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## The Use of Housing Policy Instruments in the Process of Investing in the Human Capital of Older Generation. The Example of Poland

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### Abstract

The ageing of societies and the simultaneous decline in birth rates present the majority of European countries with challenges not only regarding the provision of long-term care but also in utilising the potential offered by older individuals. The use of housing policy instruments offers a chance to use, and more importantly, invest in the human capital of the older generation. The aim of this article is to demonstrate how implementing housing policy solutions may foster the process of investing in the human capital of both the current and future seniors, as exemplified by Poland. The article fits in socio-economic analyses. The author uses the results of sociological and economic research, both based on foreign sources and own study. The examined problems are presented with the use of desk research and descriptive analysis.

**Keywords:** housing policy, the elderly, human capital, silver economy, senior housing

**JEL Classification Codes:** J11, J14, J17

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## Wykorzystanie instrumentów polityki mieszkaniowej w procesie inwestowania w kapitał ludzki seniorów. Przykład Polski.

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### Abstrakt

Starzenie się społeczeństw przy zmniejszającej się liczbie urodzeń stawia przed większością krajów europejskich wyzwania związane nie tylko z zapewnieniem opieki długoterminowej, ale także z możliwością wykorzystania potencjału tkwiącego w ludziach starszych. Wykorzystanie instrumentów z zakresu polityki mieszkaniowej daje szansę na wykorzystanie, a przede wszystkim na inwestowanie w kapitał ludzki seniorów. Celem artykułu jest ukazanie na przykładzie Polski, w jaki sposób zaimplementowanie rozwiązań z zakresu polityki mieszkaniowej wspiera proces inwestowania w kapitał ludzki aktualnych, jak i przyszłych seniorów. Artykuł mieści się w nurcie ekonomiczno-społecznych analiz. Autorka wykorzystuje osiągnięcia badań socjologicznych i ekonomicznych, oparte na źródłach zastanych i dorobku badań własnych. W prezentacji badanej problematyki zastosowano metodę desk research oraz analizę opisową.

**Słowa kluczowe:** polityka mieszkaniowa, osoby starsze, kapitał ludzki, srebrna ekonomia, mieszkalnictwo senioralne

**Kody klasyfikacji JEL:** J11, J14, J17

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## Introduction

There is a wide-ranging debate on long-term care in the context of population aging (Brodsky & Clarfield, 2017; Ikegami & Campbell, 2002; Swartz, 2013; Wiener, 2011). It is increasingly often underlined that housing policy should be incorporated into the long-term care system (Łuczak, 2018; Rataj & Iwański, 2020), which, however, is often limited to the care-related capabilities of older (Golant, 2008; Newman, 1995). The author of the present article is of the opinion that, given the rapid demographic changes, housing policy may support the investment in and the use of the older generation's human capital, in addition to providing care capabilities for them.

The research on human assets of the older generation is part of research on broadly defined human capital. Due to demographic changes observed in the recent years as well as the forecasts provided by statisticians and demographers, which clearly indicate that we are dealing in Poland with an increasing demographic crisis, the significance of senior individuals' human capital will be growing. Data published in the statistical yearbook show that Poland's population dropped to 37.677 million people in the end of September 2023, and decreased by about 130,000 people

within 12 months. In the context of these changes, it is extremely important to use the human capital of the older members of the society. Housing policy may be one of the instruments of investing in this capital. As the process of ageing entails growing limitations of fitness, which affects seniors to varying degrees, the housing environment of older people should be arranged so as to considerably facilitate their everyday life. This will allow not only to use seniors' human capital, but more importantly to invest in it. Human capital, in other words – the knowledge, skills and capabilities of the older generation, their professional experience and health condition – will become more and more valuable in the context of the demographic changes. To invest in the social capital of older citizens is one of crucial factors impacting the development of the economy of ageing countries. By offering conditions for active participation in the labour market, culture and leisure, catering for health needs, and providing options to learn new skills, e.g., education courses dedicated to older individuals, it is possible to raise their human assets. Adapting residential dwellings to the needs of older individuals will help them to move more smoothly, reduce the risk of accidents at home, augment their independence, which will translate into their activity in various sectors.

The occurring demographic changes will pressure on the creation of housing stock and adaptation of existing housing to the needs of ageing society. In the recent years in Poland, in addition to a plethora of programmes addressed to young people and low- and middle-income groups, there are emerging initiatives aimed at securing the housing needs of older adults, such as dedicated housing or housing for seniors, although these programmes are still scarce in number. It is equally important to supplement the accommodation-related measures with initiatives aimed at adapting the housing environment to the needs of an ageing society. It was as early as in 1969 when Andrzejewski stated that the well-being of an individual is influenced by the conditions inherent in the housing environment, among which he named the physical features of a residential dwelling, its location and the nature of the surroundings (Andrzejewski, 1969; Rataj, 2018).

When analysing problems resulting from the ageing of societies, emphasis should be placed most importantly on the economic effects. Among them, one of the most frequently indicated negative effect is the growing burden for the state to pay out social benefits (Rataj & Iwański, 2020). Let us note, however, that there is a concept emphasising a potential offered by older society members, a possibility of using their human capital. According to the silver economy concept, ageing population may also have a positive impact on the economy. On the one hand, it is the result of the need to create products and services addressed to older people as a specific category of consumers; on the other hand, it is the consequence of a possibility to extend

their professional activity, providing for their independence for as long as possible, or improving their health condition and fitness, as well as the way seniors use their free time (Szukalski, 2021; Wassel, 2011).

Silver economy is one of the instruments supporting the implementation of housing policy in the context of older people. Its purpose is to produce goods that encourage a healthy, active and productive life by people aged 60+ (Krzyminiewska, 2020). Moreover, the application of the instruments offered by silver economy raises the older generation's chance for active ageing in their place of residence, an idea gaining on popularity in European countries. As noted by (Szewczenko, 2017), the quality of urban space and housing structures is one of the most important factors enhancing the functional abilities of seniors. It allows them to undertake varying social roles as well as to participate in community life.

In the article, emphasis is put on the requirement to adapt housing to the needs of older society members in the context of the possibilities to invest in their human capital. The aim of the article is to demonstrate how housing policy and silver economy enable investing in the human capital of the older part of society.

The article fits in socio-economic analyses. The author uses the results of sociological and economic research, both based on foreign sources and own research. The examined problems are presented with the use of desk research and descriptive analysis.

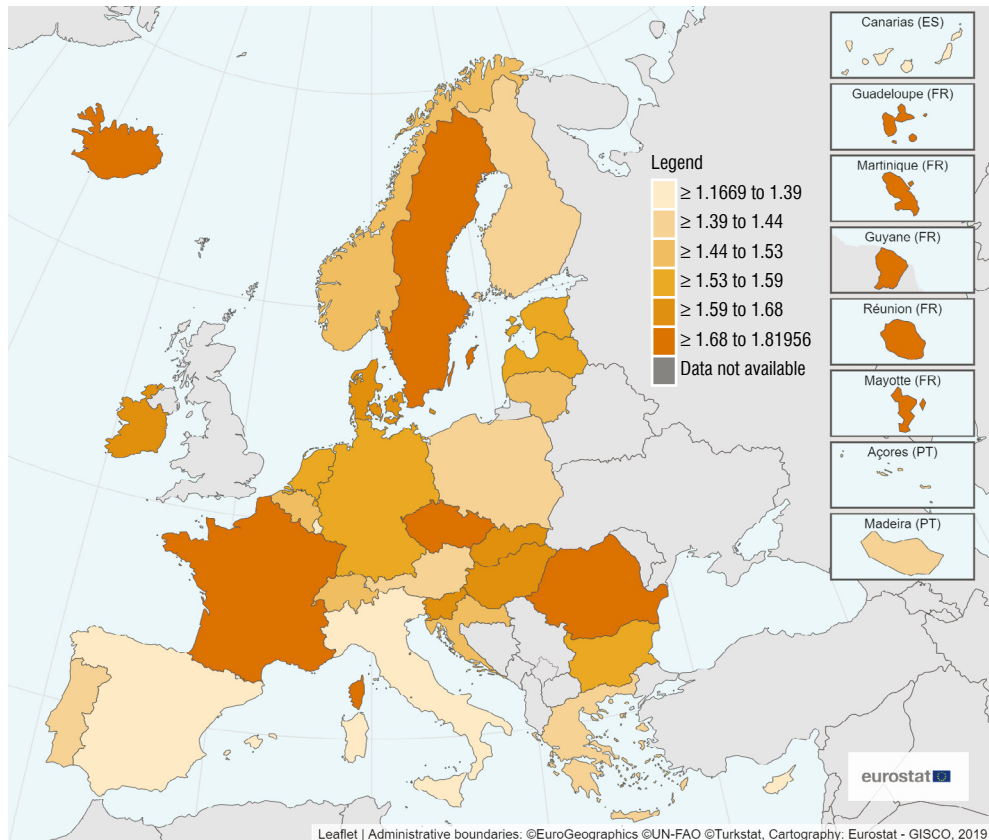
## Literature and Data Review

Human capital is a term used in sociological, economic as well as management sciences. From the sociological perspective, human capital may be defined, as in (Domański, 1993), as the resource of knowledge, skills, health and vital energy incorporated in society that may be increased by investing in people. The economic perspective of the human capital is represented, for example, by Smith (Popiel, 2015), who saw capital and human work as elements affecting the growth of social wealth, and in 1776 he found human skills as a source of the individual and national wealth. What is important, he considered the health of a human being, one's knowledge and, most importantly, the learnt skills as a personal property of an individual, to turn into the property of the society. In Smith's view, education and learning means investing in people.

When considering the potential and resources of older people, worthy of emphasis is the housing environment as an enabler of the development of seniors' human capital, which seems important in the context of demographic forecasts. In 2020,

in the EU member states, people aged above 65 accounted for nearly 22% of the population, while those aged 80 and more slightly above 6% of the population. By 2070, the share of those aged 65 and more will grow to almost over 30%, while 80+-year-olds to almost 13%. Demographic data show an increasing share of older people also in the population of Poland. In 2023, almost 15% of the inhabitants of this country was at least 65 years old. According to demographic forecasts, the share of older people in the population in 2070 will exceed 32%.

**Figure 1. Assumptions for fertility rates**



Source: Eurostat – Last updated date: Wednesday, 3 January, 2024 11:00 PM.

Population ageing is characteristic of both developed and developing countries. The total fertility rate (TFR) in Poland in 2023 amounted to merely 1.39, which placed the country near the end of the European Union ranking (24<sup>th</sup> place out of 30). A lower TFR was noted only in six countries: Finland, Luxembourg, Cyprus, Italy, Spain, Malta (Figure 1). In Poland, average life expectancy for women is approximately

81.7<sup>2</sup> years, and over 73.7 years for men. The demographic forecasts assume that this figure will grow to 89.5 years for women and 84 for men in 2070. Due to the persistent differences in the life expectancy of women and men, the process of feminization of old age will progress, particularly in the 85+ group (Iwański et al., 2019).

In the context of such demographic forecasts and challenges entailed by ageing societies, silver economy seems to be of great importance. It can be defined as *the economic opportunities arising from the public and consumer expenditure related to population ageing and the specific needs of the population over 50. The ageing population can be divided in 3 groups, each with their own need-patterns: active, fragile and dependent. Thus, the Silver Economy comprises a large part of the general consumer economy, but with considerable differences in spending priorities and patterns* (Erceg & Barkovic Bojanic, 2017). Furthermore, silver economy is combined with silver production, the aim of which is to produce goods encouraging a healthy, active and productive lifestyle among those aged 60+. The European Union places a lot of emphasis on considering silver economy as an instrument supporting professional activity and social integration of people aged 60 (Krzyminiewska, 2020).

Silver economy in the European Union is approached in various economy sectors, which is driven by the satisfaction of needs and engagement in activities by older people not only in terms of health but also social services, culture and leisure, education, transport, construction and technologies.

According to Krzyminiewska (2019) we can distinguish certain main areas of silver economy (Diagram 1). Housing is located in the two main areas, firstly in silver industries with goods and services dedicated to the elderly including facilities and smart homes, and also in gerontechnology which could be used in seniors' dwellings.

**Diagram 1. Areas of activities of silver economy**



Source: (Krzyminiewska, 2019).

<sup>2</sup> Based on Eurostat data on 22.08.2023.

Silver economy allows to treat older people not only as recipients, but also creators of services. By the creation of new jobs and working places seniors may undertake social and professional activity longer, and this leads to a changed social perception of older ones: from individuals who are a burden to ones that are independent, fit and resourceful. Thanks to new technologies (e.g., health monitoring, smart homes, driverless vehicles, and care robots) and the possibility of using them to lower the costs of ageing (Erceg & Barkovic Bojanic, 2017), seniors' quality of life is improved. By an option to create a friendly residential and urban space, housing fits in the concept of silver economy.

Managing housing environment by using the achievements of silver economy gives enormous development possibilities to current and future seniors. Silver economy is strictly connected to gerontechnologies, the effect of interest in the development of new technologies and combining them with gerontology (Klimczuk, 2011, 2013, 2016). The use of gerontechnology in a variety of areas of an older person's life may significantly affect the increase of the quality of health care, housing, life environment, employment, transport, information services or leisure (Boruta, 2017). The growing demand for care among ageing societies is impossible to be met by the growth of the number of carers only. The quality of life of the elderly may be significantly improved by new technologies, including smart homes as an element of suitable architectural solutions, and tech innovations facilitating an independent life (Stefanov et al., 2004), which entails the development and use of seniors' human capital.

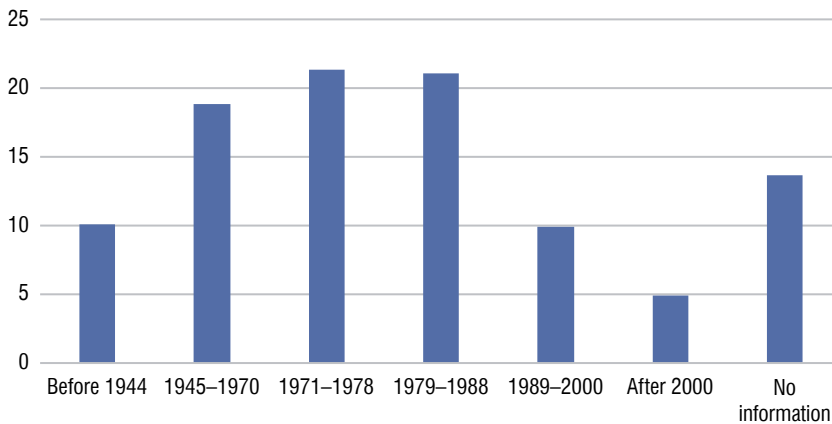
## Housing Conditions among Senior Population

Appropriate housing conditions play a vital role in meeting not only housing needs, but also broadly-defined living essentials (Rataj, 2018). With age, these needs evolve, and those that used to be considered peripheral, arising from partial limitation of physical fitness, now come to the forefront. Due to gradual decrease in professional activity, older individuals spend more time at home than younger people. Housing conditions very often determine seniors' ability to stay at home without the need to move to a community care unit. This applies especially to those who are partially or fully dependent. Adapting apartments occupied by seniors to the needs resulting from the gradual limitation of physical fitness affects not only the comfort of life but mostly the safety of older individuals (Zrałek, 2012), reduces the risk of accidents at home and allows for further professional and social activity.

Older people often live in dwellings constructed before the political transformation in Poland (Figure 2), which were built in line with different legal requirements

in terms of architectural barriers (Szweda-Lewandowska, 2021). Baby-boomers, i.e., individuals born in 1946/1947–1958/1960, live, among others, in blocks of flats constructed with the use of prefabricated panels system (Gronostajska, 2016) where they are frequently affected by the so-called *fourth-floor syndrome*, which means that seniors are “trapped” in flats located on higher floors in buildings with no lifts) (Rataj et al., 2018). As a consequence, the space in which older people actively live often gets shrunk to their own flat.

**Figure 2. Year of construction of the building currently occupied by the elderly in 2020 (in %)**



Source: (Szweda-Lewandowska, 2021).

According to the PolSenior research (Szweda-Lewandowska, 2021) every tenth person aged 60–64, every fifth aged 75–79 and every fourth aged 80–84 declared the existence of architectural barriers in their housing environment. In the age group 85–89, the share of people declaring the existence of architectural barriers amounted to nearly 38%, whereas in the oldest group (90 years old and more) almost 43%. The health condition and physical limitations affecting the difficulties with moving are the main factors impacting the perception of architectural solutions as barriers. Narrow staircases, high steps or doorsteps will not be seen as obstacles by fit and independent individuals, contrary to those who require support of specialist equipment (walking frames, crutches) or move on a wheelchair. The Statistics Poland (GUS) reports) (GUS, 2022) that the share of seniors’ households declaring that their flat is located in a building with architectural barriers hindering access to it increased in 2021 (from 29.1% in 2020 to 29.3%).

From the perspective of investing in human capital, it seems important to create such housing conditions and (broadly defined) housing environment that will



allow seniors to maintain their activity in various areas. The main role in this context should be played by housing policy, addressing the needs not only of the current seniors but also seniors-to-be.

## Findings

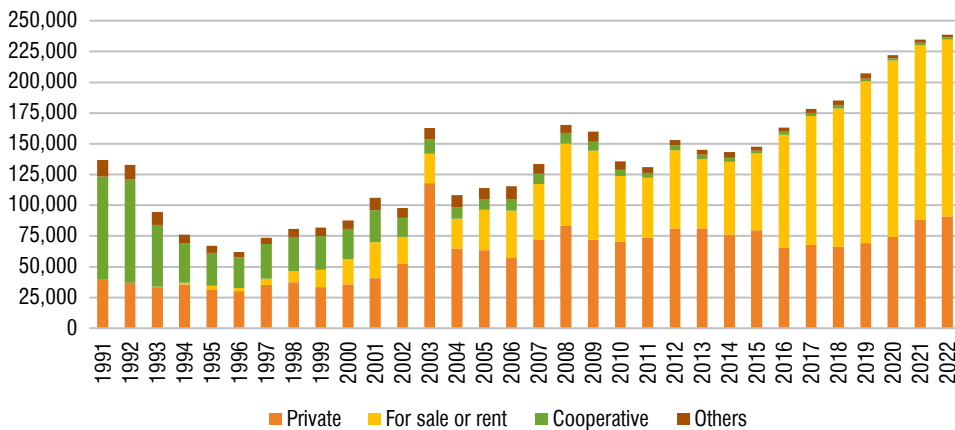
Investing in the human capital of older people, supported by housing policy instruments, gives broad options both from the point of view of the older generation and public entities. Creating opportunities for full participation in the economy and society allows seniors to widen their horizons, improve the qualifications and gain new knowledge (Kowalska, 2017). Providing appropriate housing environment enables safe and independent life, which is of importance from the economic perspective, as keeping older people at community care units (CCU) is expensive. For example, in 2023 an average monthly resident maintenance cost at a Warsaw public CCU was PLN 7,767.11, of which the resident him- or herself paid no more than 70% of their income (regardless of the income source). The spouse and relatives in the ascending line before the descendants are also obliged to pay the fees, and the rest, i.e., the difference between the average maintenance cost and the fees paid, is paid by the municipality from which the person was referred to the CCU. Despite having instruments allowing them to create a variety of organisational forms, such as community self-help homes, sheltered housing, family-type nursing homes, day-care units, municipalities used these options to a small extent only. The consequence is fast-growing expenditure on the maintenance of people referred to CCUs. An audit of the Polish Supreme Audit Office (NIK) shows that in 2011–2014, municipal costs in this area in Poland grew from PLN 680 million to more than PLN 1,035 million, which is an increase of 52% (NIK, 2017), while in 2023 it was as much as PLN 1,315 million. These costs are to a little extent covered by the fees paid by the residents and their family members. In 2014, the expenditures in the social assistance centres covered by the audit amounted to PLN 16,300 per person living in a nursing home, while in 2023 it was PLN 24,800. Due to an abundance of care-, living- and rehabilitation-related tasks, community care units very often disregard the aspect of development of the human capital inherent in seniors, and the capabilities of older people even to a larger extent. Introduction of changes to housing policy, taking account of the current and future needs of seniors, will allow to invest in their human capital as well as to curb the expenditure on the care services provided by CCUs. Such policy makes it possible to reduce the demand for long-term care provided in nursing and treatment facilities, limits the costs of long-term care, and helps to achieve

a higher care index (as compared to residential facilities) among dependent people) (Rataj & Iwański, 2020). These costs could be partially transferred to the housing policy sector, in order to adapt the broadly-defined housing environment to the needs of older people. As a result, there would emerge a possibility to use housing stock not only of the current but also future seniors, which cannot be said about the expenses incurred every year on CCUs.

## Discussion

In the author's opinion, the main challenges posed by the ageing of Polish society in the context of housing should be discussed in two aspects. Firstly, by taking into account the perspective of ageing society already at the design stage of new buildings, i.e., by presenting measures that will benefit purchasers/users who are to become future seniors. Secondly, by creating housing stock dedicated to the current seniors. Moreover, in both cases, it is important to create a friendly living environment (broadly defined) within the flat, building and the neighbourhood.

**Figure 3. Dwellings completed in Poland between 1991–2022**



Source: GUS data 1991–2023; Lis (2021) (Lis, 2021).

Polish housing policy is dominated by a trend supporting the purchase of a flat with the aim of owning it. Regardless of whether it is the Family on Their Own programme (Rodzina na Swoim), the Home for the Young (Mieszkanie dla Młodych), or the Safe 2% Loan (Bezpieczna Kredyt) currently in implementation, creating conditions to meet housing needs has focused and continues to focus mainly on young

and middle-aged individuals. As a result of uninterrupted interest in purchasing flats, the construction of new units also continues (Figure 3), although Poland has been noting a surplus of apartments over the number of households since 2012.

Completed dwellings are adapted to the changing conditions of housing culture by improving the quality of building materials (shifting away from large prefabricated panels), equipping them with service lines, or lifts in buildings. However, in the majority of cases, they do not include solutions (except for the lifts) that could be of use for older residents in the future. This approach of both investors and housing programme planners does not take account of the fact that the society is ageing. The author of this article is of the opinion that the approach of investors and social awareness of buyers should be changed so that construction output not only addresses the very important current housing needs, but also secures them for the time of the old age. Offering apartments with appropriate infrastructure nearby the building, such as ramps or benches, in the building itself, like lifts allowing to move bedridden people, and in the dwelling, such as lack of doorsteps, wide doors, bathrooms enabling wheelchairs, would allow the current buyers not only to stay in their home as long as possible but also to continue their economic and social activities.

In Poland, buying a flat often involves a long-term mortgage, which means that the current 30- and 40-year-olds will repay their loans, assuming a 30-year loan, when they are 60 and 70 years old, i.e., when it may turn out that the bought flat does not allow to live independently due to architectural barriers. A future-oriented approach to construction activity will make it possible to avoid high costs of adapting dwellings to the needs of older people, while at the same time using the potential of older people. Introduction of appropriate measures at the stage of construction would enable not only the current buyers to use their flats as long as possible but also invest in the human capital of the future seniors by letting them stay active as long as possible.

The potential of silver economy and gerontechnology becomes increasingly apparent in the scientific and public debate. Many of housing solutions are an aftermath of the development of gerontechnology. By building homes with the use of new technologies allowing for ageing in place, we provide for the comfort, safety and functionality to let seniors undertake various activities.

The responsibility for implementing the above assumptions into practice should lie in both public and private entities, supported by state programmes. Thus, an essential element is to create solutions at both the central and local level, and equipping the particular entities with instruments allowing for their implementation.

At the central level, entities responsible for forming housing policy and creating its programmes could consider supplementing its main goals by the creation of

a friendly housing environment for the ageing society. As part of this goal, they could encourage investors of the residential construction market to take into account in their designs the changing housing needs resulting from gradual limitations of usefulness.

At the local level, the main responsibility for the implementation of housing policy tasks rests with municipalities, which have the obligation to create public housing resources for households that are in a difficult financial situation. Assuming that municipalities would adapt part of the public housing stock to the needs of older people and create private-public partnerships to undertake new investments, there is a possibility to reduce the municipal expenditure related to the maintenance of seniors at community care units, and use the human capital of older people.

However, the national housing policymakers realise that we are currently experiencing significant changes in the structure of housing needs resulting from the progressive ageing of Polish population. It is important to remember that without systemic changes and nationwide solutions, local governments will be very limited in their activities directed at senior housing policy.

The author believes that those responsible for implementing housing policy in Poland should introduce new solutions. One of the most important factors in creating a housing policy that takes into account the needs of seniors is increasing the pressure to promote ageing in place. It is important to invest in the adaptation of the current dwellings of elders to allow them to live independently as long as possible or, at a later stage when the degree of dependency grows, to enable secure and appropriate care provided by the family or care professionals (from the private market, the social care sector, or the healthcare sector (Rataj & Iwański, 2020).

In Western countries the idea of ageing in place was implemented to housing policy since decades. For example, in Sweden living at home is based on the assumption that seniors have the right to live independently in decent conditions as long as possible. If the property occupied by an older person is not adapted to their special needs, he or she may obtain funds from the local government to adapt it properly (Edström & Gustafsson, 2011).

In the Netherlands, great attention is focused on intergenerational dialogue. The Dutch believe that the more conversation they have about how the elders see their future, the more care and support can be tailored to them. That is why establishing what someone wants or needs as they grow older and how to achieve these wishes is a vital component of aging with dignity. In addition, the aging in place program focuses on what older adults can do themselves) (de Jonge, 2019).

Ageing in Place has been a key tenet of UK policy on older people and housing. To support the ageing in place system in the UK telecare services is developing, using information and communication technologies (ICTs) to help people live more inde-

pendently in their own homes (Sixsmith & Sixsmith, 2008). Local councils provide telecare services with different instruments, for example: alarm button, environmental sensors for smoke, flood, temperature, gas and sensors for passively monitoring the person's movements (door opening, pressure sensors for bed or chair occupancy, or enuresis). In Poland, The Regional Centre for Social Policy is implementing a pilot programme on telecare. However, these measures are still insufficient to support seniors in developing their potential and using their human capital.

## Conclusion

The demographic forecasts for Poland clearly indicate that the number of people aged 65+ will steadily grow. In this context, it should be considered how to use the potential offered by older people and how to invest in their human capital by adapting homes to the needs changing with age. As shown in the PolSenior research (Szweda-Lewandowska, 2021), architectural barriers at older people's place of residence are a common issue. Therefore, it seems necessary to change the housing policy trends so as to allow people aged 60+/65+ for further activity. Seniors themselves, due to limited financial capabilities, are not able to adapt their flats to changing circumstances, so solutions need to be designed that use the achievements of silver economy and gerontechnology. In addition to adapting the existing housing stock, it is also necessary to design flats with the use of modern equipment, including digital one, that will provide for the safety of seniors at their homes. The author is aware that the production costs of flats using the solutions of gerontechnology are very high, but a future-oriented look at this type of investment as well as the capital existing in older people will allow to limit the upcoming need to adapt flats and the costs involved in long-term care, and moreover to use the knowledge, experience and resources offered by older people to increase economic growth.

The author of this article is well aware that the proposed changes require a long legislative process, a change of the narrative in public discourse as well as in the societal attitudes towards housing needs, which may present an enormous barrier. Demographic forecasts, however, unquestionably show that Polish society will be an ageing one, and the potential offered by the older generation must be used and invested in by offering a safe housing environment.

## Author Contributions

The author confirms being the sole contributor of this work and has approved it for publication.

## Conflict of Interest

The author declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## Ethics Statement

The author certifies that the research published in the text was carried out in accordance with the research ethics of the affiliated university.

## Research Data Availability Statement

The original data presented in the study are found in the article. Further inquiries may be made to the author.

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