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## AGEING AND QUALITY OF LIFE – NEW RESPONSES FROM THE REAL ESTATE SECTOR IN PORTUGAL (1)

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**ABSTRACT.** In the second half of the 20<sup>th</sup> century, the history of European demography is associated with a pronounced and widespread process of ageing. The 21<sup>st</sup> century will have to cater to the needs of an elderly population in transformation. Portugal is also part of this process and in efforts to improve the quality of life of the elderly, a wide range of facilities, services and social responses have been established by a variety of promoters, targeting several social levels. This paper will analyze a specific segment directed at an exclusive niche of the elderly population, the Senior Residential Condominiums. This is a very recent segment of the housing market, with high levels of comfort, quality, sanitation, health, and recreation, essential to full well-being. The paper intends to characterize this real estate market niche so as to identify its distinctive features, the promoting agents and how they can contribute to residents' quality of life.

**KEY WORDS:** Portugal, ageing, quality of life, senior residential condominiums.

### INTRODUCTION

Ageing is a characteristic of modern societies. Nonetheless, this process does not unfold the same way in all countries throughout the world, reaching higher rates in the developed countries. The United Nations predict that the number of individuals over 60 years old will reach 2 billion in 2050, representing approximately 22% of the world population (United Nations, 2009). According to this outlook, the number of individuals with more than 60 years of age will exceed for the first time that of individuals aged 15 years and less in 2045.

Marked differences exist between developed and developing regions in the number and proportion of older persons. In the more developed regions, over a fifth of the population is currently aged 60 years and over and by 2050, nearly a third of the population in developed countries is projected to be in that age group. In the less developed regions, older persons account today for just 8% of the population but by 2050 they are expected to account for a fifth of the population, implying that, by mid-century, the developing world is likely to reach the same stage in the process of population ageing that the developed world is already at (United Nations, 2009).

Population ageing results mainly from reductions of fertility that have become virtually universal. The resulting slowdown in the growth of the number of children coupled with the steady increase in the number of older persons has a direct bearing on both the intergenerational and intragenerational equity and solidarity that are the foundations of society (United Nations, 2009).

The process underlying global population ageing is known as the ‘demographic transition’, a process whereby reductions in mortality are followed by reductions in fertility. Decreasing fertility along with increasing life expectancy has reshaped the age structure of the population in most regions of the planet by shifting the relative weight of the population from younger to older groups. The role of international migration in changing age distributions has been far less important than that of fertility and mortality (Lesthaeghe, 2004).

Particularly at the earlier stages of the demographic transition, reductions in fertility are the primary determinants of the timing and extent of population ageing. However, as later stages of the transition are reached, reductions in mortality, particularly at older ages, contribute more to increasing number of older persons, thus accelerating population ageing.

Decreasing fertility has been the primary cause of population ageing because, as fertility moves steadily to lower levels, people of reproductive age have fewer children relative to those of older generations, with the result that sustained fertility reductions eventually lead to a reduction of the proportion of children and young persons in a population and a corresponding increase of the proportions in older groups (Szymańska et al., 2009).

The reduction of fertility has been dramatic since 1950. At the world level, total fertility has dropped almost by half, from 4.9 children per woman in 1950–1955 to 2.6 in 2005–2010, and it is expected to keep on declining to reach 2.0 children per women in 2045–2050 (United Nations, 2009).

As a result of the sustained decline in fertility that occurred in developed countries during the 20<sup>th</sup> century, total fertility in the more developed regions has dropped from an already low level of 2.8 children per woman in 1950–1955 to an

extremely low level of 1.6 children per woman in 2005–2010. This level is well below that needed to ensure the replacement of generations. In fact, practically all developed countries are currently experiencing below-replacement fertility (United Nations, 2009).

Major fertility reductions in the less developed regions occurred, during the last three decades of the 20<sup>th</sup> century. From 1950–1955 to 2005–2010, total fertility in the developing world dropped by over half from 6.0 to 2.7 children per woman (United Nations, 2009).

As fertility levels drop, mortality has also continued to decline, especially at older ages. When fertility reaches low levels and remains low, reductions in mortality at older ages gain importance as a cause of population ageing. In developed countries, in particular, where low fertility has prevailed for over three decades, increases in the proportion of the older population are now primarily caused by increasing survival to advanced ages (Grundy, 1996).

Population ageing is profound, having major consequences and implications for all facets of human life. In the economic area, population ageing will have an impact on economic growth, savings, investment, consumption, labour markets, pensions, taxation, and intergenerational transfers. In the social sphere, population ageing influences family composition and living arrangements, housing demand, migration trends, epidemiology, and the need for health care services.

As of the second half of the 20<sup>th</sup> century, the history of European demography is associated with a pronounced and widespread process of ageing throughout the continent, as a result of the shift towards a demographic pattern marked by low fertility and mortality rates and the ensuing increase in the average life expectancy, associated with scientific and technological progress in the medical sciences.

Population ageing presents the following relevant features: growing feminization due to increased female life expectancy, progressive solitude and isolation, and a significant growth of elderly groups. According to the United Nations, the number of elderly persons aged 80 and over is rapidly increasing worldwide (approximately 4% per year) and 1 in every 5 elderly individuals will be 80 years old and over by 2050.

As in other countries worldwide and particularly in Europe, progressive ageing has also taken place in the Portuguese population. Over the last few decades, elderly population rates increased from 8% in 1960 to 16.5% in 2001, reaching 17.4% in 2008. The population ageing trend in Portugal is expected to continue to grow over the next years. Estimates indicate that one third of the national population will be aged 65 and over in 2060 (National Statistics Institute, 2009).

In recent years, there has been a pronounced growth in the supply of services and care provided to the elderly by formal institutions and informal caregivers.

This situation is entailed by both demographic ageing and especially lesser involvement of family members in providing care to their elderly relatives, suggesting higher income to support third-party service expenses.

Within the European context, Portugal is among the countries in which family values are as still of great importance, which explains the existing lower penetration rates of elderly services and care despite the significant increase over the last few years. The public sector and non-for-profit organizations supported by the Government account for approximately 80% of the supply, mainly targeted at more underprivileged populations. The private sector caters for the higher-income segment.

This paper will analyze a specific segment directed at an exclusive niche of the elderly population, the Senior Residential Condominiums. This is a very recent segment in the housing market, with high levels of comfort, quality, sanitation, health, and recreation, essential to ensuring full well-being.

The paper aims to characterize this real estate market niche so as to identify its distinctive features, the promoting agents and how they can contribute to the residents' quality of life. This research is still in progress and also intends, in a second phase, to conduct a survey on a sample of residents, mainly in facilities located within the Porto Metropolitan Area. The purpose consists in gaining insight into the motivations behind the choice for this market segment, and to characterize the residents' profile as well as their satisfaction in relation to the facilities and services provided.

### SENIOR RESIDENTIAL CONDOMINIUMS

The concept of senior condominium was very recently introduced in Portugal with a view to explore a differentiated housing market segment, which is structured in terms of consumer segmentation and individualization in the post-Fordist context.

This market segment only emerged at the beginning of the 21<sup>st</sup> century, at the end of the rising real estate cycle begun in the second half of the 1980s, when the widespread trust in real estate investment profits was already being called into question because of the repetitiveness of supply and its general lack of quality. It was the end of a rising cycle in which the most alarming news on the international real estate crisis only surfaced later on. The end of a period in which the growing professionalization of the real estate sector also concurred with the perception of a social change centred on family changes, among which the most notable are reduced family size, ageing of family nuclei, increased rate of individuals living alone, changes in lifestyles, and higher demand in terms of quality housing.

Senior condominiums respond to population ageing with a view to meet the demand of autonomous, high-income individuals in retirement, seeking to retain a certain independence and quality of life. These condominiums are of a residential nature, consisting of apartments or detached houses (more common in the United States, for instance), and their image is of singularity, in addition to a range of support services offered – leisure, personal and health.

'Continuing Care Retirement Communities' is the inspiring concept of this market niche. The concept emerged in the post-war United States but greatly expanded during the 1980s and has been developed in several countries ever since. 'Continuing Care Retirement Communities, or *life care* communities, are residential campuses consisting of independent apartments and cottages and a variety of social and health services in one setting. Usually a nursing home is one or near the campus' (Rivlin, Wiener, 1988: 83).

According to Portuguese Social Security nomenclature (2006: B1.6), the closest concept found to include residential condominiums for senior citizens is residence – 'social response, developed in facilities, consisting of a number of apartments with common use areas and/or services for elderly persons or others with total or partial autonomy'.

Assisted-living residences are also included in this concept. As described further ahead, senior condominium operators have also been promoting assisted-living residences, given their almost identical philosophy. It is worth noting that assisted-living residences have been promoted by non-profit institutions for social solidarity and public institutions (central and local government), and are directed to the target audience with less autonomy and lower income.

Assisted-living residences can be defined as 'Any residential group program that is not licensed as a nursing home, that provides personal care to persons with need for assistance in daily living, and that can respond to unscheduled needs for assistance. The key philosophical principles or tenets that distinguish assisted living are: services and oversight available 24-hours a day; services to meet scheduled and unscheduled needs; care and services provided or arranged so as to promote independence; an emphasis on consumer dignity, autonomy and choice; an emphasis on privacy and a homelike environment' (Hawes, Phillips, 2000: 2).

With these features in mind, senior residential condominiums appear to be structures that marketing has designed as a real estate concept like 'exclusive condominium' targeting well-defined social strata. A modern and prestigious urban structure that adds value to the imaginary, symbolic, social, and individual residential utopias, with a strong image of singularity which is expressed by the architectural concept itself as well as the advertising slogans used to promote the facilities.

## THE SUPPLY – EXISTING AND PLANNED FACILITIES IN PORTUGAL

In Portugal, Senior Condominiums supply is mainly clustered in the two metropolitan areas (Lisbon and Porto) and promoted by four financial and economic groups. In 2010, the first of such enterprises to be undertaken by a religious institution closely linked to health care (*Ordem Terceira de S. Francisco do Porto*) was opened – *Residência Rainha Santa Isabel* in Porto city.

The first Senior Condominiums were built in Lisbon – the *Junqueira* (2004) and *Expo* (2005) promoted by the José de Mello Group.

In addition to this economic group, stand out, yet the groups, *Espírito Santo Saúde*, *Carlton Life* and *Montepio Residências e Serviços*.

The groups initially started their activity by providing medical care services, later taking advantage of the existing clinical and business structures to expand their supply of services and thus meet the demand for residential care (CEDRU, 2008: 157).

In the case of Montepio, the process began by building residences. Since the group never owned a health care unit, medical assistance agreements were later established for the provision of medical and nursing services in residences. The group currently owns five operational residences, as follows: *Residência Montepio Breiner* in Porto city, *Residências Montepio Gaia* in Vila Nova de Gaia (Porto Metropolitan Area), *Residências Montepio Coimbra* in Coimbra city, *Residências Montepio Parede* in Cascais (Lisbon Metropolitan Area) and *Residências Montepio* in Montijo (Lisbon Metropolitan Area). The latter three recently opened in 2009. Aside from these, the facilities in Braga city and Lisbon – *Expo* are expected to open doors in 2011 and 2012.

The *Residência Montepio Breiner*, operational since 2008, resulted from the rehabilitation of part of a building complex located in a block enclosed by the streets of *Torrinha*, *Cedofeita*, *Rosário* and *Breiner*, where there used to be a manufacturing plant. Part of the old factory facade and chimney were preserved. The facilities include car parking, a heated indoor swimming pool, a gymnasium, a garden, en-suite rooms (double or single), and studio apartments, with a capacity for 119 residents. It was built in compliance with modern principles of sustainable architecture: thermal insulation, natural light to all rooms to reduce heating and air conditioning costs, solar panels for domestic hot water supply, and swimming pool pre-heating. Additionally, a range of common areas and support services are provided – living rooms, dining rooms, laundry, personal hygiene, hairdresser, aquatic therapy, socio-cultural animation, cinema, music, library, religious service, nursing care, medical assistance, and follow-up by therapists for a variety of conditions.

The *Residências Montepio* in Gaia, Coimbra, Parede and Montijo were built from scratch, based on the same principles of sustainable building design, and offer the same type of support services. The difference is that there are only single and double en-suite rooms, a concept which is closer to that of an assisted-living residence, but with the quality of a five-star hotel, making it distinct from the concept of senior condominium. The residences accommodate 119 residents in Gaia, 105 in Coimbra, 102 in Parede and 120 in Montijo, the latter with a separate unit for 35 Alzheimer's patients.

The residence of the *Carlton Life Group* is located next to *Rotunda da Boavista* in Porto and is part of the *Hospital Privado da Boavista* complex, a private hospital also owned by the group. It is not strictly speaking a senior condominium but rather an assisted-living residential unit with rooms for permanent or temporary stays and a range of support services: geriatric assessment unit, functional rehabilitation unit, cleaning services, laundry, living rooms, activities, meals, and also a day unit for older persons who are still able to spend nights in their own homes.

The *José de Mello Group* was pioneering in the supply of senior condominiums. The group's *Junqueira* condominium with 19 apartments and the *Expo* one with 49 are housing facilities consisting of one and two bedroom apartments, including a private kitchen and house cleaning services, laundry, nursing care, a chapel, and library. There are assisted-living residences nearby offering a range of therapy, nursing and medical services. They also offer permanent and temporary accommodation, in addition to leisure and cultural activities, plus two health care units: *Clínica Cuf Sta. Maria de Belém* and *Hospital Cuf Descobertas*, owned by the group.

For each apartment, there are two parking spaces and basement storage. All apartments are unfurnished so that residents may decorate as they please. The resident pays a permanent use right according to age. Should any changes occur, for instance, a resident decides to leave, becomes ill or moves to an assisted-living residence, the initial amount will be reimbursed according to period of time used. This reimbursement can also be returned to the heirs if the expected life span is not reached.

These condominiums allow family members and friends to visit or spend a given period of time with no schedule limitations. Residents are also allowed to organize parties as a way to maintain their family and social relationships, just as if they were living in their previous homes.

In addition to these two condominiums, the *José de Mello Group* owns another assisted-living residence in Parede, Cascais, with a seafront view and a swimming pool, which has been very popular for temporary stays, especially in the summer (Fig. 1).





Fig. 1. Assisted-living residence in Parede, Cascais (Lisbon Metropolitan Area)

Source: [www.josedemellosaude.pt/vPT/JMRS/Paginas/Homepage.aspx](http://www.josedemellosaude.pt/vPT/JMRS/Paginas/Homepage.aspx)

The growing demand for temporally stays led the group to develop a new strategy. They established an agreement with Star, a travel agency owned by the *Sonae Group*, targeted at foreign high-income elderly retirees to spend certain periods of time in Portugal. Here they will find all the comfort of a five-star hotel in assisted-living residences, in addition to nursing care, a range of therapy treatments and medical services, as well as leisure and cultural activities in facilities with no physical obstacles.

The *Espírito Santo Saúde Group* owns *Casas da Cidade* in Lisbon and *Clube de Repouso Casa dos Leões* in Carnaxide, Oeiras (in Lisbon Metropolitan Area).

*Casas da Cidade* is located near a hospital which is also owned by the group – *Hospital da Luz*. It has 115 apartments, consisting of 30 studio apartments, 63 one-bedroom apartments and 22 two-bedroom apartments. Studio apartments range from 39 to 82 m<sup>2</sup>, one-bedroom apartments from 64 to 95 m<sup>2</sup>, and two-bedroom apartments from 88 to 132 m<sup>2</sup>. All apartments include a fully equipped kitchenette, bathrooms with no architectural obstacles, a central heating and cooling system, cable TV, and internet. There are also several common areas for leisure, catering, a hairdresser, cleaning and daily housekeeping, laundry, meals, health care, and personal support services.

The *Repouso Casa dos Leões* club opened in 2003 and consists of 57 housing units, of which 27 are one-bedroom apartments with a private area of 51 m<sup>2</sup> and 30 are studio apartments with areas ranging from 18 to 30 m<sup>2</sup>.

This residence is a complex of 4 buildings: two are only housing units; one includes dining and living rooms, a bar/cafeteria, a solarium, a gymnasium, and

offices for the provision of health care support services (medical, nursing and physical therapy); and the other includes housing, a game room and hairdresser, a living room, dining rooms, offices for the provision of health care support services, a kitchen, a laundry room, administrative services and also daily housekeeping, laundry, and a meal-ordering service (Fig. 2).



Fig. 2. Clube de Repouso Casa dos Leões, Oeiras (Lisbon Metropolitan Area)

Source: Google Maps

The *Residência Rainha Santa Isabel da Ordem Terceira de S. Francisco do Porto* consists of single and double apartments and en-suite rooms, with the option of being decorating and furnished by residents and also including a range of support services (meals, laundry, personal hygiene care, leisure activities, hairdresser, gymnasium, and private parking), medical and nursing assistance and a chapel.

Based on the marketing analysis of some of the studied facilities, it can easily be understood that the aim is to sell an exclusive product with all the comfort, quality and safety, in which value is added to social relationships as well as an active, affective and balanced ageing process in a space with specialized and technically high-quality services.

In relation to the price rates applied in the different condominiums, they range considerably depending on modality of use, whether or not an admission fee was paid, and number of rooms, as shown in Table 1.

Table 1. Rates at some condominiums

Apartment Types	PUR ≥ 65 years		PUR ≥ 65 years		TUR
	Admission €	Monthly Rate € (a)	Admission €	Monthly Rate €	Monthly Rate € (b)
<i>Casas da Cidade</i>					
Studio					
39–82 m <sup>2</sup>	78,000 to 128,000	–	53,000 to 87,600	–	–
1 <sup>st</sup> resident	–	1,570	–	–	2,320
2 <sup>nd</sup> resident	–	942	–	942	942
1 bedroom apartment 64–95m <sup>2</sup>	115,400 to 144,300	–	78,500 to 98,100	–	–
1 <sup>st</sup> resident	–	1,760	–	1,760	2,730
2 <sup>nd</sup> resident	–	1,056	–	1,056	942
2 bedrooms apartment 88–132 m <sup>2</sup>	161,000 to 232,000	–	96,600 to 139,200	–	–
1 <sup>st</sup> resident	–	1,880	–	1,880	3,200
2 <sup>nd</sup> resident	–	1,128	–	1,128	1,128
<i>Clube de Repouso dos Leões</i>					
1 bedroom apartment	99,000	–	68,000	–	–
1 <sup>st</sup> resident	–	1,785	–	1,785	2,750
2 <sup>nd</sup> resident	–	893	–	893	893
Special studio	66,000	–	45,000	–	–
1 <sup>st</sup> resident	–	1,580	–	1,580	2,270
2 <sup>nd</sup> resident	–	790	–	790	790
Standard studio	44,000	–	31,000	–	–
1 <sup>st</sup> resident	–	1,440	–	1,440	1,940
2 <sup>nd</sup> resident	–	720	–	720	720
Plain studio 1 person	33,000	–	23,000	–	–
	–	1,440	–	1,440	1,940
<i>Residências Montepio</i>					
Studio	–	From 1,650	–	From 1,650	–
Double room	–	From 1,805	–	From 1,805	–
Single room	–	From 2,280	–	From 2,280	–
<i>José Mello Group</i>	40,000 to 60,000		40,000 to 60,000		–
		From 950		From 950	–

Explanation: (a) Meals and basic services included, medical services not included; (b) 1 month stays, less than a month also possible; PUR – Permanent Use Right; TUR – Temporary Use Right

Source: Information provided by Companies

Considering the applied rates, it is very clear that this market segment is targeted at high-income retirees, a relatively small group of the Portuguese elderly population, as demonstrated by a national survey conducted by CEDRU on a sample of 1,324 individuals aged 55 years and over, of which 16% had a monthly income above 751€ (CEDRU, 2008: 41). Precisely due to the poor financial resources of the Portuguese elderly population, in the first few years, the demand and occupancy rates of senior condominiums were well below what promoters had expected.

In terms of scenarios of evolution as to the supply, the promoters do not consider the possibility of expanding their current capacity, except the *Montepio Group* which is the only one to present a certain dynamic. Another feature with some potential seems to be the intent to attract foreign high-income clients.

Another obstacle concerns demand, elderly people who are still nimble and autonomous would rather stay in their own homes, with which they have already established strong ties of ownership and where they keep memories, are acquainted with their neighbours, welcome family and friends, and often take care of their grandchildren.

Moving to a new space where neighbours as strangers and memories are only kept in the belongings they bring with them, even considering the range of services offered in senior condominiums as well as a close relationship with family and friends, the change is never easy. Another obstacle has to do with ‘purchasing a permanent housing right’ since it is not hereditary and thus reduces the inheritance they would transfer to family members.

## CONCLUSION

To conclude, the senior housing market segment is targeted at the high-income social class, taking into account the high price rates applied by the promoters of such facilities.

Senior residential condominiums are a very recent supply, physically clustered in the two metropolitan areas (in addition to other existing and planned facilities in a few medium-sized cities). Promoted by major groups and due to the high levels of financial support required, such condominiums are managed by financial institutions or health care providers with consolidated experience in the field, a situation which led promoters to broaden their services to include assisted-living care.

The supply is characterized by high-quality facilities where safety, exclusiveness, comfort, active, and healthy ageing are emphasized, within the conception of a five-star hotel.

Emphasis on safety is presented as a multi-dimensional concept that includes: health, through permanent nursing and medical services provided: urban, given the structure of a closed condominium that limits access to strangers; physical, associated to the needs of this age group for a detailed design of housing and support areas; affective, through personalized house decoration, the freedom to bring personal and affective objects to the new home, keeping in touch with family members and friends with no scheduled hour limitations, providing a sense of continuity in relation to the former home, essentially emotional and biographical.

The issue of housing ‘hotelization’ is fulfilled through the range of services provided (housekeeping, meals, laundry, reception, and call centre) which is complemented with additional facilities (swimming pool, chapel, gymnasium, workshops, cinema, library, and hairdresser) and several leisure-time activities.

In condominiums for senior citizens, services are based and provided within the premises and are for shared use by residents. In other words, a concentration in the residential area of life in its various forms, that is, the home-service model in which domestic activities gain a logic of consumption (model defined by Platzer, 1992).

As regards the evolution of supply, operators do not seem interested in expanding their business given the experienced difficulty in attracting clients. The situation will most likely probably get worse considering the current economic crisis. However, some promoters have sought to attract a new demand segment with some potential: foreign seniors, especially from Northern Europe.

## NOTES

- (1) A poster of this article was presented in the ‘European Conference on Complex Systems 2010’ (ECCS’10), in 14 to 17 September 2010, at Lisbon University Institute (ISCTE).

## REFERENCES

- CEDRU (Centro de Estudos e Desenvolvimento Regional e Urbano) in cooperation with a Boston Consulting Group, 2008: Estudo de avaliação das necessidades dos Seniores em Portugal, Lisboa.
- Grundy, E.** 1996: Population Ageing in Europe In: Coleman, D. editor, *Europe’s Population in the 1990’s*, New York: Oxford University Press, Chapter 8.

- Hawes, C. and Philips, C.D.** 2000: A National study of assisted living for the frail elderly-Final Summary Report, U.S. Department of Health and Human Services Assistant Secretary for Planning and Evaluation.
- Instituto Nacional de Estatística (National Statistics Institute), 2009: Projeções da população residente em Portugal 2008–2060, Lisboa: INE.
- Lesthaeghe, R.** 2004: Europe’s demographic issues: fertility, household formation and replacement migration. In: *Population Bulletin of the United Nations*, Special Issue, No. 44/45.
- Platzer, M.** 1992: Pour un habitat accueillant aux services In: Driant, J.-C. editor, *Habitat et Villes: l’avenir en jeu*, Paris: L’Harmattan, pp. 115–162.
- Rivlin, A.M. and Wiener, J.M.** 1988: Caring for the Disabled Elderly: Who Will Pay? Washington DC: The Brookings Institution.
- Segurança Social, 2006: Respostas Sociais – nomenclatura/conceitos, Lisboa: Direcção-Geral da Segurança Social, da Família e da Criança.
- Szymańska, D., Biegańska, J. and Gil, A.** 2009: Rural areas in Poland in the context of changes in population age structure in 1996, 2001 and 2006. In: Szymańska, D. and Domin, D.J. editors, *Bulletin of Geography. Socio-economic Series*, No. 12, Toruń: Nicolaus Copernicus University Press, pp. 91–108. DOI: <http://dx.doi.org/10.2478/v10089-009-0006-1>
- United Nations, 2009: World Population Ageing 2009, New York: Department of Economic and Social Affairs, Population Division.  
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