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ul. Powstańców Wielkopolskich 16, 61-895 Poznań, Poland
phone +48 61 854 31 54, +48 61 854 31 55
https://wydawnictwo.ue.poznan.pl, e-mail: wydawnictwo@ue.poznan.pl
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# Growth prospects for the silver economy in the market segment of residential care services provided to dependent elderly people

**Rafał Iwański**[1]

**Abstract**

The aim of this study is to characterise the determinants of the development of the silver economy in the field of care services provided in a residential form for dependent elderly persons in Poland. The analysis was carried out on the basis of statistical and financial background data, including those from the Ministry of Family and Social Affairs, the Ministry of Health, OECD, etc. Although the demand for care services will continue to grow in the coming years, the following barriers to the development of this segment of the silver economy can be identified: lack of employees, unattractiveness of monetary gratification, inefficient financing mechanisms, lack of public investment in the development of care facilities, and increasing costs of providing services in all forms.

**Keywords**

- economics of the elderly
- silver economy
- demographic trends
- labour demand
- welfare programme

**JEL codes:** H53, I38, J11, J14, J23

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[1] Applied Gerontology and Thanatology Group, Institute of Pedagogy, University of Szczecin, ul. Ogińskiego 17, 71-431 Szczecin, Poland, rafal.iwanski@usz.edu.pl, https://orcid.org/0000-0001-6345-9677.

## Introduction

Demand for care services will grow in the coming years as a consequence of an ageing population and the diminishing care potential of families. According to estimates, approximately 2 million elderly people in Poland will require the assistance of others in 2022, rising to more than 3 million by 2060. Many societies across the world are facing the challenge of securing care for dependent older people. This article contributes to the discussion on the role of individual segments of the silver economy in constructing a care system for dependent persons in Poland. It fills a research gap, as there is a noticeable lack of studies in this area that adopt an interdisciplinary perspective on the development of the silver economy. The process of population ageing, combined with a decline in the care potential of families, results in demand for care services growing every year. It is not always possible to meet the care needs of an elderly person in the form of a health visitor service, in which case residential forms of care apply.

Care services could be a significant segment of the silver economy in the coming years. While demand for services will grow rapidly, the availability of publicly funded or co-funded services is limited, which may contribute significantly to the development of the private sector. The process of population ageing is global and affects countries on every continent. However, it is worth noting the variation in the progression of the population ageing process. In the case of European countries, including Poland, there has been a steady increase in the proportion of older people in the population for several decades, and demographic forecasts predict that this trend will continue (OECD, 2021b; WHO, 2022). In contrast, in the case of the African continent, for example, a significant number of societies are entering the demographic explosion stage, according to the theory of the first demographic transition. The effect of demographic processes at this stage is dynamic population growth and, for the time being, a slight increase in the percentage of elderly people. However, a change in the reproductive pattern and a gradual shift away from dispersive reproduction towards a conservative model can be expected in the next decades, which will lead to an increase in the proportion of older people in the populations of African countries. Yet in Europe, the ageing population process has not taken place simultaneously in particular countries. Therefore, the degree of ageing of individual populations within Europe itself also varies (Dudley, 1996; Rudakova et al., 2023).

Countries affected by population ageing are taking a variety of measures to secure the care needs of dependent older people based on the social policy model adopted, including the social assistance and health care systems. Comparative studies are being conducted on the performance of different solutions based on available resources (Costa-Font & Courbage, 2011; Poškutė,

& Greve, 2017). Building a long-term care system is a very complex process, and it is based on four main elements: beneficiaries, benefits, providers, and financing (Dintrans, 2020). While each system has its own specific conditions and is based on the use of available resources, the cultural context and social preferences for forms of support are also important. For years, there has been a debate in analyzing the costs of care as per the form of service provision (Chappell et al., 2004; Kaye et al., 2010). Residential forms are indicated as more expensive and less desirable for care recipients, but studies should not only be conducted at a macro level, but also include the individual needs of the dependent older person, the care potential of the family and the local environment, as well as the available services provided in a community-based form.

Currently, there are three main pillars of assistance in the system. The first one is the social care sector, where the cost of services is borne by recipients, family members and local governments. The health sector constitutes the second pillar, where certain services are financed exclusively by the National Health Fund (NFZ) and some are co-financed by the recipient. The last pillar includes services provided by the private sector, which has seen rapid growth in recent years. Each of the sub-systems presented has its own distinctive characteristics in terms of the organization and financing of services.

The aim of this study is to characterize determinants of the development of the silver economy in the area of residential care services in Poland. A forecast of the number of elderly people requiring assistance until 2026 was produced based on the results of research carried out as part of the PolSenior2 project. For the purpose of the analysis, we used statistical and financial data made available by the Ministry of Family and Social Affairs, the Ministry of Health the National Health Fund, the Supreme Chamber of Control, OECD, Eurostat, the Central Statistical Office, among other institutions, in addition to our own research results.

The first part of the article characterises the silver economy and the main issues related to the market of care services for dependent elderly. It presents basic demographic information describing the process of ageing among the Polish population and an estimate of the number of people requiring support in everyday functioning together with the projections until 2060. The next part of the article analyses the three main sectors of residential care, i.e. care services provided by the health care sector, social assistance and private entities. The final section presents the conclusions of these analyses.

## 1. The silver economy and long-term care

The silver economy is a part of the general economy and includes public and private spending related to the specific needs of people aged 50 and over. Since its emergence, the silver economy has been associated with the health and care services sector provided to the elderly and pension systems. However, it should be emphasised that the silver economy also includes those market segments providing services and products to address the needs of older people (European Commission, 2018). Nevertheless, many researchers point to a broader understanding of the concept of the silver economy, which also includes education, clothing and fashion, media, culture, inter-sectoral activities, gerontotechnologies and social innovation (Klimczuk, 2016; Reshetnikova et al., 2021).

Three main areas can be identified that are relevant when addressing the silver economy. The first is silver industries, which includes goods and services dedicated for seniors and support for older employees. The second important module is social innovation including, in particular, strategies, concepts, and organizational forms. The last is gerontology, which includes research and development of gerontotechnology (Krzyminiewska & Pondel, 2019).

Long-term care services can be classified as meeting basic, or even biological, needs. For elderly people with a low degree of self-care skills, care must often be provided from the beginning of the crisis (e.g., after a stroke, femoral fracture), the duration of which is sometimes counted in months and years (Alzheimer's disease). While we cannot eliminate the risks that affect the dependency of individuals, we can attempt to reduce them through preventive measures such as healthy eating, physical, social and intellectual activity and avoidance of stimulants, etc.

The amount of support provided is determined on an individual basis. It depends mainly on the medical condition, but also on the place of residence, preferences in terms of the organisation and provision of care, the income and accumulated capital of the dependent person and family members, etc. (Cardoso et al., 2012). The availability of services is determined by a number of factors, which we can also include those occurring at the macro level, in particular: the mechanism for organising and financing care services, the number of providers, and the forms and scope of services, which are not uniform.

The third important determinant is the existence of a permanent imbalance with regard to care services provided to dependent elderly people, where demand for services exceeds supply. The deepening imbalance may be further enhanced by the lack of a coherent and long-term social policy for such care, which includes services provided by public entities and the private market of services. When seeking to maintain the current level in meeting the needs of dependent people, the dynamics of investment demographic

and social changes must be monitored. Expenditure is required for the three main determinants necessary for the development of the care services: the care workforce, infrastructure, and mechanisms for financing benefits with private and public funds.

In home and community care, there is a notable shortage of direct care workers (Zagrodney et al., 2023). This problem is global and affects most societies with a growing elderly population (Fujisawa & Colombo, 2005; Prince et al., 2013). Many problems related to resources in long-term care were exacerbated during the COVID-19 pandemic. It is worth noting that the shortage of workers affected carers with different qualifications, including highly skilled workers such as nurses and doctors working in long-term care facilities (Grabowski & Mor, 2020; White et al., 2021; Xu et al., 2020).

The findings of studies on the organization of long-term care systems in EU countries indicate that two models prevail. The first, where responsibility for regulating care services rests with central authorities, and the second, where responsibility is shared between central and regional authorities. This is reflected in the distribution of funds, mainly including the sharing of care costs for both in-house and residential care, and the choice of service providers between public and private ones (Riedel et al., 2016). The solutions adopted for financing care services, which may be prospective or retrospective, have consequences for how the system functions and the inadequacies, which depend on a number of factors, including the wealth of a given population (Costa-Font et al., 2017). In some countries, e.g. the Nordic countries, formal care is more developed, with the state bearing a significant part of the burden. In the case of Western European countries, a model based on social-financial programmes is popular. Financial schemes that operate on the basis of a provision- and insurance-based system allow consumers of services to choose their provider, which contributes to the development of different segments of the care market. In contrast, Mediterranean and central-south-eastern countries are characterized by lower levels of formal care and social transfers. Care is mainly provided by family members or is privately funded (Damiani et al., 2011). In EU countries, an average of 1.8% of GDP was spent on long-term care services provided by health sector providers in 2020. The highest percentage was observed in the Netherlands and amounted to 3.24% of GDP, with the lowest percentage being in Slovakia at 0.03% of GDP. Polish spending in this area is relatively low, as it only constitutes 0.54% of GDP (Eurostat, 2023). According to forecasts, expenditure on health services related to long-term care is expected to increase to around 2.8% of GDP by 2070 for EU countries, and in some countries, e.g. Denmark, it may reach around 7% of GDP (OECD, 2022).

## 2. Ageing population and the demand for care services

Since OECD member states, which mainly include Western Europe and North America, entered the second demographic transition, the issue of securing care for a growing number of dependent elderly has become increasingly urgent. Attempts have been made for decades to estimate the needs for services as well as the costs in particular populations, taking into account the local characteristics of the current support system (Cardoso et al., 2012; Comas-Herrera et al., 2007; Hrynkiewicz & Halicka, 2022; Spasova et al., 2018, Spetz et al., 2015). In the case of Poland, we are facing a very dynamic process of population ageing. In 2022, people aged 65 and over accounted for 19.5% of the population; by 2060, the percentage of senior citizens will have risen to 32.6%. In turn, the percentage of senior citizens aged 85 and above will have increased from 2.1% in 2022 to more than 6% in 2060 (GUS, 2023a). The caregiving potential of families will decline, as is best illustrated by the ratio of prospective support for elderly parents, which is the quotient of the size of the subpopulation aged 50–64 by the size of the elderly in the same population (85 and older) (Freedman et al., 2024; Kowaleski & Majdzinska, 2012; Redfoot et al., 2013). In 2022, it stood at 8, while by 2060 it will drop to 2.9 (GUS, 2023a). One of the reasons for the dynamic increase in the proportion of older people in the population of Poland but also of other Central and Eastern European countries is the very low fertility rate, which oscillates around 1.3–1.5, and is significantly below the threshold for the simple replacement of generations (2.15). This situation has persisted since the transition period of the 1990s. In addition, many Central European countries, including Poland, recorded a negative migration balance, especially after the enlargement of the European Union in 2004. Migrants were predominantly people of working age, leaving their ageing parents and grandparents in their home countries.

The risk of dependency increases with age and is associated with the fact that an elderly person needs continuous assistance from family or other persons (Legdeur et al., 2018). Senior citizens affected by dependency can be divided into two groups: “requiring assistance” and “definitely requiring assistance”. The latter group includes those with limited ability to perform basic daily activities. The results of a survey conducted as part of the PolSenior2 project indicate that in the 60–64 age group, 6% of men and 9.8% of women require assistance. However, in the age category of 90 and older, 70.9% of men and 84.5% of women require assistance. In the case of seniors definitely requiring assistance in the 60–64 age group, such a need is expressed by 2.6% of men and 4.1% of women. In the oldest age category, the proportion rises to 46.6% of men and 61.3% of women (Błędowski, 2021).

Table 1 presents estimates of the number of senior citizens in each age category who require assistance. In 2022, the total number of such individuals is estimated to be 1.9 million people. In each age category, the predominance of women is noticeable, especially for those over 75 years of age. By 2060, the share of those in need of assistance will rise to 3.3 million people. In this group, the majority will be individuals aged 80 and over.

**Table 1. Estimates* of the number of men and women aged 60 and older requiring assistance from other persons between 2022 and 2060 (in thousands) in Poland**

| Age | Year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2022 | | 2030 | | 2040 | | 2050 | | 2060 | |
| | Sex | | | | | | | | | |
| | M | W | M | W | M | W | M | W | M | W |
| 60–64 | 69 | 127 | 60 | 107 | 80 | 141 | 73 | 129 | 52 | 90 |
| 65–69 | 131 | 162 | 108 | 128 | 123 | 143 | 148 | 169 | 112 | 128 |
| 70–74 | 147 | 148 | 161 | 155 | 133 | 123 | 181 | 163 | 170 | 150 |
| 75–79 | 100 | 204 | 164 | 318 | 143 | 259 | 169 | 294 | 209 | 354 |
| 80–84 | 77 | 249 | 128 | 375 | 161 | 438 | 140 | 355 | 198 | 483 |
| 85–89 | 81 | 262 | 82 | 239 | 179 | 467 | 167 | 399 | 211 | 473 |
| 90+ | 48 | 175 | 65 | 222 | 114 | 330 | 180 | 481 | 184 | 451 |
| Total | 653 | 1327 | 766 | 1544 | 932 | 1900 | 1058 | 1990 | 1136 | 2130 |
| Total M+W | 1980 | | 2310 | | 2832 | | 3048 | | 3265 | |

Note: * Estimates based on the results of research conducted as part of the PolSenior2 project. Adopted risk levels by age category, for men: 60–64 years: 6%, 65–69 years: 11.6%, 70–74 years: 17%, 75–79 years: 21.7%, 80–84 years: 28.1%, 85–89 years: 52.4%, 90 years and older: 70.9%; for women: 60–64 years: 9.8%, 65–69 years: 11.7%, 70–74 years: 12.5%, 75–79 years: 28.2%, 80–84 years: 47.1%, 85–89 years: 70.7%, 90 years and over: 84.5% (Błędowski, 2021).

Source: based on (Błędowski, 2021; GUS, 2023a).

Table 2, in turn, shows estimates of the number of elderly people who definitely need assistance. Over the course of almost four decades, their number will increase from 0.9 million in 2022 to 1.6 million in 2060. This group is already dominated by senior citizens aged 80 and older in 2022, and this number will grow in the coming decades. Demand for care will increase as people born during the baby boom of the second half of the 20th century pass the second and third thresholds of old age. The analysis of the data presented (Tables 1 and 2) makes it possible to determine prospective demand for long-term care services in each decade. Forecasts facilitate preparing the

care system for the increasing burden, including the development of the silver economy in the area of care services.

**Table 2. Estimates* of the number of men and women aged 60 and older definitely requiring assistance from other persons between 2022 and 2060 (in thousands) in Poland**

| Age | Year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2022 | | 2030 | | 2040 | | 2050 | | 2060 | |
| | Sex | | | | | | | | | |
| | M | W | M | W | M | W | M | W | M | W |
| 60–64 | 30 | 53 | 26 | 45 | 35 | 59 | 32 | 54 | 23 | 38 |
| 65–69 | 50 | 62 | 41 | 49 | 47 | 55 | 56 | 65 | 43 | 49 |
| 70–74 | 77 | 36 | 84 | 37 | 70 | 29 | 95 | 39 | 89 | 36 |
| 75–79 | 42 | 75 | 69 | 116 | 60 | 95 | 71 | 107 | 87 | 129 |
| 80–84 | 39 | 121 | 65 | 182 | 81 | 213 | 71 | 173 | 100 | 235 |
| 85–89 | 35 | 128 | 35 | 117 | 77 | 228 | 72 | 194 | 91 | 231 |
| 90+ | 31 | 127 | 42 | 161 | 75 | 239 | 118 | 349 | 121 | 327 |
| Total | 304 | 601 | 362 | 707 | 444 | 918 | 515 | 981 | 553 | 1045 |
| Total M+W | 905 | | 1069 | | 1362 | | 1496 | | 1599 | |

Note: * Estimates based on the results of research conducted as part of the PolSenior2 project. Adopted risk levels by age category, for men: 60–64 years: 2.6%, 65–69 years: 4.4%, 70–74 years: 8.9%, 75–79 years: 9.1%, 80–84 years: 14.2%, 85–89 years: 22.6%, 90 years and older: 46.6%.; for women: 60–64 years: 4.1%, 65–69 years: 4.5%, 70–74 years: 3%, 75–79 years: 10.3%, 80–84 years: 22.9%, 85–89 years: 34.5%, 90 years and over: 61.3% (Błędowski, 2021).

Source: based on (Błędowski, 2021; GUS, 2023a).

According to estimates published in an OECD report (2021a), 34% of people aged 65 and older report limitations when performing daily activities, and 16% describe these as significant. If these criteria are adopted, in 2022 there were 2.5 million elderly people reporting activity limitations and 1.1 million described them as significant. In 2060, their number would rise to 3.4 million and 1.6 million, respectively. Regardless of the scenarios adopted, the demand for long-term care services will grow rapidly. When analysing the issues of service development prospects, it is important to consider that the needs of elderly citizens will vary greatly. This will be due to health conditions, personal preferences in terms of the expected support, and the possibility of providing support based on available resources. Therefore, for the purposes of this discussion, it is worth distinguishing several major segments of the market for goods and services dedicated to dependent elderly, family and professional caregivers:

- Care services provided directly to dependent seniors in residential and community-based forms.
- Benefits for family caregivers.
- Equipment and solutions used when providing care.
- Equipment and solutions to enhance or maintain self-care skills.

Each of the areas identified has its own individual development prospects. Some are dependent on legal regulations for organization and financing, while others are mainly subject to factors occurring in the free market for goods and services.

## 3. Residential care

Services provided in the form of residential care should be reserved for dependents for whom safe and appropriate care in the form of health visiting service cannot be secured. This is the most expensive form and requires significant investment to make the delivery of services possible (Konetzka, 2014; Marek et al., 2012). Greater demand for this type of service is affected by the following factors:

1. Demographic: increase in the number of elderly people in the population; decline in the care potential of families; increase in the number of elderly individuals with low levels of independence; increase in the number of single-person households among the elderly; external long-term migration of working-age family members.
2. Systemic: insufficient supply of services provided in the community (Konetzka, 2014). In this case, people who could have benefited from community-based support, if it were available, end up in the residential care system. Lack of indirect forms of care in the form of day care for dependents and respite care.
3. Community: lack of support for family caregivers in the form of counselling, guidance, training and support groups; insufficient financial support for family caregivers when they give up their professional duties.

In the case of the first factor, it is largely independent and the influence from social policy is significantly limited. For the other two factors, on the other hand, this importance is dependent to a great extent on long-term care policies. There are three main pillars in residential care: facilities run by the health sector, including mainly medical care and nursing facilities; facilities run by the social welfare sector in the form of nursing homes; and private care facilities, i.e. nursing homes and family care homes.

### 3.1. The health sector

In 2022, there were 527 long-term care facilities operated by health sector entities and co-financed by the National Health Fund, with nearly 30,000 places (Table 3). Over the period of 20 years, the number of facilities has increased by 80 since 2012, and the number of places by more than 7,500. According to a report by the Supreme Chamber of Control, 61% of patients are aged 65 and older (Najwyższa Izba Kontroli, 2020). Therefore, the ratio of the number of available places in facilities to the number of senior citizens is important. In 2012, on a national scale, there were 4 places per 1,000 people aged 65 and older; for 2022, we can observe a slight increase to 4.1. It is worth noting that there are large differences between voivodships. The largest number of places in medical care and nursing facilities per number of residents is in Podkarpackie (6) and Dolnośląskie (5.7) voivodships, with Wielkopolskie (1.7) and Warmińsko-mazurskie (2.5) voivodships at the other end of the spectrum.

The reasons for the differences between the voivodships in terms of the development of health care infrastructure aiming to meet the treatment and care needs of dependent people, mainly those in advanced age, can be found in the social policy priorities in the field of health care pursued by local authorities (at the level of municipalities, districts and the voivodships), and the differences in the dynamics of ageing in particular regions. It is mainly local authorities that undertake initiatives related to the development of infrastructure, equipment and employment of the necessary staff in order to then apply for a contract for the provision of services with a public insurer. This type of investment requires the securing of substantial financial resources as early as at the establishment stage.

Care and nursing facilities are intended for dependent persons who have completed hospital treatment, but require specialized care provided by health sector personnel. Patients are referred to the facility by a doctor and have a score of up to 40 on a test conducted using the Barthel scale. The fee for the stay paid by elderly person amounts to up to 70% of their pension, with the remaining cost being covered by the National Health Fund. Family members are not required to co-pay.

In 2012, PLN 1,000,610,000 was allocated from the National Health Fund's budget to nursing and long-term care services, which accounted for 1.65% of overall spending on health services. In contrast, in 2022, spending on the range of services analysed here increased to PLN 1,892,479,000, which accounted for 2.79% of the National Health Fund's budget spent on health services (Ministerstwo Zdrowia, 2023). The rise in spending was influenced by an increase in the number of providers but also by rising costs of implementing medical and care procedures.

**Table 3. Medical care and nursing facilities between 2012 and 2022 in Poland**

| Voivodship | 2012 | | | 2022 | | |
|---|---|---|---|---|---|---|
| | Number of care and nursing facilities | Beds | Beds/1000 aged 65+ | Number of care and nursing facilities | Beds | Beds/1000 aged 65+ |
| Dolnośląskie | 54 | 2652 | 6.4 | 64 | 3217 | 5.7 |
| Kujawsko-pomorskie | 29 | 1222 | 4.3 | 38 | 1659 | 4.4 |
| Lubelskie | 20 | 794 | 2.4 | 22 | 1275 | 3.2 |
| Lubuskie | 12 | 407 | 3.1 | 11 | 579 | 3.2 |
| Łódzkie | 28 | 1349 | 3.3 | 36 | 1943 | 3.9 |
| Małopolskie | 33 | 2439 | 5.1 | 39 | 3156 | 5.3 |
| Mazowieckie | 66 | 4128 | 5.2 | 67 | 5032 | 5.0 |
| Opolskie | 0 | 0 | 0.0 | 15 | 769 | 4.2 |
| Podkarpackie | 36 | 1818 | 6.3 | 40 | 2224 | 6.0 |
| Podlaskie | 21 | 536 | 3.0 | 19 | 727 | 3.4 |
| Pomorskie | 27 | 1088 | 3.7 | 28 | 1201 | 2.9 |
| Śląskie | 59 | 3002 | 4.3 | 63 | 3905 | 4.5 |
| Świętokrzyskie | 14 | 618 | 3.1 | 19 | 1039 | 4.2 |
| Warmińsko--mazurskie | 14 | 520 | 2.9 | 18 | 608 | 2.5 |
| Wielkopolskie | 21 | 728 | 1.6 | 28 | 1012 | 1.7 |
| Zachodniopomorskie | 13 | 440 | 1.9 | 20 | 936 | 2.9 |
| TOTAL | 447 | 21741 | 4.0 | 527 | 29282 | 4.1 |

Source: based on (Bank Danych Lokalnych, 2023; GUS, 2013, 2022).

It is a very expensive form of long-term care, not least because of the need to hire highly specialized personnel, including doctors, nurses and therapists. Due to the fact that the market for health care services has experienced a shortage of sufficient medical staff for years, this can be a very big obstacle to the development of this type of services, especially since, according to an OECD report, Poland has a very low ratio of doctors (2.4) and nurses (5.1) per 1,000 inhabitants (OECD, 2020). What is more, the development of this segment of services is largely dependent on the payer (the National Health Fund), which makes the valuation of services and determines the limits of funds allocated for contracting services in this area.

## 3.2. Social welfare sector

The expansion of the care infrastructure and the co-financing of services in social welfare homes is mainly the responsibility of local governments. In 2022, there were 822 facilities of this type operating across the country, with a combined total of more than 80,000 places (Table 4). On average, the facilities had 97 places at their disposal, although it is worth emphasizing that there are social welfare homes with 300 residents. Currently, the maximum size of an institution should not exceed 100 residents. Since 2012, only 20 new social welfare homes have been opened, and the number of places has increased by only 1,490 (MRiPS, 2023a, 2023b). Although the largest number of such homes is in Śląskie voivodeship (97) with a total of 8573 places, and Mazowieckie (92) voivodship with 9340 places, the highest level of security per 1,000 people aged 65 and over is recorded in the Opolskie voivodship with 16.4 and the Warmińsko-mazurskie voivodship with 15 (MRiPS, 2023b).

The cost of staying in the facility is covered primarily by the recipient (up to 70% of their pension, disability or allowance benefits), then ascendants and descendants (a surcharge applies above 300% of the income criterion in social assistance), with the shortfall being paid by the municipality. Municipal expenditure on surcharges for stays in social welfare homes is growing rapidly, which is mainly due to the increasing monthly cost of stay; in 2023 this was on average around PLN 6,000–6,500 (EUR 1.3–1.4).[2] In contrast, the average retirement benefit was PLN 3,300 gross (EUR 726) (ZUS, 2023b). Surcharges from family members obligated to pay welfare are at very low levels. Therefore, some municipalities try to limit the issuance of referrals to social welfare homes, thus avoiding future costs (Iwański, 2016). Of the 56,000 people admitted to social welfare homes under regulations introduced in 2004 (described above) who were in 2022 in the facilities, the fee for 54,000 had to be paid by municipalities. In 2012, municipalities spent PLN 810 million (EUR 178 million) to support stays in social welfare homes, which accounted for 0.58% of total local government expenditure. In 2022, on the other hand, PLN 2,237 million (EUR 492 million) was spent nationwide for this purpose, which constitutes a 176% increase over the decade. The share in municipal budgets has increased to 0.90% (Bank Danych Lokalnych, 2024; MRiPS, 2023b).

As there are noticeably low dynamics of investment carried out by local governments in terms of the building new social welfare homes, the private--public partnership model is a solution. Municipalities can provide land for investment and guarantee the referral of residents of their municipality to the facility once it obtains the status of a social welfare home of a certain type

[2] Calculation based on the average annual euro exchange rate in 2023 of EUR 1 = PLN 4.5436 (Ministerstwo Finansów, 2024).

**Table 4. Social welfare homes in Poland – as of 2022**

| Voivodship | Number of facilities | Number of places | Average number of residents | Number of places per 1,000 persons aged 65+ | Number of persons aged 65+ |
|---|---|---|---|---|---|
| Dolnośląskie | 61 | 5834 | 96 | 10.3 | 565557 |
| Kujawsko-pomorskie | 46 | 3982 | 87 | 10.6 | 376036 |
| Lubelskie | 46 | 4525 | 98 | 11.3 | 400554 |
| Lubuskie | 23 | 2236 | 97 | 12.2 | 183109 |
| Łódzkie | 55 | 6134 | 112 | 12.2 | 503516 |
| Małopolskie | 89 | 8114 | 91 | 13.7 | 592767 |
| Mazowieckie | 92 | 9340 | 102 | 9.3 | 1002043 |
| Opolskie | 28 | 3030 | 108 | 16.4 | 184335 |
| Podkarpackie | 52 | 4881 | 94 | 13.3 | 368208 |
| Podlaskie | 22 | 2177 | 99 | 10.2 | 213022 |
| Pomorskie | 40 | 4045 | 101 | 9.9 | 407857 |
| Śląskie | 97 | 8573 | 88 | 9.9 | 869576 |
| Świętokrzyskie | 36 | 3336 | 93 | 13.4 | 248774 |
| Warmińsko--mazurskie | 40 | 3656 | 91 | 15.0 | 244010 |
| Wielkopolskie | 63 | 6382 | 101 | 10.5 | 606730 |
| Zachodniopomorskie | 32 | 3870 | 121 | 12.0 | 322343 |
| TOTAL | 822 | 80115 | 97 | 11.3 | 7088437 |

Source: based on (GUS, 2023b; MRiPS, 2023b; data from records of 16 voivodship offices).

(there are seven main types of facilities for dependents, e.g., somatically ill, mentally ill). Meanwhile, a private investor would build the facility, equip it and run it, once it receives regulatory approvals for operation and meets the standards set forth in the relevant legislation (entry in the register kept by the voivodship office). Although the first investments of this type have already been completed in Poland, it is still not a popular model, despite its potential to provide opportunities for the expansion of care infrastructure in the form of social welfare homes, and to strengthen this market segment. Given the high demand for this form of care and the potential for development, this could be an attractive form of capital investment for private entities.

The return rate on this type of investment is long-term, due to the need for substantial resources during the construction stage, as well as equipping the

building and hiring the necessary staff. The investor must have a guarantee that the local government with which it is cooperating will refer residents in need of residential care to the facility for a specified period (e.g., 10–20 years). Since, in the vast majority of cases, municipalities pay a substantial surcharge for residents in nursing homes, if the monthly cost of care rises dynamically (through inflation, increases in labour costs, etc.), then municipalities may not have the necessary funds to cover the fee. In this case, the investment risk increases significantly. In order to reduce the risk, the investor may allocate part of the places to senior citizens referred by the municipalities on the basis of tasks set out in the Social Assistance Act. Another part of the resources could be dedicated to providing care services for private clients. In this type of facility, it may also be worth considering community-based activities, e.g., in the form of a rehabilitation equipment rental, a training facility, a shop with essential care items and community care services, etc. Expanding the business profile can help diversify revenue sources.

## 3.3. Private sector of residential long-term care

Although nominally there is a slight increase in the number of places in social welfare homes, the supply in relation to the number of elderly people, including dependents, has been steadily declining in recent years. This situation contributes to the development of the private market for residential care. Facilities providing 24-hour care for the disabled, chronically ill or elderly may be provided by business entities or non-government organizations for which this type of activity is included in the statute (Ustawa, 2004). In the case of business activity in the form of nursing homes or family care homes, the total cost of the stay is borne by the senior citizen or by family members who agree to partake in the costs. A contract is signed between the recipient and the provider, which specifies the scope of services and the terms of payment for additional services, e.g., medicines, diapers, additional rehabilitation treatments).

In 2023, there were 753 facilities providing 24-hour care for people with disabilities, chronic illnesses or the elderly nationwide (Table 5). The largest number is in Mazowieckie voivodship (151) and Śląskie voivodship (92), the lowest in Świętokrzyskie voivodship (19) and Lubuskie voivodship (14). If we consider the number of places in institutions per 1,000 people aged 65 and over, the most favourable ratio is in Pomorskie voivodship (7.3) and the worst in Podkarpackie voivodship (1.6). Facilities of this type are mostly smaller than social welfare homes, and house an average of 38 residents. The largest residential care facility run as a business or by a non-government organization is found in Małopolskie voivodship, with 195 places. There are also facilities run as family care homes, which care for 5–6 dependents.

**Table 5. Facilities providing 24-hour care for persons with disabilities, chronic illnesses or the elderly as business and statutory activities**

| Voivodship | Number of facilities | Number of places | Average number of residents | Number of places per 1,000 persons aged 65+ | Number of persons aged 65+ |
|---|---|---|---|---|---|
| Dolnośląskie | 61 | 2 402 | 39 | 4.2 | 565557 |
| Kujawsko-pomorskie | 29 | 885 | 31 | 2.4 | 376036 |
| Lubelskie | 20 | 667 | 33 | 1.7 | 400554 |
| Lubuskie | 14 | 373 | 27 | 2.0 | 183109 |
| Łódzkie | 36 | 1136 | 32 | 2.3 | 503516 |
| Małopolskie | 53 | 2264 | 43 | 3.8 | 592767 |
| Mazowieckie | 151 | 6682 | 44 | 6.7 | 1002043 |
| Opolskie | 32 | 1230 | 38 | 6.7 | 184335 |
| Podkarpackie | 20 | 607 | 30 | 1.6 | 368208 |
| Podlaskie | 54 | 940 | 17 | 4.4 | 213022 |
| Pomorskie | 83 | 2961 | 36 | 7.3 | 407857 |
| Śląskie | 92 | 3973 | 43 | 4.6 | 869576 |
| Świętokrzyskie | 19 | 856 | 45 | 3.4 | 248774 |
| Warmińsko--mazurskie | 22 | 868 | 39 | 3.6 | 244010 |
| Wielkopolskie | 43 | 1608 | 37 | 2.7 | 606730 |
| Zachodniopomorskie | 24 | 1091 | 45 | 3.4 | 322343 |
| TOTAL | 753 | 28543 | 38 | 4.0 | 7088437 |

Source: based on (GUS, 2023b; MRiPS, 2023b; data from records of 16 voivodship offices).

New facilities are established every year, and once they meet the standards, they are approved to provide residential care. However, it is worth pointing out that this form of business, although it has prospects for growth, does have certain limitations. The first of these is related to the need for substantial investment expenditures. As early as at the stage of constructing or adapting the building for care purposes, the investor must decide which group of clients it will target. The main issues here are the standard of rooms (single, double or triple), the size and number of common spaces, the area for recreation, rooms for rehabilitation, occupational therapy, and room equipment, etc. Although the regulations set minimum staffing requirements, some clients will look for facilities that provide a higher level of services in terms of reha-

bilitation, leisure activities, etc. Another important issue is the retention of care staff, including medical staff. There is a shortage of care workers in the market, and staffing problems are reported by both public and private facilities (Iwański, 2019; Kałuża-Kopias, 2018). This problem concerns most countries in the European Union, leading care staff to migrate to countries where wages in this sector are higher (Facchini, 2022; Leiber et al., 2019). Salaries in this market segment are not high, and are close to the minimum wage in some facilities in Poland. Providing salaries at a level that will allow staff to be retained feeds into increased costs, which, in the case of free market entities, is reflected in the price of the services offered. The monthly estimated cost of staying in a private facility ranges from PLN 4,000 (EUR 880) to over PLN 10,000 (EUR 2,200), depending on the standard.

## Conclusions

Residential long-term care represents an important segment of the silver economy in terms of demographics, and the three main market areas distinguished in this field should enjoy strong prospects for growth. However, we can identify several factors that are of key importance for the care services market to develop. First of all, it is essential to initiate efforts to train nursing staff, both in the area of social assistance and health care. Many nursing homes are already facing a shortage of nurses, for whom this type of facility is not an attractive place to work in terms of salary. Allowing social welfare homes to contract medical services with the National Health Fund could be one of the solutions to this issue; in fact, this is a solution that managers in this sector have been advocating for years. Furthermore, it is important to educate professional caregivers who will be able to provide proper and safe care for dependents. However, care professions are not attractive in the labour market, which is mainly due to low salaries and high level of professional responsibility (chronically ill, dying people). Indeed, staff shortages in long-term care have worsened in recent years in many countries (Chen et al., 2023; Scales, 2021)

Considering that in the coming years the purchasing power of the average pension can be expected to decline and the cost of care to rise, it seems necessary to introduce additional mechanisms for co-funding care services, e.g. a solution similar to German ones in the form of long-term care insurance (Freudenberg, 2015; Przybyłowicz, 2017; Sawulski et al., 2019). While there were draft bills in Poland that intended to introduce an insurance model co-financing long-term care, they did not meet with the approval of legislative representatives (Poselski projekt, 2018). What is worth emphasising is that the bill adopted in 2023 on the Support Benefit for Persons with Disabilities

excludes from support those residing in residential care facilities, regardless of their type and operating authority (Ustawa, 2023). The result of a 2016 study in Poland (with a nationwide sample of 1,026 respondents) indicated that 65 respondents would consider taking out private care insurance that would pay out in the event of dependency (Jurek, 2019).

The cost of care will continue to rise in years to come, which is primarily due to rising labour costs. This is influenced by the rapid growth in Poland's minimum wage in recent years (PLN 2600 (EURO 572) gross in 2020 to a projected level of PLN 4300 (EURO 946) gross in mid-2024 (ZUS, 2023a). Rising costs are also impacted by high inflation. Thus, expenses for food, energy and the building maintenance in general are increasing. If the monthly cost of a stay continues to grow dynamically, the availability of services will decrease, especially for entities run as a business. Social welfare homes will also be affected, as municipalities will limit referrals to facilities if the amounts resulting from surcharges on stays exceed the financial capacity of poorer local governments. In the case of services provided by health sector entities, with rising costs, the supply of services may decrease, especially if the public payer does not include rising costs in its contracts.

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## Aims and Scope

The **Economics and Business Review** is a quarterly journal focusing on theoretical, empirical and applied research in the fields of Economics and Corporate and Public Finance. The Journal welcomes the submission of high quality articles dealing with micro, mezzo and macro issues well founded in modern theories and relevant to an international audience. The EBR's goal is to provide a platform for academicians all over the world to share, discuss and integrate state-of-the-art Economics and Finance thinking with special focus on new market economies.

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