be rising in the future. Based on the estimation shown in Figure 1 below, old-age dependency ratio will be over 55.0% by 2100. The projected total age dependency ratio will be moving close to 85.0%. The European countries that have a relatively low old-age dependency ratio are Luxembourg (21.3%), Iceland (22.5%), Albania (23.1%), and Cyprus (24.5%).

Observed and projected total-age and old-age dependency ratio, EU, 2007-2100
(%)



Note: Break in time series in various years between 2007 and 2022. 2022: provisional/estimated. 2023–2100: projections (EUROPOP2023).

Source: Eurostat (online data codes: demo_pjanind and proj_23ndbi)

eurostat 

Figure 1. Age Dependency Ratio at EU level

Source: (Eurostat, 2023a)

Population pyramids, shown in Figure 2 below, presents the distribution of population in EU by gender and by age groups. Comparing the population pyramid in 2007 and the one in 2022, it is clear to see the bottom of population pyramid in 2022 is getting narrower, however the top of the population pyramid has become larger. The visible change of the population structure reflects the declining trend of labour force participation rate and the increasing percentage of older people in society which presents a challenge for the labour market and the wider society.

Population pyramids, EU 2007 and 2022

Population pyramids, EU 2007 and 2022
(% of the total population)

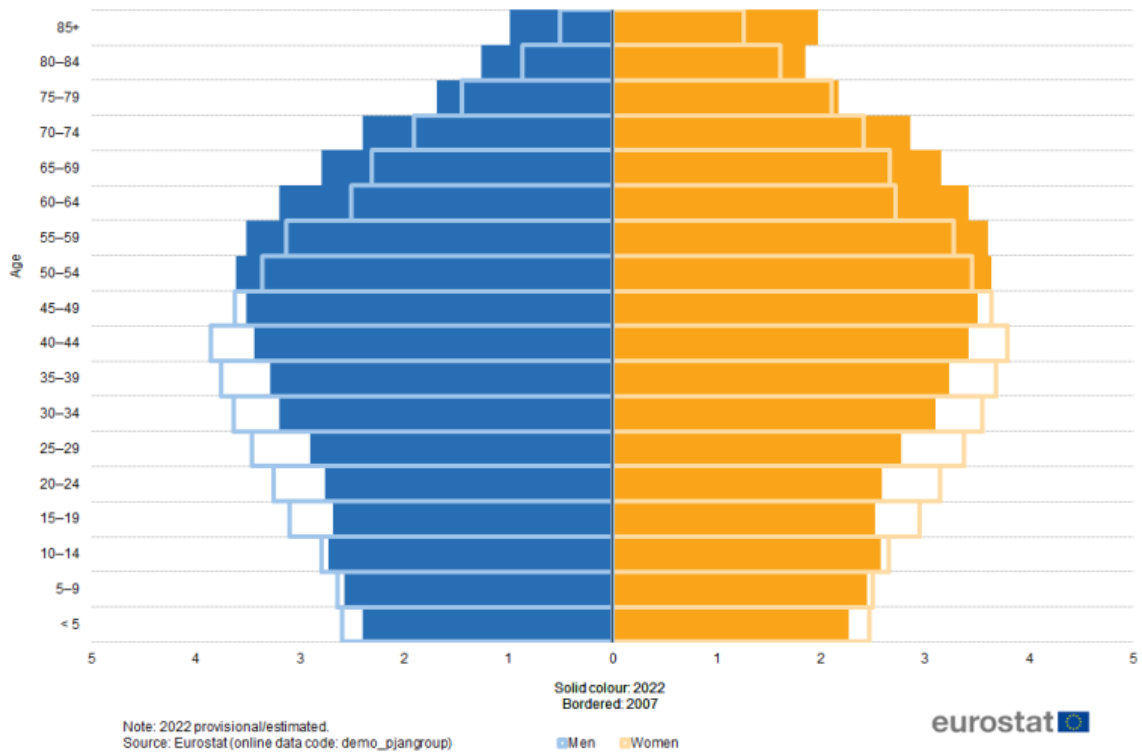


Figure 2. European Population Structure 2007—2022

Source: (Eurostat, 2023a)

The projected population structure (see Figure 3) indicates that the population in the EU is transforming to “top heavy”. Figure x shows that the number of older people and very older people will rise significantly. By 2100, the share of age groups between 45 and 59 years will shrink noticeably. The estimated percentage of very older people in the EU population will rise from 6.1% in 2022 to 14.6% in 2100.

Population pyramids, EU, 2022 and 2100
(% of the total population)

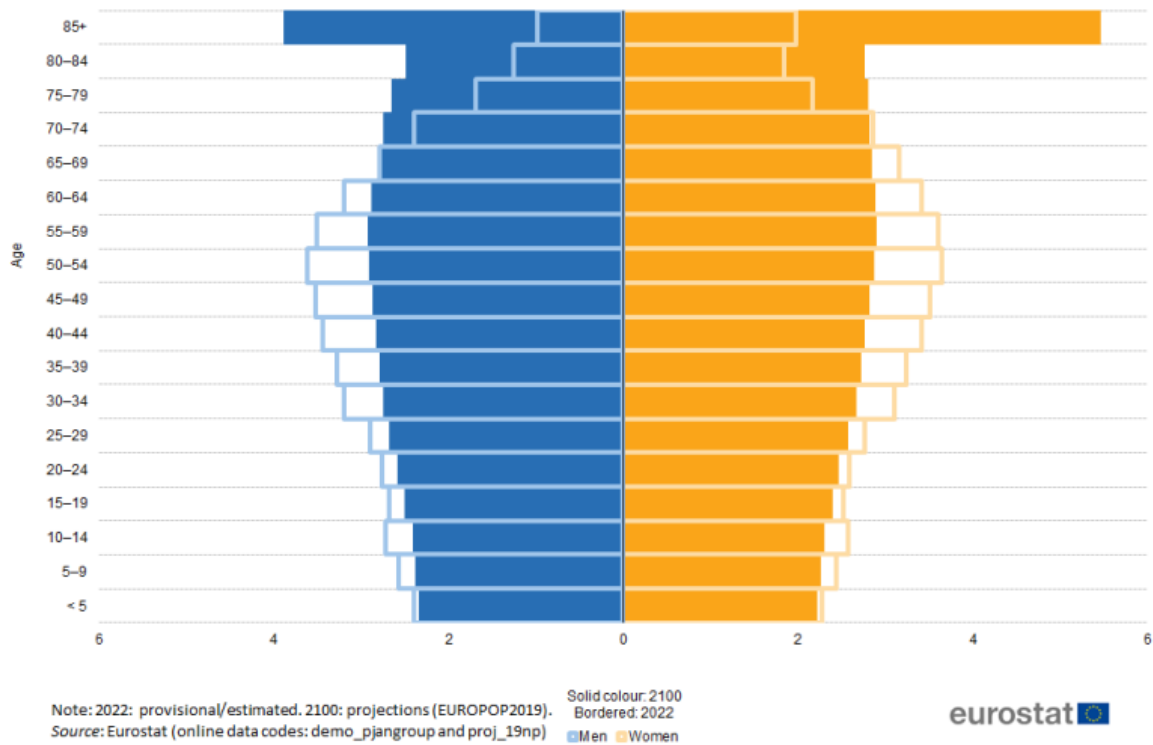


Figure 3. Estimation on Population Structures, 2022—2100

Source: (Eurostat, 2023a)

Let us shift the focus on ageing population from the EU level to the individual EU/EEA member states level.

4.1.2 Member State Example: France

EU Census 2021 shows that the number of older people in France is 11,943,238 and the number of very older people is 2,282,645 (Eurostat, 2023b). The share of young people in the population in France is 17.5% (Eurostat, 2023a). In 2022, the number of older people and very older people in France has reached 14,225,883. In 2023, 26% of the population in France are over 60 years old (Madeline, 2023). The projected growth rate of the number of very older people in France will reach to 90% in the next 30 years (Le Monde, 2022). The projected number of older people and very older people will be over 19,000,000 by 2050 (Eurostat, 2023b).

The median age for the population in France has increased from 40.0 years to 42.2 years in the last decade (Eurostat, 2023b). Institut national de la statistique et des études économiques

(ISNEE), the National Institute of Statistics and Economic Studies of France, estimated average age for the population in France has reached to 40.8 years (INSEE, 2022). France has a relatively high old-age dependency ratio among the partner regions. In 2022, it has reached to 34.1% (Eurostat, 2023b). The old-age dependency ratio will continuously climb up. The projected old-age dependency ratio could reach to 56.8% under baseline scenario (INSEE, 2021).

The population pyramid of France has changed considerably since 1990. In 1990, 58.0% of the population is between 20- and 64 years. 14.0% of the population are older people and very older people (INSEE, 2023a). In 2023, 21% of the total population in France are older people and very older people. The share of population that are between 20- and 64 years has fallen to 55% (INSEE, 2023a). Based on the estimation made by ISNEE, the number of people who are under 60 years old will fall by 5 million, however the number of people that are aged 75 or over will rise by 5.7 million (INSEE, 2021). As shown in Figure 4 below, the peaks of the population pyramid for France will move toward older people in the next 50 years.

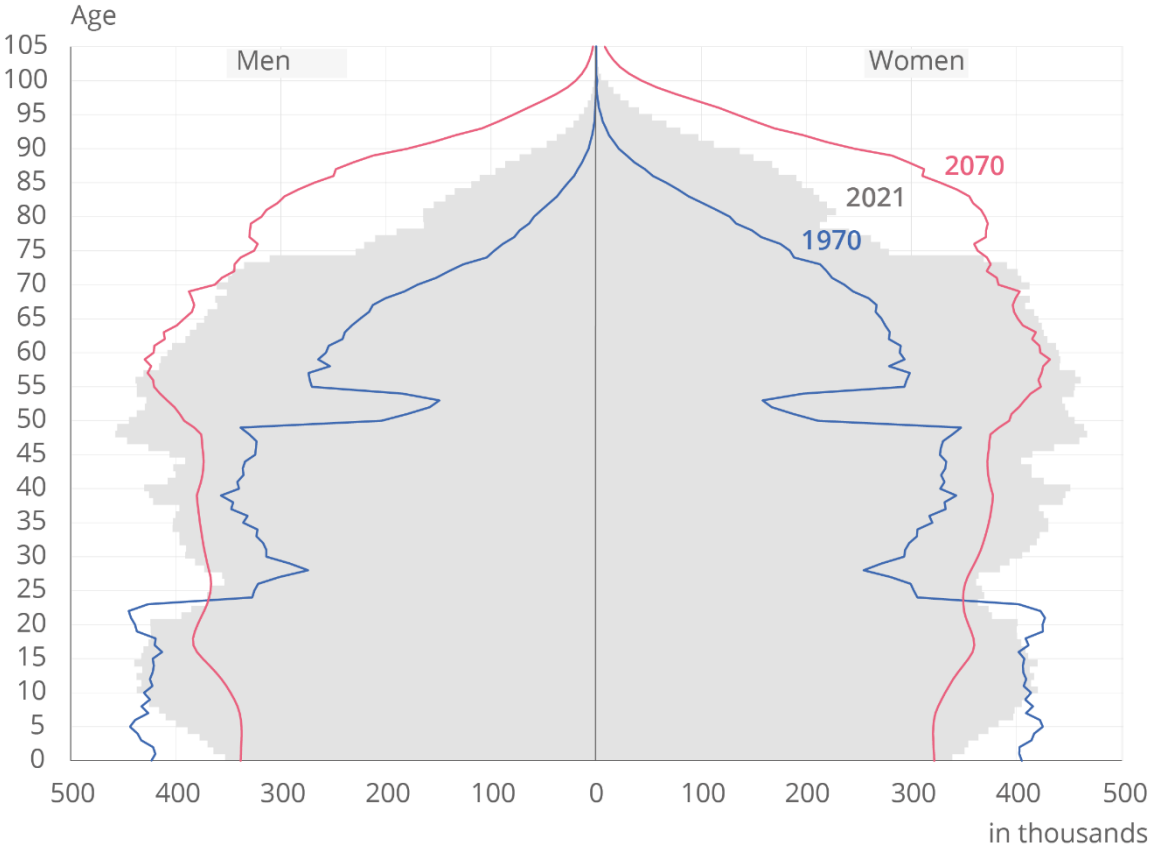


Figure 4. France Population Pyramid in 1970, 2021 and 2070

Source: (INSEE, 2021)

4.1.3 Member State Example: Slovenia

Currently the population of Slovenia is 2,117,674 and 21.4% of them are older people (Statistical Office of the Republic of Slovenia, n.d.). The total number of older people and very older people in Slovenia is 444,743 (Eurostat, 2023b). Based on the estimation from Eurostat, it will reach to 632,884 in the next 30 years. The increasing life expectancy at birth and relatively high healthy life years may explain the increasing number of older people. The life expectancy birth has risen from 70 years in 1980 to 81.5 years in 2020. The estimated life expectancy for women will reach to 90 years by 2070 (Eurostat, n.d.). For men, it may reach to 85 years. In 2018, the healthy life years of women was 54.6 years, for men, it was 56.3 years. The average healthy life years for the total population is 55.5 years.

The median age of the population in Slovenia has risen from 41.7 years in 2011 to 44.7 years in 2022 (Eurostat, 2023b). The projected median age for the total population will reach to 50 years by 2070 (Eurostat, n.d.). The mean value of age of the total population is 44 years (Statistical Office of the Republic of Slovenia, n.d.).

The old-age dependency ratio has been increasing since 1988, in 2022 it has reached to 33.1% (Eurostat, 2023b). It is estimated that the old-age dependency ratio will reach to approximately 62.0% by 2060 and then may decline to 60.0% by 2070.

According to the Statistical Office of the Republic of Slovenia, in 2022 the peaks of the population pyramid (Figure 5) are in the age group between 39 – and 69 years. (Statistical Office of the Republic of Slovenia, n.d.). However, in 2001, the peaks of the population pyramid were in the age group between 32 – and 52 years. The peaks are steadily moving upward. It is estimated that peaks of the population pyramid will move to the age group between 66 – and 89 years by 2060 (Statistical Office of the Republic of Slovenia, n.d.). The proportion of older people and very old people will considerably increase within 40 years. Even though the current number of births is high which is approximately 20,000, however it is estimated to decline to 15,000 in the next 50 years (Eurostat, n.d.).

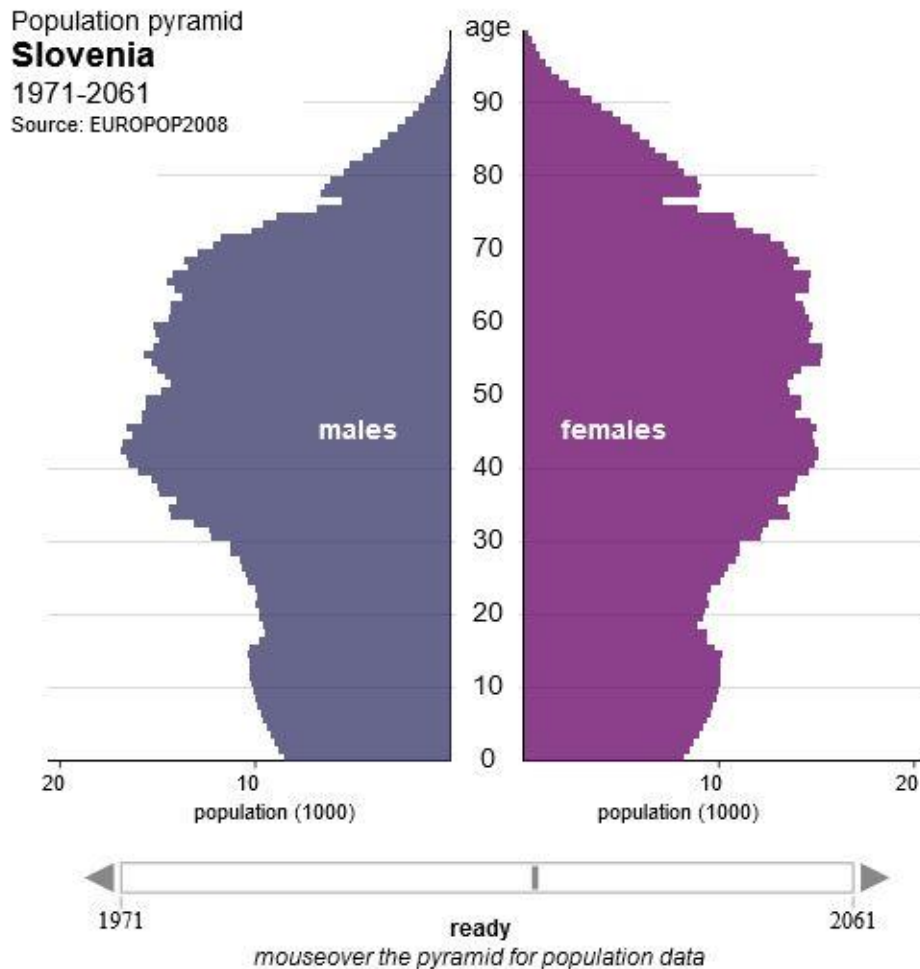


Figure 5. Population Pyramid of Slovenia

Source: (Statistical Office of the Republic of Slovenia, n.d.)

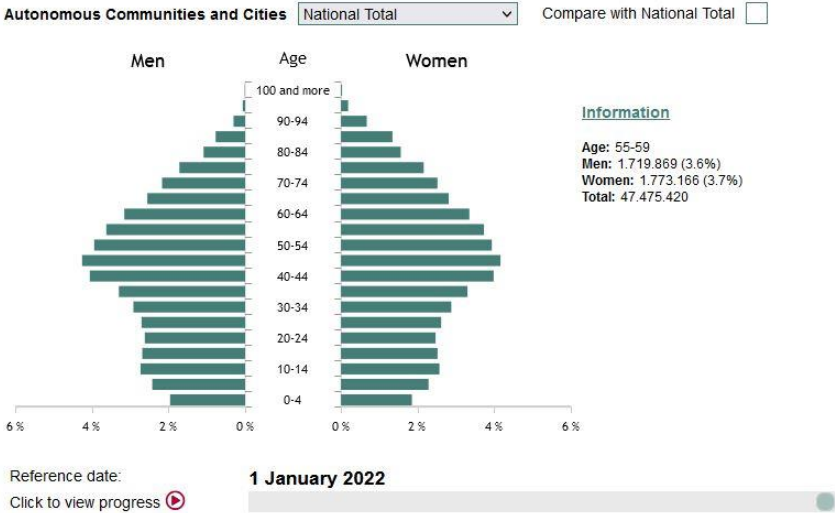
4.1.4 Member State Example: Spain

In 2021, there are 7,753,676 older people and 1,563,305 very older people in Spain (Eurostat, 2023b). Between 2000 and 2021, the share of people aged at 60 – and 74 years in the population has increased from 14.3% to 16.2% (European Commission, 2023). The percentage of people aged at 75 years and over in the population has risen from 7.3% to 9.8% during the same period. However, the percentage of young people aged under 14 years has decreased from 14.5% to 14.1%. The shares of people who are in the age group between 15 and 29 years, and between 30 and 44 years, have both decreased during the past 20 years. Between 2012 and 2022, the percentage of older people in the Spanish population has increased almost 3% (Eurostat, 2023a). By 2050, the projected total number of older people and very older people will reach to 16,489,769 (Eurostat, 2023b).

There is fast growth on the median age of the population in Spain. The median age has increased from 40.3 years in 2011 to 45.1 years in 2022 (Eurostat, 2023b). Between 2020 and 2022 the median age in Spain has increased more than 0.5 years. This is the largest observed increase in the median age among EU member states during the same time period. The average age in Spain in 2023 has reached to 44 years (European Commission, 2023). The ageing index is 133.48% which indicates that for every 100 young people who are under 16 years old, there are 133 older people.

The old-age dependency ratio is increasing steadily in the last ten years and in 2022 it has risen to 30.5% (Eurostat, 2023b). Spain also has a high life expectancy which is the highest in Europe in 2023 (World Population Review, 2023). The average value of life expectancy is 82.6. However, the estimation shows that there will be a decline in population with a steeper slope in this century. It is projected that the population will decrease to approximately 33 million in 2099 (World Population Review, 2023).

According to Insituto Nacional de Estadística, the statistic office of Spain, the peaks of the population pyramid in 2003 are appears in the age group between 20- and 50 years (Continuous Register Statistics, 2003). As shown in Figure 6 below, in 2022, the peaks of the population pyramid have moved to a higher age group which is between 40-and 64 years. The peaks have steadily moved from the bottom and middle of the pyramid to the top of the pyramid which indicates the growing trend of ageing population in Spain.



Source: Continuous Register Statistics

Figure 6. Population Pyramid of Spain

Source: (Insituto Nacional de Estadística, 2023)

4.1.5 Member State Example: Ireland

Ireland has a high percentage of young people in the population. Statistics shows that 19.7% of the population in Ireland are young people in 2022 (Eurostat, 2023a). The share of young people in the total population has declined, compared with the level in 2012 which was 21.6%. In the past decade, the percentage of older people in the total population in Ireland has gone up from 11.9% to 15.0% which still is the lowest percentage of older people in the population among EU member states. In Census 2016, Central Statistics Office (CSO), the national statistics office in Ireland, reports that the number of older people has increased by 19.1% to 637,567 in 2016 (Central Statistics Office, 2017). The projected population of older people will increase to 872,700 in 2031 and by 2051, the number of older people in Ireland will reach to 1.29 million (Central Statistics Office, 2020a). The projected population of very older people will reach to 134,000 in 2031 and it will continue to increase to 304,900 in 2051 (Central Statistics Office, 2020a).

The median age for the population also has risen. From 2011 to 2022, the median age of population in Ireland has increased from 34.5 years to 38.8 years (Eurostat, 2023b). As shown in the Figure 7 below, the average age of the population has increased by 1.3 years to 37.4 years in the same year. In Kerry and Mayo, two counties of Ireland, the average age has reached to 40.2 years.

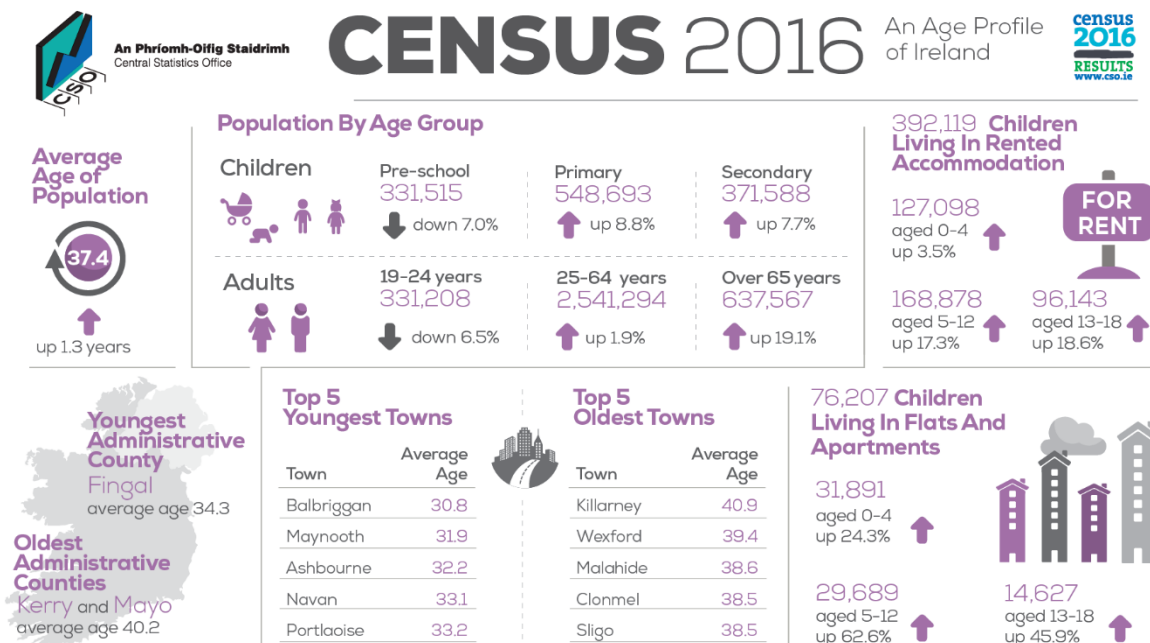


Figure 7. Ireland Census 2016

Source: (Central Statistics Office, 2017)

Based on Census 2022 in Ireland, the average age of population in Ireland is 38.8 years (Central Statistics Office, 2023a). It has gone up by 1.4 years compared with the average age reported in Census 2016. The number of older people in Ireland had a considerable growth, 22%, between 2016 and 2022. The number of very older people had a significant increase, 25%, compared with the number for the same age group in 2016.

In 2022, the old-age dependency ratio is 23.1% in Ireland, lower than the ratio at EU level. Ireland is one of the few countries that old-age dependency ratio is lower than 25.0%. Based on the estimation from CSO, the old-age dependency ratio will rise to 27.6% in 2031 and by 2051, it will reach to 41.1% (Central Statistics Office, 2020b).

Census 2022 reports that in 2011 the peaks in the population structure in 2011 appears in the age groups of under 5 years old, and between 25- and 29 years (Central Statistics Office, 2023b). However, in 2022 the peaks appear in the age groups of between 10- and 14 years and between 40- and 44 years. The detectable change in the population structure indicates that the population ageing is an inevitable challenge ahead.

4.2 ECONOMIC INDICATORS

Economic indicators include the contribution in the labour market, employment and self-employment, and other related indicators.

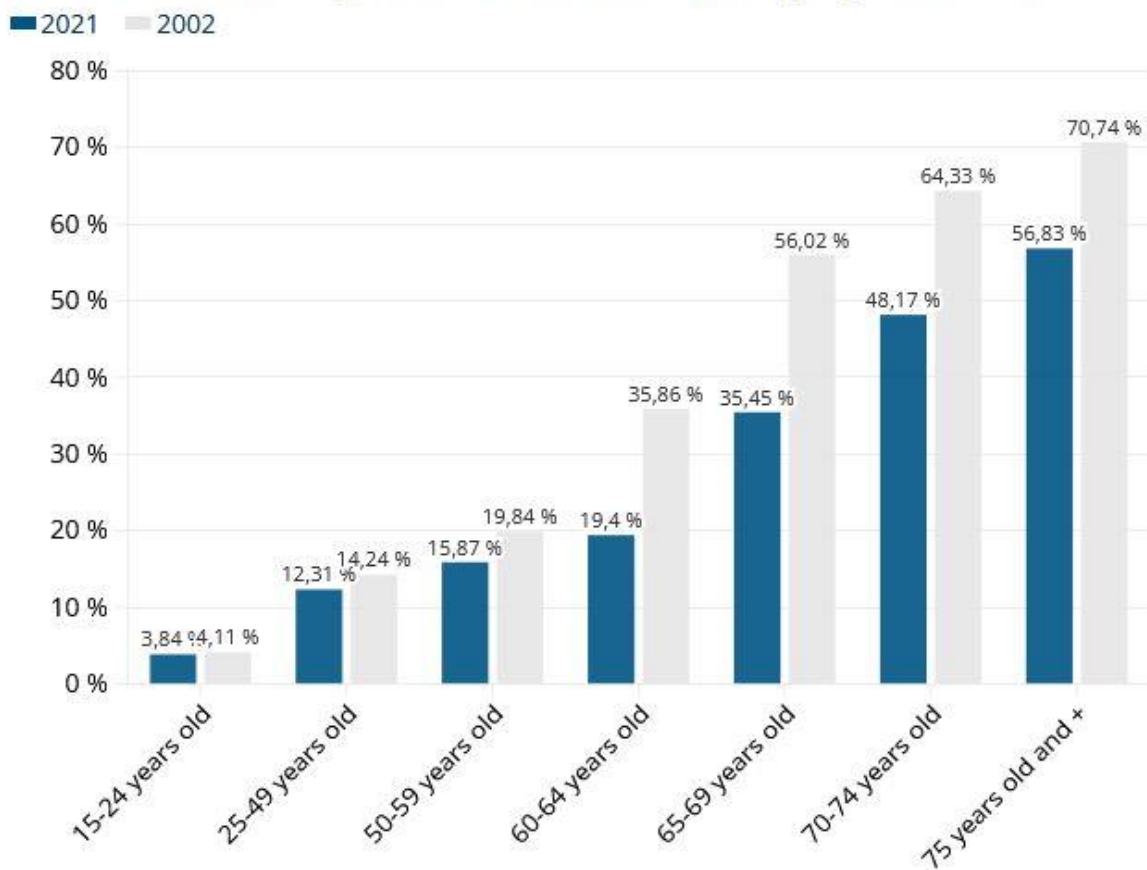
4.2.1 Performance of Economic Indicators at EU Level

The European Pillar of Social Rights Action Plan aims to make Europe Union fairer, more inclusive and fuller of opportunity. Among the 20 principles, Principle 3 equal opportunities, focuses on making the labour market more inclusive and allow people to have equal opportunities to access to job opportunities, social protection, education and to goods and services they may need, regardless their age, gender, nationality, and other cultural and demographic characteristics (European Commission, 2021a, n.d.). Moreover, Principle 15 old age income and pensions, focuses on the right of older people to have sufficient income to support them living with dignity.

Ageing does not necessary mean leaving labour market and farewell to the job that fulfilled passion and enthusiasm. It is common to see that older people who are fit for and willing to continue working after retirement. The average retirement age in EU is 64 years. In Europe older people work beyond the age of 65 years and even higher. In 2021, the statistics shows that of the population of employment, 46.4% of them are aged between 60- and 64 years, nearly one fifth of them are aged between 65 and over (Jamet and El-Atillah, 2023). Estonia has the highest employment rate in the age groups between 65- and 69 years, and between 70- and 74 years. The high employment rates in both age groups are driven by women.

Self-employment is another working status that old people have. Figure 8 presents that over 40.0% of older people were self-employed in 2021. However, it is worth to draw attention to the downward trend on the share of older people who are self-employed since 2002.

EU: 40% of those aged over 65 were self-employed in 2021



Source : Eurostat, *Employers and self-employed by gender, age and nationality*, Eurostat, *Employment rates by gender, age and nationality* • Data 2021

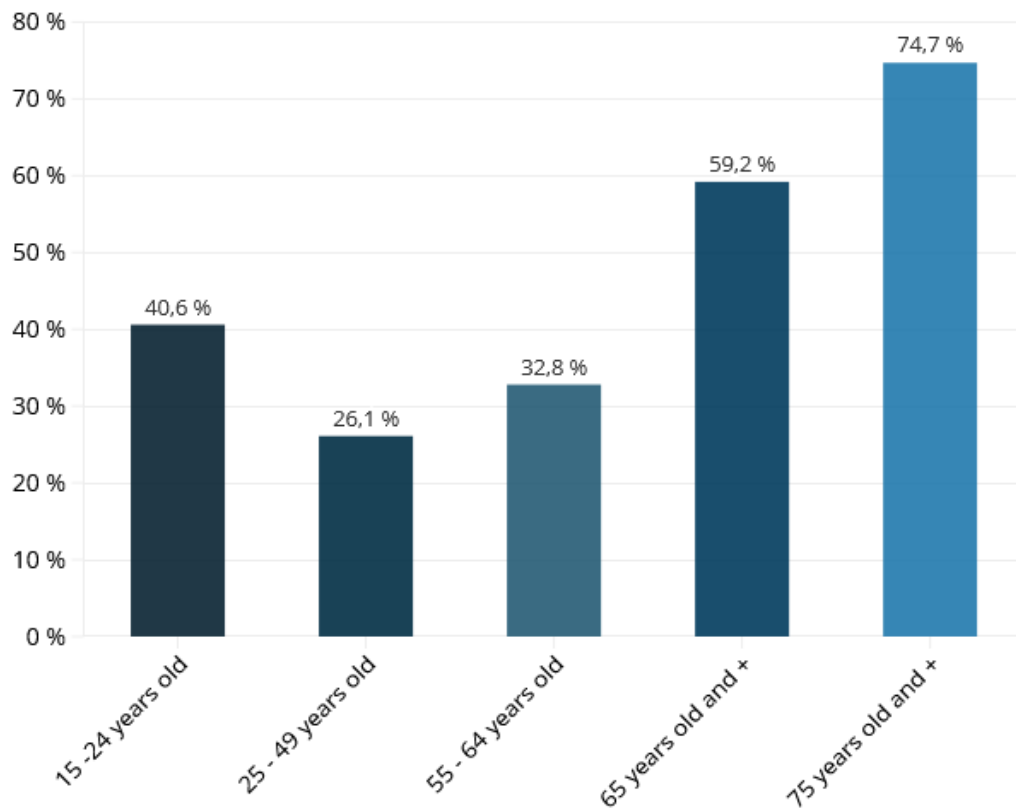
euronews.

Figure 8. Older People Self-employment Status in EU (2021)

Source: (Jamet and EI-Atillah, 2023)

Furthermore, part-time working is another option that is available to older people in Europe. Figure 9 shows that 59.2% of the older people whose age are between 65 years and over are working part-time, and the percentage is even higher for those who are between 75 years and over, is 74.7%. In the Netherlands, approximately 83.0% of older people choose to work part-time or flexible hours which is the highest comparing with other European countries (Jamet and EI-Atillah, 2023).

EU - In 2021, 59% of people aged 65 and over worked part-time



Source : [Eurostat](#)

euronews.

Figure 9. Older People Part-time Working Status in EU (2021)

Source: (Jamet and El-Atillah, 2023)

Moreover, they have become an important component of voluntary activities which could be easily neglected as it is non-monetary. In the past, the stereotypical view on older people is they benefit from voluntary services. In the past decade, the number of older people that are involved in voluntary activities is increasing in Europe (Eurofound, 2011). Denmark, Sweden and the Netherlands have the highest number of older people contribute to voluntary activities and services (Eurofound, 2011).

Many reasons could explain why older people choose to continue working after passing retirement age or involve in voluntary activities. One of the reasons that might be a strong motivation for older people to stay in the labour market is financial security (Jamet and El-Atillah, 2023). Continuous income inflow would support them, and their family to live in dignity. Having a meaningful life, social connections and accessing to learning and opportunities are also widely accepted reasons that older people choose to continue to work (Jamet and El-Atillah, 2023).

4.2.2 Member State Example: France

Based on Labour Force Survey in 2022, 620,600 older people are in the labour force (ILOSTAT, 2023). The labour force participation rate for the older people group is 4.4%. In the same year, 596,300 people in employment are older people. 24,300 older people that are willing to and available for employment are unemployed in 2022. The employment rate for older people in France is lower than 5.0% for both men and women (Eurostat, 2020c).

Part-time working is a more popular option among older people, comparing with the working age population. Statistics shows that over 40.0% of men are aged 65 years and over, and over 60.0% of women are in the same age group are in part-time employment. Self-employment is another employment status for older people. Statistics shows that in 2019, close to 60.0% of people aged 75 years and over are in self-employment (Eurostat, 2020c). The percentage of people aged between 65- and 74 years that are in self-employment is slightly over 40%.

In 2021, 16.0% of population aged between 55- and 69 years were not in employment or retirement in France (INSEE, 2023b). 45.0% of them were inactive in the labour market due to health issues and disability. Early retirement is also an option. It is also worth to pay attention that over 40.0% of respondents in France reported that they would like to retire at 60 years old, according to the results from European Working Conditions Surveys (EWCS) in 2015 (Eurofound, 2017).

4.2.3 Member State Example: Slovenia

According to the data collected by Eurostat, the employment rate for men aged 65 year and over was approximately 5.0% in 2019 (Ageing Europe - statistics on working and moving into retirement). The employment rate for women in the same age group in the same year was below 5.0%. Regarding the older people in self-employment, closed to 30.0% of older people aged between 65- and 74 years, and over 30% of older people aged between 75 years and over were self-employed (Ageing Europe - statistics on working and moving into retirement). Slightly over 10.0% of people aged between 25 and 54 years were self-employed in the same year. Close to 60.0% of women aged 65 years and over, and slightly over 40.0% of men in the same age group were part-time employed in 2019. The percentage for the men and women aged between 15- and 64 years were under 20.0%.

According to the report from Eurofound, current pension system in Slovenia may have demotivated older people to continue to work (Eurofound, 2013). The working conditions that do not suit older people may also be a reason to explain the relatively low employment rate

of older people. Moreover, biased and stereotypical perceptions of older people could discourage companies to hire older people. It is suggested that reforming the pension system could encourage older people to continue to work or slow down the pace of early retirement (OECD, 2022).

4.2.4 Member State Example: Spain

Statistics shows that in 2019 the employment rate for both men and women who aged at 65 years or over are below 5.0% (Eurostat, 2020c). The industries that people who aged 55-and 74 years were active are public administration and defence, and compulsory social security. Self-employment is an option which more popular for older people. In Spain, over 20.0% of the work age population aged 65-74 years were in self-employment (Eurostat, 2020c). Over 70.0% of people who aged 75 years or over in the workforce were self-employed. The percentage for people aged 25- and 54 years in workforce that were in self-employment was less than 10.0%. In 2019, less than 40.0% of women that are aged 65 years or over in workforce were working part-time (Eurostat, 2020c). The percentage for men in the same age group is lower which was slightly over 20.0%.

COVID pandemic posted significant challenge to the whole labour market. Information shows that the challenge is more difficult to tackle for younger people. In 2020, the unemployment rate for people aged 50 years and over has returned to pre-pandemic level which is approximately 12.7%, however the unemployment rate for young people in workforce is around 25% (McMurtry, 2021). The main reason of unemployment is impact of the pandemic. Moreover, two thirds of young people in workforce were on temporary contacts and only 14.3% of older people in workforce were on the same type of contacts (McMurtry, 2021).

4.2.5 Member State Example: Ireland

CSO reported that between Q2 2018 and Q2 2023 the number of older people in employment has increased from 78,300 to 108,500 (Central Statistics Office, 2023c). The average working hours are 31.2 hours per week. In the last three decades, the share of farm holders who are older people has increased noticeably from 22.8% to 32.7% (Central Statistics Office, 2022a). Census 2022 reported that from 2016 to 2022 the number of retired people has risen by 21.0% to 657,790 (Central Statistics Office, 2023a). The percentage of older people that are willing to and available for employment opportunities are going up. The labour force participation rate of older people increased from 8.9% in 2011 to 11.2% in 2022 (Central Statistics Office, 2023a).

The data also shows that older people have a relatively higher possibility of facing a poverty risk. The median nominal disposable income for older people is falling from €22,636 in 2011 to €22,261 in 2022 (Central Statistics Office, 2023d). In the same year 19% of the older people are at a risk of poverty and 3.3% of older people are experiencing consistent poverty.

4.3 HEATH AND SOCIAL INDICATORS

This section will cover the areas that are related to the wellbeing of older people, such as health, independent living, social connections and community activities, and other relevant sectors.

4.3.1 Performance of Social Indicators at EU Level

It is widely accepted that older people are facing a relatively high risk of complicated health conditions or mobility difficulties. According to the European Pillars of Social Rights, Pillar 16 health care and Pillar 18 long-term care, affordable and superior quality health care and long-term care are important to prolong living, maintain and improve current health status, and tackle any potential challenges at an early stage.

The data on the Healthy Life Years (HLY) shows that in 2021 the healthy life years for those who are at aged 65 is 9.9 years for females and 9.5 years for males (Eurostat, 2021a). Figure 10 shows that 41.0% of older people at national level stated that they health level is good or very good, and 43.0% of older people in the urban areas reported the same health status. The official statistics shows that the average life expectancy level in EU area has increased in the 1960s (Eurostat, 2020d). At EU level, an additional 21.6 years are expected for women aged 65 years and an additional 18.1 years are expected for men.

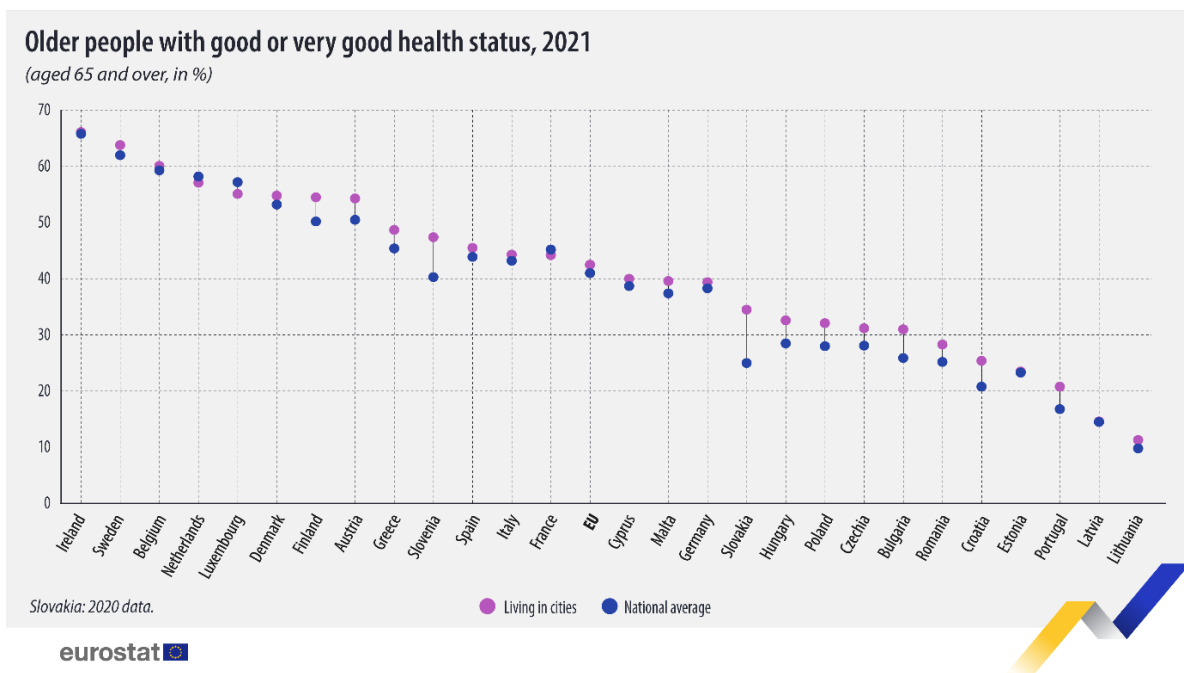


Figure 10. Oldre People with Good or Very Good Health Status (2021)

Source: (Eurostat, 2023c)

Healthy lifestyle may contribute to the improvement on life expectancy. At EU level, 72.4% of older people took fresh fruit daily and 67.1% of older people consume fresh vegetables on the same frequency (Eurostat, 2020d). It is widely known that alcohol and tobacco consumption bring uncertainties to health conditions. In 2014, 37.2% of older people reported that they consume alcohol on a weekly basis, and 16.8% of population of older people consumed alcohol daily (Eurostat, 2020d). In the same year, the reported share of older people smoke daily was 8.2%.

Obesity is a challenging public health obstacle, and it increases the likelihood of developing multiple and/or complicated health conditions, such as chronic conditions and cancer. Statistics shows that in 2017, 21.2% of population aged between 65- and 74 years had obesity in the EU-27 (Eurostat, 2020d). In the same year, 15.8% of population aged between 75 years and more were obese. Mobility difficulties present another challenge to older people. In 2014, 25.0% of female older people and 15.9% of male older people reported having severe walking difficulty in the EU-27 (Eurostat, 2020d). Very older people are more likely to have long-standing health issues. Statistics shows that 72.5% of very older people reported having long-standing health issues in the EU-27 in 2018 (Eurostat, 2020d). In the EU-27, it is reported that 20.8% of female older people and 13.9% of male older people used homecare services within 12 months.

Living alone is a considerable challenge for older people, especially to those who have mobility difficulties and complicated health conditions. Data shows that across EU27 member states, 58.0% of male older people and 38.0% of female older people were living alone (Eurostat, 2020a). 60.9% of the older people who live alone are homeowners without any loan or mortgage when data was collected. In 2018, 66.9% of older people were living in under-occupied dwellings, higher than the percentage for the working age population which is 30.7% (Eurostat, 2020a).

Statistics shows that in 2019 nearly a quarter of the EU residents that had overnight trips were older people. (Eurostat, 2021b). Travelling for recreation and leisure purpose, for visiting purpose, for professional and businesses purposes are the main reasons of travelling. Statistics has shown that slightly over 50% of the trips made by older people were for recreation and leisure purposes, and 37.0% of the trips made by older people are for visiting friends and families (Eurostat, 2021b). Only 3.0% of the trips made by older people are professional and businesses related. Comparing the number of older people that are travelled with the rest of population, only 18% of the total tourist population was older people while 23.9% of population is the

same age group (Eurostat, 2021b). For the other age group, percentage of total tourist population and the percentage of total population were nearly the same or the former was slightly higher than the latter. Health reasons, financial reasons and not interested in travelling are the main reported reasons that demotivate older people to travel (Eurostat, 2021b).

4.3.2 Member State Example: France

The healthy life years for the people are at 65 years in France is 12.6 years for females and 11.3 years for males (Eurostat, 2021a). Life expectancy at age 65 has increased from 20.9 years for females and 16.3 years for males in 1997 to 23.1 years and 19.2 years in 2022 respectively (INSEE, 2023c). In 2021 40.0% of the older people reported they have good or very good health status (Eurostat, 2023c). The difference between those who live in cities and the national level is the lowest among EU countries.

Regarding health lifestyle, over 70.0% of male older people in France reported that they have fresh fruit on a daily basis (Eurostat, 2020d). The share in female older population is close to 80.0%. Regarding vegetables intake, slightly over 80.0% of older people confirmed their daily consumption of vegetables, which is slightly higher than the percentage of younger people who have the similar style of diet, 70% (Eurostat, 2020d). The percentages of male older people and female people consume vegetables daily are very close and there is no significant difference between them. Less than 10% of older people reported they consumed tobacco products every day which is much lower than the percentage of population aged between 18- and 64 years (Eurostat, 2020d).

Regarding obesity rate, over 20.0% of older people between 65-and 74 years have obesity, and slightly over 15% of older people between 75 years and over reported the same (Eurostat, 2020d). There is a higher percentage in the latter age group reported having severe limitations in hearing and walking, comparing with the former age group. Approximately 30% of older people between 75 years and over reported having severe walking difficulties (Eurostat, 2020d). Less than 10% of older people between 65-and 74 years confirmed the same. Over 60% of older people in France reported having long standing health issues (Eurostat, 2020d).

Data shows that in 2018, approximately 70.0% of older people were living in under-occupied dwellings (Eurostat, 2020a). In 2018, over 60.0% of older people have cleared their mortgage or housing loan in France. Less than one fifth of older people were living in rented accommodation by paying market price. Even though older people are more likely to be homeowners and most of them do not have any outstanding mortgage, the housing cost

overburden rate is close to 5.0% which indicate close to 5.0% of older people were spending over 40.0% of their disposable income on the cost of housing, such as rent and loans.

Older people have a higher possibility of facing walking and mobility difficulties. Easy and convenient accessing to transportation is very important to them. Local government in France provided different solutions for overcoming the difficulties on transportation (Makindu, 2021). Local government has offered public transport cards which allow older people to take public transport with a discounted price, or even take it for free for older people in certain income group. Moreover, local government also offered varied transportation choices, such as taxi and shuttle buy to facilitate different travel purposes. The solutions aim to make transportation more affordable and more supportive to satisfy different travel needs.

Statistics shows that in 2019, 23.3% of the tourism population were older people in France (Eurostat, 2021b). The share of older people in tourism population is higher than the percentage at EU level which was 18.1%. This is also the highest percentage among EU 27 in the same year. 31.7% of older people did not take any tour in 2019. Demotivated to travel, health reasons and financial reasons are the three main reported reasons (European Commission, n.d.). 53.0% of older people did not travel due to losing motivation to participate. 48.2% of them did not take any tour due to health reasons and 45.8% of them did not travel due to financial reasons.

4.3.3 Member State Example: Slovenia

In 2021, the healthy life years for the female people who are at 65 years of age is 11 years, and for the male people at the same age is 10 years (Eurostat, 2021a). In Slovenia, approximately 80.0% of older people stated that they have fresh fruit every day (Eurostat, 2020d). Over 70% of older people consumed vegetables on a daily basis. Regarding alcohol intake, over one third of older people reported that they consumed alcohol at least once a week (Eurostat, 2020d). Slightly over 5% of older people reported that they smoke daily (Eurostat, 2020d).

Based on statistics, 25% of older people aged at between 65 – and 74 years were having obesity in 2017 (Eurostat, 2020d). Under 20.0% of older people who are 75 years or over were facing the same health issue. Hearing and walking difficulties are the challenges that older people are facing in Slovenia, especially to those who are 75 years or over. Nearly 30.0% of them are facing hearing difficulties, and 40.0% reported difficulties in walking (Eurostat, 2020d).

In 2018, over 60.0% of older people and very older people reported that they have long-standing health problems (Eurostat, 2020d).

Statistics shows that in 2018, over 70.0% of older people reported that they did not have any mortgage or housing loans outstanding for the dwelling they were living in (Eurostat, 2020a). Less than 5% of the older people were still paying rent at market price. Approximately 5.0% of older people reported that they spent over 40% of their disposable income on housing (Eurostat, 2020a). The housing cost overburden rate for male older people is approximately 4% and it is close to 10% for female older people. Close to 5.0% of the older people population reported that they faced severe material deprivation (Eurostat, 2020a). The share of female older people is slightly higher than the share of male older people, however both percentages are close to 5.0%. Less than 10.0% of the older people reported that they face energy poverty in 2019 which indicates that they cannot afford the heating cost to keep their dwelling adequately warm (Eurostat, 2020a).

Regarding transportation, Slovenia has been promoting transportation in "Save Energy" mode which means use public transport, cycling and walking instead of driving. Statistics shows that in 2021, 29.0% of residents in Slovenia aged between 15 – and 84 years took their daily trips in "Save Energy" mode (Statistical Office of the Republic of Slovenia, 2023). 44.0% of older people aged between 71 – and 84 years took their daily trips by walking, cycling or public transport (Statistical Office of the Republic of Slovenia, 2023). This age group has the highest percentage of people took daily trips in "Save Energy" mode. For the people aged between 56 – and 70 years, 26.0% of them took their daily trips by walking or running, 6.0% of them were cycling and 2.0% of them use public transportation instead of driving.

Moreover, Velenje, a city in Slovenia, has shared their good practice on transportation for older people with World Health Organisation for promoting to build an inclusive environment for older people (World Health Organization, 2013). By offering free bus services within Velenje and its suburb areas, older people, who cannot drive and their relatives and friends who may not be able to drive them around, are encouraged to leave the house to participate in local communities. Additionally, the frequent bus services also shortened the waiting time for older people. All people could benefit from the services, not only the older people which could possibly connect multiple generations together in the community.

In 2019, 12.6% of tourism population in Slovenia were older people (Eurostat, 2021b). This percentage is approximately 6% lower than the share for the EU level. 65.3% of older people did not travel in the same year which is higher than the percentage for the EU level, 51.1%.

Similar with the situation in Spain, health reasons are the main reasons that obstruct older people to travel. 60.4% of older people reported health reasons caused them not to travel in 2019. 20.1% of older people reported that they were demotivated to travel. 26.5% of older people did not travel due to financial reasons.

4.3.4 Member State Example: Spain

The healthy life years for the population of female people that are at 65 years is 10.3 years, and for the male people it is 10.7 years. Spain is the only one that among partner regions that female people at 65 years of age has a lower level of healthy life years than male people (Eurostat, 2021a). In Spain, on average approximately 45.0% of older people reported their health status was good or very good in 2021 (Eurostat, 2023c). The older people live in cities have a slightly higher perceived health level.

Close to 90% older people in Spain reported they ate fresh fruit every day (Eurostat, 2020d). There is no obvious difference between male older people and female older people on the respective percentage of population in the corresponding gender group. Nearly 70% of older people maintain vegetable intake daily. In 2014, 25.9% of older people reported that they consume alcohol daily (Eurostat, 2020d). Less than 10.0% of older people reported that they smoked cigarettes or other tobacco products every day (Eurostat, 2020d). Slightly over 20% of people who are between 65- and 74 years, and between 75 years and over have obesity. The obesity rate between the two age groups has no significant difference.

Regarding social activity and wellbeing, according to the data from the Survey of Health, Ageing and Retirement in Europe (*SHARE*), over 60.0% of 5,583 respondents who were aged at 50 year and older and were from the Spanish population reported a relatively high level of satisfactory on their social relations (Silberman-Beltramella et al., 2022). Over 60.0% of the respondents reported that they did not feel any loneliness and over 90.0% of the respondents confirmed that they had at least one family member in their social network. However, almost 78.0% of the respondents reported that they had no friends.

According to the statistics, in 2018 over 80.0% of older people owned a property without any outstanding mortgage or housing loan in Spain (Eurostat, 2020a). Less than 10.0% of older people were renting at market price. Slightly under 5.0% of older people were still facing the situation that 40.0% of their disposable income were used on the cost of housing, such as rent. Almost 70.0% of older people were living in under-occupied dwellings. In 2019, around 12.0% of households with one older people were facing energy poverty (Eurostat, 2020a).

Spain is also one of the countries that government provides subsidies for public transportation. Previous research has shown that the public transport subsidies policy has significant benefit to the older people, especially those who are at lower end of income level (Arranz et al., 2022). The research also show that this is an essential policy which provides valuable and positive impact on the older people and the households with older people.

Regarding the travel and tourism activities of older people, data shows that in 2019 14.9% of the tourist population were older people (Eurostat, 2021b). It is slightly lower than the percentage of older people in tourist population at EU level. 50.7% of the older population did not take any tour in the same year. Over half of the older people who did not travel in 2019 reported it was due to health reasons. Less than 40.0% of older people did not travel because of demotivation and less than 30.0% of them were due to financial reasons.

4.3.5 Member State Example: Ireland

Regarding the health level, the data on the Healthy Life Years (HLY) at aged 65 shows that the healthy life years for the people who are 65 years old has increased from 11.4 years in 2011 to 11.9 years in 2020 (Central Statistics Office, 2022c). Even though it is a small increasing on the healthy life years at aged 65, it is a positive step towards improving health level for older people.

In 2021, 11% of the population between 65- and 74-years reported that they smoke regularly and only 6.0% of the population that is 70 years or above reported the same (Central Statistics Office, 2020c). In 2022, two thirds of the people in the age group between 65- and 70- years are overweight or obese (Central Statistics Office, 2020c). According to Census 2022, over 40.0% of older people reported their general health is good and 36.0% of very older people reported the same (Central Statistics Office, 2023a). Figure 11 below shows that the percentage of older people and very older people of the total population use carers have increased noticeably from 2011 to 2022.

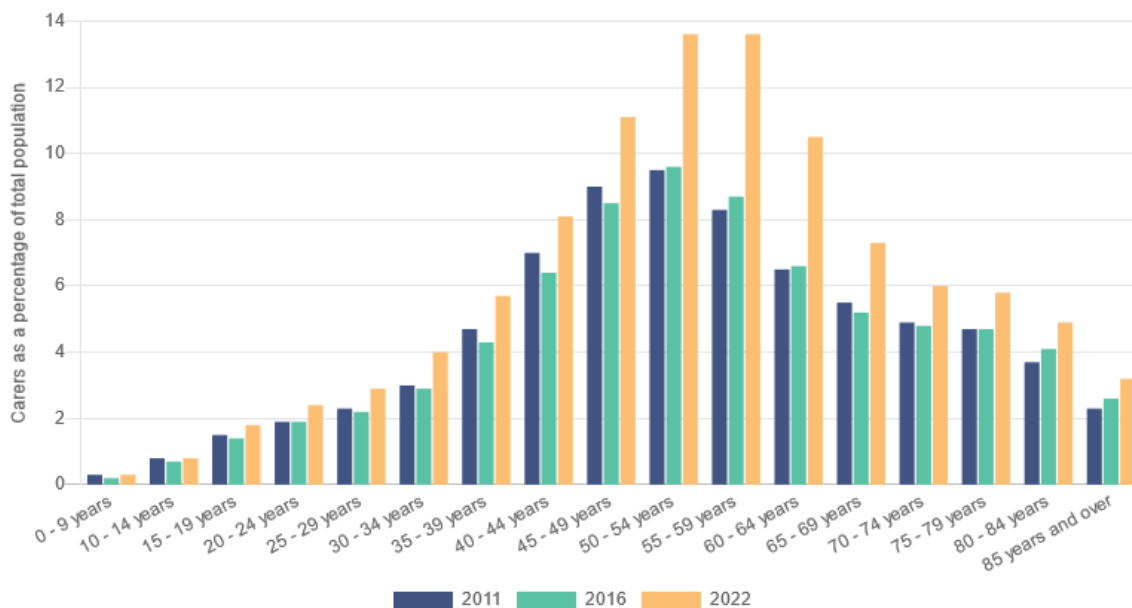


Figure 11. Carers as a Percentage of Total Population 2011—2022 (by age group)

Source: (Central Statistics Office, 2023a)

Regarding housing tenure status, 374,417 older people live in owner occupied dwellings without any loan or mortgage (Central Statistics Office, 2023f). To those who are unable to live in owner occupied dwellings or rented accommodation in their communities, nursing home and communal establishments, such as hospitals, are a common choice for residential purpose.

In Ireland, more than 330,000 people who are 70 years old or over have full driving licenses (Central Statistics Office, 2022b) which allow them to travel and commute independently. The option of public transport, such as bus services and rail services, is not very popular among older people and very older people. According to the National Travel Survey, over 50.0% of the respondents who are between 65 and 74 years, and between 75 years and over reported that they have never used public transport (Central Statistics Office, 2022d). An explanation for this might be unavailability of public transport in the departure and/or destination areas.

The number of older people taking personal overnight trips had bounced back to pre-Covid pandemic level. In 2021, 268,700 older people had taken domestic overnight trips, a visible increasing compared with the number in 2017 which was 124,500 (Central Statistics Office, 2022e). However, the numbers of older people took outbound overnight trips, and both domestic and outbound overnight trips have fallen since 2017. Unfamiliarity of foreign environment and travelling difficulties might be the reasons behind the fading interests on outbound overnight trips. Moreover, the decreasing disposable income could also explain the

falling number of older people taking outbound overnight trips. The use of internet is essential to older people and very older people. Communication, get access to information and news, social networking, and online shopping are the common type of activities that older people use internet for (Central Statistics Office, 2022f).

5. Silver Economy Development

The silver economy covers a broad area of economic activities which aim to serve and satisfy the diverse range of needs of older people (Varnai et al., 2018). It includes the public and private goods and services from multiple sectors. The goods and services may or may not originally be designed for older people, however, due to the dynamic market and changes on the needs, they are produced and provided to older people for their consumption. The related public spending and provision of facilities and infrastructure are also considered to be a component of silver economy. The silver economy and the associated economic activities could generate considerable direct or indirectly income to the circular flow.

The impacts from the silver economy are categorised as direct impacts, indirect impacts and induced impacts. The direct impacts refer to the impacts that are generated from the goods and services which are produced for and consumed by the consumers in the silver economy, such as goods and services of health care and mobility. The indirect impacts refer to the impacts that are generated from the production of goods and services which serve a purpose in the supply chain, for example, it could be the provision of key ingredients for certain medicine. People who are employed directly or indirectly associated with the needs of older people, spend their income in the wider economy, is defined as the induced impact. There impacts work conjunctionally and could potentially accelerate the national economy.

There is no doubt that the silver economy in EU has an important contribution to the national income and labour market. In 2015, the total expenditure of older people on goods and services in EU was €3.7 trillion (Varnai et al., 2018). Slightly under 90.0% of the expenditure is financed by themselves or by central or local government through transfer payments. The state covered the remainder of expenditure which is around 10.0% of the total spending. Research shows that the silver economy in EU generated over €4.2 trillion and created 78 million jobs which 38.5% of the jobs were created by the economic activities of the silver economy directly. Among the €4.2 trillion, approximately 40% comes from the direct contribution made by silver economy. Around 36.0% of the €4.2 trillion is generated from the indirect contribution, and the rest were from induced contribution. The consumption on public services was worth €42 billion in 2015 which is 14.0% of public sector spending in EU (Varnai et al., 2018).

According to the 2021 Ageing Report, the average spending at an EU level on pensions is worth 11.6% of the Gross Domestic Product (GDP) in 2019 (European Commission, 2021b). On

average, 6.6% of the GDP has been spent on healthcare at the EU level. 1.7% of GDP is spent on long-term care and 4.1% of GDP is spending on education.

Regarding the private consumption, data shows that Germany has both the highest percentage of people aged 50 years and over in the total population and the largest share of private consumption which is made by the population that are aged 50 years and above which is close to 50% (Varnai et al., 2018). Ireland has the lowest percentages for both the share of population and the share of personal consumption among the survey European countries, which is 30%. Previous research suggested that the percentage of people aged at 50 years and over, and the cost of essential goods, such as housing, may explain the differences on the varied percentage of private consumption made by population which is 50 years old or over across different countries. Regarding the public consumption, Netherlands, Sweden and Finland had the highest percentage of public consumption which was made by the people aged at 50 years or over, Cyprus had the lowest percentage points.

In this section, a sketch at macro level of the labour market, health care sector, long term care sector, education sector and SMEs section will be provided.

5.1 LABOUR MARKET: STRUCTURE AND CHANGES

It is widely accepted that the development of labour market is closely connected with the growth of national income, which is measured by GDP. Labour input and labour productivity are perceived to be main energy resources for the national economy. According to the 2021 Ageing Report, labour input is measured by the total number of working hours which depends on the size of labour force and the average working hours for the individuals who are in employment (European Commission, 2021b). Labour productivity is measured by output for every working hour which depends on the average capital stock per person in the employment and the factors of production (European Commission, 2021b).

The size of labour force is important to discuss the level of labour input. Currently in the EU 92% of male people who are at prime-age, aged between 25- and 54 years, are in labour force (European Commission, 2021b). For the member states, labour force participation rate of prime-age men is also above 90%. Meanwhile, the labour force participation rate for prime-age women is also increasing steadily in the last decades. It is worth to note that the labour force participation rates for both male and female workers aged between 55- and 64 years have increased since 2000 (European Commission, 2021b). An explanation behind the rising

labour force participation rate is pension reform. It is widely accepted that pension reform has effectively influenced the structure of the labour market by changing the retirement age. In 2019, the employment rate at EU level is 73.1% and at Euro-Area level, it is 72.6%, which indicates a strong labour supply in late 2010s.

Pension is one of the main expenditures that associated with older people. In EU, there are a few different types of pension schemes. It can be categorised as public pension scheme and private pension scheme. The public pension scheme is a key component of government expenditure, which is what will be discussed next. In EU, defined benefit (DB), national defined contribution (NDC) and point systems (PS) are the three types of public pension schemes that member states often use. Denmark, Ireland and Netherlands are the few countries that use flat-rate pension. Countries, such as Belgium, Bulgaria, Slovenia, and Spain, are using defined benefits. France adopts both defined benefits and point system. Italy, Poland, and Norway are using national defined contribution for their public pension scheme.

According to the 2021 Ageing Report, at the EU level the spending on public pension scheme in 2019 was 11.6% of GDP (European Commission, 2021b). At Euro-Area level, the percentage of public pension spending in the total value of GDP was 12.1%. Greece has highest value of percentage points, which was 15.7%. An equivalent value of 15.4% of GDP in Italy was spent on the public pension scheme. Several countries, Austria, France, Finland and Portugal, the share of the expenditure on public pension in the total value of GDP were higher than the average percentage points at both EU level and Euro-Area level.

5.2 HEALTHCARE: EXPENDITURE AND NEEDS

As mentioned in the earlier section of Social Indicators, the older people and very older people have a higher possibility of experiencing difficulties on vision, hearing and mobility and the challenges of health issues and long-standing and/or complicated health issues. It is reasonable to estimate that the expenditure, which are private or public funded, on health care for the older people and very older people would be a significant component to analyse. The impact from COVID-19 pandemic may still exist in the health care system. It may also be a reason for the considerable proportion of total expenditure on health care.

The 2021 Ageing Report shows that in 2018, the total expenditure on health care in the EU was worth 10% of GDP which 7.3% of GDP was spent on public funded health care services (European Commission, 2021b). At EU level, the percentage of public health care expenditure in

the total government expenditure was 16.8% in the same year. Public funded health care expenditure is the main component of health care expenditure. The data shows that 77.4% of the health care expenditure in EU was public funded. Among the European countries, Sweden has the highest percentage of public health care expenditure in GDP which was 9.7%. In Ireland, the public health care spending accounted for 21.1% of government expenditure in 2018. Long standing illness and disability, chronic diseases which includes cancer and chronic lung disease were identified are the main reasons that result in a high hospital treatments cost (Cygańska et al., 2023).

Research believes that longer life expectancy with an absence of improvements on physical and mental health may increase the public health care expenditure and total health care expenditure overall (European Commission, 2021b; Zweifel et al., 2005). Even though the technologies that are used for health care and medical purposes have had fast growth in the last decades and provided a great extent of assistance to the health care system, these technologies did not show significant effectiveness on remaining or improving the health status of older people and very older people (European Commission, 2021b). Research suggests that funding and government policy supports would provide a strong incentive and motivation for health care institutions and research institutions working on explore innovative approaches to remain and improve the health status of older people and very older people by using technological or non-technological assistance (Cygańska et al., 2023). This is why it is important to promote health ageing and active ageing. It would prolong the active time of older people stay connected with the community and the society. It would also encourage them to engage with and participate in the society. It may also delay their uses of hospital treatments or reduce the frequency of using them. The increasing expenditure on health care and hospital treatments will bring crucial challenges to develop a sustainable silver economy, especially considering the structures of future population and labour market.

5.3 LONG-TERM CARE: EXPENDITURE AND NEEDS

Long-term care is another vital component of public expenditure across Europe. Data shows that between 2003 and 2017, the total long-term care expenditure accounted for GDP has increased from 1.2% to 1.5% (European Commission, 2021b). In 2003, public funded long term care expenditure was worth close to 1.0% of GDP. In 2017, it has increased to close to 1.3%. From 2003 and 2017, the percentage of long-term care expenditure in the total health

expenditure risen from 13.5% to 15.5%. In 2019, the public long-term care expenditure was worth 1.7% of GDP at European level (Gauret, 2023). Private long-term care expenditure usually is spent by the families. Moreover, there is a proportion of older people need to cover part of the costs themselves. The share of public funded long-term care expenditure in the total health expenditure also showed an upward moving trend. Longevity without any positive changes on current health status and the expanding size of older people population may result in the increasing share of long-term care expenditure in total health expenditure.

Currently, around 6 million people are working as long-term care workers in Europe, however the study shows that another 1.6 million long-term care workers are needed by 2050 to satisfy the growing need of older people on long-term care (Gauret, 2023). The need for long-term care includes assisting older people and very older people to complete basic daily activities, such as cleaning, cooking, and shopping. Currently, 86.7% of the older people need long-term care however only 40.1% of them received the help (Gauret, 2023). For the people aged at 75 years and over, 89.1% of them need long-term care and only 41.8% received the assistance.

The existing perception of long-term care worker is often associated with low salary, varied working needs and working environment. They may also have to deal with different type of situations which would require them to have certain level of knowledge in the health care area. It is not difficult to see why less people are interested in working in this sector. This is why there is a need of funding, and policies and resources support in the long-term care sector. European Care Strategy, a strategy that is designed for caregivers and care-receivers were released in 2022. It aims to improve the situation in the long-term care sector for both the supply and demand sides of the care services. Funding and other types of supports will be provided to the care sector to make the long-term care comprehensive and affordable to the care-receivers and to improve the working conditions for the care givers (European Commission, 2022). The European Social Fund Plus (ESF+) will also be allocated in the care sector. Bulgaria, as one of the countries under the national ESF+ programmes (2021—2027), will invest €323 million in the long-term care sector to increase the provision of care services and increase the number of people that will be trained and work in this sector (European Commission, 2022). Czechia and Lithuania, another two countries that are ESF+ programme (2021—2027), will also spend €165 million and €71 million respectively in the long-term care sector (European Commission, 2022).

5.4 EDUCATION: EXPENDITURE AND NEEDS

Different from the labour market and the health care sector, the sector of education may not draw a lot of attention when discussing silver economy. Research shows that in 2015, 29.0% of the consumption on education was made by people aged at 50 years or older (Varnai et al., 2018). The projected figures show that it will go up to 30.0% by 2025. Education and lifelong learning that are offered to older people, not only aim to increase their productivity, provide them career options and enrich their knowledge and skills and fulfil the gaps, but also encourage them to stay connected with the dynamic society and the local community, and with different generations. Further education and lifelong learning could potentially encourage older people remain active in the labour market.

Based on the data collected via EU Labour Force Survey, the percentage of older people participate in lifelong learning and related education or training programme in the preceding month when the survey was carried out has increased from 2010 to 2016 at the EU level. On average 7.0% of people who were aged 50- and 64 years participated in lifelong learning and related programmes (European Centre for the Development of Vocational Training, 2017). Sweden, Denmark and Finland have a higher percentage of people from this age group engaged in the lifelong learning and related programmes, which were 23.0%, 21.3%, and 18.9% respectively (European Centre for the Development of Vocational Training, 2017). Several countries, such as Czech Republic, Ireland, Spain, and Slovenia, the participation rates of the people aged 50- and 64 years in 2016 were lower than the ones in 2010.

In 2019, the participation rate of older people aged between 65- and 74 years in lifelong learning was 2.9% at EU level which is the lowest compared to the other age groups (European Commission. Statistical Office of the European Union., 2020). 12.4% of EU population aged between 25- and 54 years and 6.2% of the people aged between 55- and 64 years were participating in lifelong learning or related education programmes one month prior the survey. In the same year, the participation rate (5.6%) at EU level for female people aged between 55- and 74 years is higher than the participation rate (3.9%) for male people who were in the same age group. Sweden has the highest participation rate for women aged between 55- and 74 years among the surveyed European countries (European Commission. Statistical Office of the European Union., 2020).

The participation rate at EU level stayed the same in 2022 which was 2.9% (Eurostat, 2023d). In the same year, Denmark had the highest participation rate, 15.7%, for the older people aged

between 65- and 74 years compared to the other surveyed European countries. Hungary had the lowest participation rate for the people in the same age group, which was 0.9%. The participation rate at EU level for the people aged between 25- and 54 years reached to 13.7% and for the people aged between 55- and 64 years, it has increased by 0.5% (Eurostat, 2023d). It indicates that older people are less involved in lifelong learning programmes, comparing to the other age groups.

5.5 ENTERPRISES AND SMES IN SILVER ECONOMY: CURRENT STATUS

The expanding size of older people population indicates an increasing volume of demands on the related goods and services. It also means that the corresponding market may not be “niche” anymore. Research shows that SMEs and enterprises in EU may not be fully aware of the potential customer segmentation and the related market and the potential profits it could bring (McGuirk et al., 2022). Moreover, the views on the silver economy and perceived business opportunities on developing new goods and services concentrate on the sectors of older people housing, care and welfare. The research also shows that enterprises may not be fully aware of the training options and policy supports that are associated with silver economy. This may result in the enterprises overlook the value of the silver economy and the potential opportunities and profit it may bring to them.

SMEs are often seen as capillaries in the economy and ecosystem. They are directly connected with the silver economy and their roles, no matter on job creation or national income generation, are significant to establish a robust, well-functioned and comprehensive ecosystem. To strengthen the competitiveness for SMEs and support the new SMEs participate in the silver economy, SILVER SMEs, an INTERREG Europe project that gathering 9 partner regions from rural Europe was launched in June 2018 (Interreg Europe, 2023). The project is finished in May 2023. The project aims to support the existing SMEs and new SMEs via an improvement of the regional policies implementation and other types of supports, to offer a wider range of opportunities in the different sectors of the silver economy (Interreg Europe, 2019). Over 70 good practice cases were collected which includes the Siver Normandie in France, Digital Innovation Hub in Slovenia, Social Entrepreneurship Programme of Aragon in Spain, Health Innovation Hub Ireland in Southern Ireland and Aldeia Toda Project in Portugal (Euromontana, 2021). According to the SWOT Analysis Report, which was conducted for SILVER SMEs project, proactive policy supports are still necessary for the development of SMEs which are participating in the silver economy (ConwayLenihan et al., 2018). Moreover, it is necessary to the awareness of SMEs on the silver economy and related opportunities, and to encourage the SMEs to explore the underdeveloped potential of silver economy.

In the next section, SWOT Analysis, a summarised analysis of the viewpoints and opinions from 108 respondents across four partner regions, France, Slovenia, Spain and Ireland will be presented. It will display the perceived strengths, weaknesses, opportunities and threats from

varied stakeholder groups regarding the silver economy development and future growth in their regions.

6. SWOT Analysis

The SWOT analysis was conducted and completed on basis of 108 effective responses collected via SWOT survey. 1 response was submitted from Finland which is not included in the effective responses and will not be used for the SWOT analysis. Additionally, it is worth to draw attention to the relatively small number of responses from France, comparing with the number of responses that were collected from Slovenia, Spain and Ireland. Hence the SWOT analysis may not be able to reflect the understandings and perceptions from the stakeholder groups in France. It may overlook certain areas or components which were important to the development of the silver economy in France. Therefore, it is worth to note that the analysis results may not be fully applicable to France.

Similarities and differences were both found in the answers across four regions.

Majority of respondents from the four regions reported that they were familiar with the term of "Silver Economy." When they were describing their understanding of silver economy, over 50% of them stated that the silver economy is about older people. However, the perceived definition of older people varies from the people are aged at 50 years and over to the people aged over 70 years. Also "silver hair" and "retirement" were also used in the answers to describe the older people group. Even though the answers show a moderately good understanding of the silver economy across four regions, it is undeniable that the misunderstanding of older people still exists in the stakeholder groups which will need further promotion and education to change the situation.

By processing the answers of perceived strength via NVivo 12, except the regular terms being used in the answers, such as "older people", "population", "silver economy", it is worth to note that "tourism", "social" and "cultural" were also regularly mentioned in the answers. Stable development in tourism and hospitality sector is a perceived strength which is accepted by the stakeholders across four regions. The four survey regions all have strong tourism advantages which may explain the strong perception on tourism and hospitality industry from stakeholder groups. Respondents believed that this industry have a potential to be the pillar industry of silver economy. According to the analysis, this perceived strength is more applicable and widely accepted by the respondents from Spain. The respondents from the other regions did not show a strong perception on it.

Moreover, high quality connection and collaboration which includes the networking is also a significant perceived strength. Knowledge, experiences, success and lessons that were learned from the failed actions could be shared and exchanged via a dynamic and inclusive connection and collaboration. This creates “knowledge spill over” which is a positive externality of the regional silver economy. Respondents also believe the supports that were provided in the local communities is also necessary to develop a robust silver economy. Additionally, contribution from businesses and entrepreneurs, excellent quality social services and volunteering, and robust growth in the education sector in the survey regions were also reported as strengths to develop a strong silver economy. Respondents also pointed out the supports from policy makers and government is another perceived strength which brings positive impact to the silver economy at regional level.

“Lack”, “awareness”, “funding” and “infrastructure” were regularly used in the answers when the respondents shared their opinions on the perceived weakness to the development of the silver economy in their regions. It is widely accepted by the respondents that lack of correct and unbiased awareness and perceptions of older people and the silver economy will negatively influence the development of silver economy. The answers on the understanding of the silver economy which was discussed earlier could testify that limited awareness and understanding still exists in the survey regions. Even though none of the 11 respondents in France has mentioned this point, it is reasonable to assume this same situation also exists in France. Misunderstanding and biased stereotypical perceptions may obstruct the pace of exploring the potential of the silver economy. To the enterprises and entrepreneurs, wrongly define the older people group may cause the failure of developing the products and services that satisfy the needs of this group of customers. For the policy makers, the misunderstanding and biased perceptions may impact their strategy and actions on the silver economy development. Comparing with the other survey regions, respondents from Slovenia have a strong perception on this perceived weakness.

Respondents also reported that there is a lack of interests in their regions. From policy makers to enterprises, even the wider society, the interests and incentives on improving the wellbeing of older people and developing a robust silver economy are either weak or absent. This could result from the limited awareness and perceptions which was discussed earlier. Moreover, lack of government support, such as funding, well designed age-friendly infrastructure is also a perceived weakness which is vital to develop a strong silver economy. This perceived weakness is reported by the respondents from Spain and Ireland.

According to the analysis, a strong perception from the respondents shows that the perceived opportunities are closely connected to certain industrial sectors which can be health and care sector and non- health and care related sectors. Tourism and hospitality, technology and digital skills, housing and financial and legal services were the main industries that respondents believed that the opportunities will be rising from, other than health and care sector. Especially for financial and legal services, strategic planning on retirement and pension, and related legal assistance is essential to older people however it may have been neglected in the market in the past. Older people have distinctive and exceptional needs on financial and legal services, comparing to the other generation. As discussed in the section of social indicators, majority of surveyed older people did not have any outstanding mortgage and housing loans, which means they may have a higher proportion of disposable income is left idle. Professional and tailored financial services and legal assistance could help them to prevent any deprivation to their wealth. Moreover, the increasing population of older people indicates a growing demand on accessible and affordable housing in the housing sector which could create further opportunities for the related industries to benefit from it. It is worth to note that according to the analysis, the opportunities that are associated with certain industries is more applicable in Spain comparing with other survey regions.

High quality connection and collaboration at macro level is also reported as perceived opportunity. Collaboration between different sectors and stakeholder groups at regional level and beyond regional level is believed to be able to develop the untapped potential of the silver economy. Respondents reported that changes in certain areas will bring more opportunities to the silver economy in their regions. Changes on government support and policy, interests and expectations could help the different stakeholder groups to review their current strategy and plan and redirect them to explore the potential of the regional silver economy.

It is widely accepted by the respondents across four regions that lack of support and facility poses a serious threat to the regional silver economy. This threat could result from unavailability of financial support from government, short-sighted policy and planning, absence of leadership and insufficient supply of age-friendly infrastructure. It is believed that it will restrict the scale of at which the silver economy can development at regional level.

Moreover, lack of connections and collaborations, which has been discussed earlier in perceived weaknesses, was also reported as a threat to the future development of the silver economy at regional level. Respondents believed that it would result in insufficient resources provision and unwise resources allocation. Eventually, it will restrict the development of an

inclusive and interconnected silver economy. This perceived threat is more important to the respondents from Spain, comparing with other regions.

Respondents from Ireland were more concerned about the current and future status of older people concerning their physical and mental health, the challenges they will face and the growing number of the population. Lack of focus and interest in the silver economy may relate to the former perceived weakness, lack of awareness and perceptions. The absence of motivation or limited incentives may obstruct the stakeholder groups to explore the options to satisfy the needs of older people and to develop a sustainable silver economy.

7. Research Methodology

Desk research methods on information and data at macro level on EU, and partner regions were applied to the market study. Secondary data and information collected from Eurostat, national statistics offices, related government portals, research and official government publications and other reliable sources are analysed equally in this market study. The level of details on the analysis is subject to the data availability from the corresponding area/region/country.

Moreover, primary qualitative data, 108 effective responses that were collected from SWOT survey across four partner regions, were also used and analysed in the study for assisting to present a comprehensive picture to the prime stakeholders. The SWOT survey is an anonymous online survey which was designed by H designed by Hincks Centre for Entrepreneurship Excellence at Munster Technological University in Ireland. The SWOT survey aims to collect qualitative data via 16 questions which include sub-questions. Stakeholders were invited to share their understanding, perceptions and opinions on the development of silvery economy and related sectors at regional and European level by selecting options or entering their answers.

The stakeholder groups were selected by using Quadruple Helix approach which include the following groups. To be inclusive when collecting opinions and perceptions from stake holder groups, a fifth category, other innovation actors which is listed at the end of the list below, is also invited to complete the survey.

- ▶ Civil society/end users
- ▶ Education/research/training
- ▶ Policy makers/public authorities/supporting institutions
- ▶ SMEs/industrial sectors
- ▶ Other innovation actors

Statistical analysis computer packages, SPSS and NVivo (Version 12) were used to process the primary qualitative data. The full analysis can be viewed in the SWOT Composite Report (Robinson and Xiong, 2023).

The analysis for both primary and secondary data were conducted concurrently. The analysis on both types of data stays unbiased to the greatest extent to keep the content including the opinions and forecasts neutral, to support and assist the partner regions and institutions, and

other prime stakeholders to make joint decisions on necessary actions to take to establish a robust, interconnected and sustainable silver economy.

8. The Silver Economy Outlook

Ageing is not evitable. It is a necessary part of the life journey. 65 years, rather than being a borderline for defining older people, it is closer to be a landmark for celebrating an enrichment of knowledge, skills and life experiences.

According to the 2021 Ageing Report, the projected population structure will transform into a rectangular shape pyramid at both the EU level and the Euro-area level in the next 50 years (European Commission, 2021b). The old-age dependency ratio of EU will rise to 59% by 2070 which means for every older person, there are less than two working-age people. The very-old-age dependency ratio will reach to 25.7% in the same projection horizon (European Commission, 2021b). The projected labour force participation rate will rise to approximately 81% by 2070. The growth is driven by the people aged at 55-and 64 years. Compares to the size of labour force in 2019, the total number of labour force is estimated to reduce by 16% by 2070 which means a loss of 32.1 million workers in the labour market at the EU level (European Commission, 2021b). Meanwhile, the estimated labour input is going to decrease by 12% in the next 50 years, *ceteris paribus*. However, the labour productivity is expected to increase by 1.8% by 2045, and then will increase by approximately 1.6% from 2046 to 2070 (European Commission, 2021b). The changes on the population structure and on work-age population indicates a significant challenge that we are facing in the future, a shortage of labour supply in the next 50 years.

According to the previous discussion in Section 4.3 Economic Indicators, older people may be interested in staying labour market however in different working mode due to their varied needs, self-employment and part-time working are both options to them. Silver-entrepreneur may become a new form of working for the older people to participate and stay connected. It is important to note that a proportion of working-age population is also willing to choose early-retirement. Hence a potential shortage of labour supply soon would become a challenge that needs to be tackled urgently.

The projected public health care expenditure will represent 18.0% of GDP at EU level by 2070, if the population structure is growing in the same way of the estimation that was discussed previously (European Commission, 2021b). If the impact from an increasing life expectancy is considered, the projected public funded health care expenditure will be worth 20.0% of GDP at both the EU level and at the Euro-Area level. Strong and well-managed financing to support

the volume and value of public health care expenditure are vital to develop a sustainable silver economy, especially considering the shrinking size of labour supply in the next projected horizon. It is accepted that the size of older people and very older people population, and the technological innovations that are applied in health care sector are the main drivers of an increasing public health care expenditure (European Commission, 2021b). The estimation also points out that if the gains from long life expectancy are invested in maintaining a good health status or improving the current health status, then the projected percentage of public health care expenditure in GDP will drop to 5.0% by 2070. This proves the importance of promoting healthy ageing and active ageing to a certain extent.

The volume of demand on long-term care also presents an upward moving trend. The current data shows that approximately 50% of the older people in EU need long-term care however did not receive any or still need further care and assistance. The projected number of older people who needs long-term care in the EU will increase by 23.5% and reach to 38.1 million people in the next 30 years (European Commission, 2022). Under the same demographic estimation which means the population structure would grows in the same way with previous projection, the public long-term care expenditure would represent 2.9% of GDP by 2070 (European Commission, 2021b). The concern that is raised from public expenditure about long-term care has become a challenge to the sustainability of silver economy development. How would the government finance the expenditure eventually continuously and sustainably, without harming the fiscal position of the state? The answer to this question may need the wisdom from not only the policy makers, but also from other related stakeholder groups. The European Union has released the European Care Strategy which aims to provide affordable and accessible care services, not only to the older people, but also to people in other age groups with diverse needs (European Commission, 2022). The European Care Strategy could inspire the government of the member states to explore approaches to maintain and improve the fiscal sustainability.

Lifelong learning is a hidden need for older people; however, it is also a hidden sector that has opportunities for further development which has not been paid considerable attention in the past. This might be due to a smaller percentage of older people participated in lifelong learning compared to the people in the other age groups. Based on the SWOT Composite Report (Robinson and Xiong, 2023), digital divide and other types of knowledge gap is a concern from the stakeholders that they may obstruct older people to stay connected with the external environment. With the promotion of active ageing and lifelong learning, the demand on lifelong learning programmes, especially the programmes on digital technology and social media, will

be growing. Several EU member states have started take actions on enhance digital literacy in the older people group, such as Germany, France and Ireland (AGE Platform Europe, 2022). Via free digital classes, pedagogical toolkit and other digital skills programmes, the digital divide could be narrowed.

The further education on media literacy and information communication technology (ICT) skills are also necessary and essential to older people. The widely and frequently use of online banking system and online shopping nowadays may have blocked the path of some older people to fully enjoy their life or getting access to essential goods and services (Hermans, 2022). It may be even more difficult to those who are not able to drive. Digital, media and technology related lifelong learning programme may be a strong support to them and help them to be able to connect with the external environment. By offering several types of further education options, older people may have a stronger initiative to participate in lifelong learning. These further education choices could also encourage them to engage and participate in the community activities.

Moreover, a considerable volume of public services that are delivered and made available online nowadays. In a press release which was published recently, EU Agency for Fundamental Rights emphasised the importance to making online public services accessible and making digital upskill courses available (European Union Agency for Fundamental Rights, 2023). Funding is also made available for supporting the member states to take action to eliminate the barrier made from modern technology.

One of the member states, Slovenia, has started to provide free computer literacy lessons to older people and very older people since 2007 (World Health Organization, 2007). Between 2007 and 2019, 1884 free courses were delivered to 15,538 older participants. The total investment was over €1 million. The average age of the audience was 68 years. The free courses cover the contents such as using emails and social network for communication and connection, searching information by using different browsers, and using different types of devices such as tablets and smartphones. Relaxing learning environment, appropriate size of class, useful knowledge, professional delivery and experienced teaching team made the learning more accessible and friendly to older people. A programme, ACTIVA el +60, was started in January 2021 in Spain. It aimed to help people aged 60 years or over to sign up and get messages, and announcements on activities and other useful information during the pandemic time. It also aimed to create an inclusive communication and social network in the communities.

The SWOT analysis in Section 5 also indicate that there are needs on financial and legal services from older people. How to manage savings, pension, and private property wisely and how to seek the legal services to protect own rights and benefits, are two questions which are important to older people. Majority of the banks may neglect the needs on financial services from older people, due to most of them have no needs on large investment, such as property investment. In 2018, 60% of surveyed older people did not have any mortgage or house loans (Eurostat, 2020a). The legal institutions may also overlook the volume of demand from the older people. However, the situation could have a notable change in the next 50 years. With the visible change on the population pyramid at the EU level and at the member state level, older people could become an important segment of the customers group for both financial and legal institutions.

The needs on older people are more than health care and long-term care. The respondents who answered the SWOT survey explained that this is one of the stereotypical perceptions of older people that should be changed. There are different types of older people, and their needs would be varied too. Non-health care related sectors, such as tourism, education, financial and legal services still have undeveloped potential and opportunities for enterprises to explore.

Several member states have paid attention to the non-healthcare needs of older people. A cultural project which may allow older people to enjoy going to cinema on Tuesdays for only €2 (Dartford, 2023). It aims to encourage the older people to leave home and stay connected with the community. It is estimated that this project could benefit approximate 9.5 million people (Dartford, 2023). Local authorities and Older People's Association in France started a programme in 2020, to support older people to maintain the quality of social life and to maintain high-quality communication to inform the older people and to listen what they care and concern (World Health Organization, 2020). The communication was made through weekly telephone meeting, online meetings and letters. Musical, sports and other creative entertainment activities which would also stimulate memory were tailor designed for the older people who were under the programme.

Different counties in Ireland have been working hard on establishing age friendly towns to create an age friendly community to the people of different generations (World Health Organization, n.d.). Moreover, Age Friendly Ireland Business Recognition Programme which is an ongoing programme that is supported by Chambers Ireland and the Age Friendly Programme, provides a detailed toolkit to encourage and support businesses to further understand their customers, especially the older people, and make their businesses age friendly (Age Friendly Ireland, 2023). Advice in the areas, such as communication, needs and

concerns identification and recognition, which does not cost the business any money to make effective changes were given in the toolkit. It is clearly to see that member states have started taking actions to respond to the challenges and opportunities of silver economy.

More good practice cases are available to view in the handbook, *Handbook on Silver Economy, Sustainable Development and Innovation Ecosystem*, which will be published on the website of the project, <https://www.senior-eco-nect.com/>. It is clear to see that partner regions are taking actions proactively to participate in the development of the silver economy. The SWOT composite report (Robinson and Xiong, 2023) also shows that the stakeholder groups are actively getting involved in the silver economy and the wider ecosystem. Their perceptions on the opportunities and challenges to the future development of the silver economy at regional level and at the EU level are also shared in the report.

It is undeniable that the increasing share of older people in population poses significant challenges to regional economy, society, and the whole ecosystem. It is also worth to point out the potential opportunities are rising in the healthcare and non-healthcare related sectors. Balancing between tackling the challenges and seizing the opportunities will be vital for developing an inclusive and an interconnected silver economy overall. Foresighted and innovative strategies, comprehensive and adaptive plan, and collaborative and effective actions across sectors and stakeholder groups can provide an age-friendly environment in the community and society and benefit the development of the silver economy eventually.

9. Conclusion

In the last decades, the population structure in EU has had a notable change. The projected percentage of older people and very older people is going to climb. This rise urges the government, communities and the related stakeholder groups to explore solutions to the challenges that are brought with the increasing number of older people and very older people population. The increase of older people in society indicates a greater pressure on labour supply and the labour market and on increasing public expenditure for healthcare and long-term care. It poses a difficult challenge for the government, policy makers and public authorities, and other related stakeholders including private enterprises. The varied needs on the working conditions and working environment to accommodate older people and the people who are approaching retirement age also need attention and support.

Non-healthcare related sectors, such as tourism and hospitality, education, transportation, and financial legal services, are perceived to have untapped potential for silver economy development. Not only does the existing data and research indicate the potential opportunities associated with these sectors in developing an inclusive silver economy, but also the answers from the SWOT survey showed a similar perception.

Policy supports, such as financial support and collaboration support, are essential to SMEs and enterprises that operate within the silver economy, especially for start-up enterprises. Enhancing the connection and collaboration networks at regional level and at EU level is also vital in securing a robust and interconnected silver economy. Based on the existing research and SWOT analysis, it may still be necessary to raise the awareness and promote correct understandings of the silver economy and older people in the wider society.

The proactive actions that have been taken at EU level, and within member states, indicate a strong incentive to develop a sustainable silver economy. With collaborations from varied stakeholders, the silver economy would have a bright future.

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