

Home Ownership in Portugal from an Intergenerational Perspective

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ABSTRACT

This study examines the expansion of home ownership in Portugal, between different generations, after 1970. It analyses this evolution based on census data, micro data from the Survey on Income and Living Conditions (ICOR) from 2011 and 2017, and scientific evidence. It provides information for an analysis of this evolution in the different age groups, offers some regional analyses and discusses the emergence of risk. These new social risks are associated to the overburden of housing-related costs, overcrowding of the housing unit and the material deprivation of housing, as well as the evolution of the factors that condition access to housing. These risks affect various age groups, are linked to tenants paying rent at market prices or low rents, and homeowners with or without purchase charges. Various social and economic factors have increased the social risks not only of the lowest income families, but also of middle-class families hitherto shielded from these situations. The conclusions presented suggest that access to housing is an important issue for intergenerational justice and social policy intervention.

INTRODUCTION



The growth in home ownership was one of the major changes in Portuguese society in recent decades, impacting society, the economy, and families

Over the period analysed in this report, census data (1970-2011) shows that there have been important political, economic, and social changes in Portugal and substantial development, which have, in turn, resulted in a marked improvement in the population's socioeconomic conditions. The evolution of the standard human development indicators - health, education, and standard of living - are evidence of this improvement.¹ Average life expectancy at birth increased by 13 years, reaching 80 years of age in 2011. The actual schooling rate at the different levels of education rose significantly. In 1970, this rate stood at 84%, 22%, 14% and 4% for primary, lower and higher secondary education, and high school education, respectively, vis-à-vis 100%, 95%, 92% and 73% in 2011. The percentage of the resident population with higher education went up from 1% to 15%. In the same period, GDP per capita at constant prices increased 2.7 times.

The growth in home ownership was one of the major changes in Portuguese society in recent decades, impacting society, the economy, and families (Xerez & Fonseca 2016; Xerez, Rodrigues, & Cardoso 2018; Xerez, Rodrigues, Lima & Cardoso, forthcoming). Public intervention in housing has changed in recent years, while public expenditure has declined. The social housing stock is limited (2%) and is one of the lowest in Europe. Changes in the housing system, notably over the last 50 years, have led to housing being valued not for its use but as an investment and financial asset.

In Portugal, as in other Southern Europe countries (Spain, Italy and Greece), most families own their home. However, this has not always been the case in Portugal. According to the 1970 Census, the same proportion of households rented their home as were homeowners. In 2011, the situation was quite different with 73% homeowners and 27% tenants.

In the welfare state model of the Southern Europe countries, of which Portugal is part, families have always played a relevant role in the provision and financing of their own homes (Allen, Barlow, Maloutas & Padovani, 2004). International studies suggest that the family provides financial support so that the young can buy their own home, and that housing wealth is also transferred within family relationships (Ronald & Lennartz, 2018). In this context, home ownership is fundamental to our understanding of the inequalities between generations, how these are perceived, and their implications for public policies (McKee, 2012).

¹ The data presented below, which have been rounded to the unit, are from Pordata (www.pordata.pt), obtained in June, 2019.

The right to decent housing has been universally acknowledged by all nations and has been part of the Universal Declaration of Human Rights since 1948. Article 31 of the European Social Charter (1961) deems that States must foster access to housing; in Portugal, this is a social right, enshrined in the Constitution since 1976.

This report analyses the evolution of permanent home ownership after 1970 from an intergenerational perspective, discusses the causes of this evolution, and sets out the new social risks. It is comprised of a methodological note explaining the data and the methodology inherent to the study, three main sections, and an appendix and glossary with additional information shedding light on this evolution.

The first section describes the evolution of home ownership in Portugal from 1970 to 2011, based on census data. An analysis is made of the system of ownership, with or without purchase charges, per age group of the household representative, and the NUTS II region in the country. The main reasons for this trajectory were identified through data analysis and a review of the scientific literature.

The second part addresses the current situation and recent evolution of housing in Portugal. It is based primarily on microdata from the Survey on Income and Living Conditions (*Inquérito às Condições de Vida e Rendimento* - ICOR) in 2011 and 2017. The analysis identified the different conditions of access to housing, considering the excessive burden of housing-related expenses, overcrowding of the housing unit and material deprivation of housing for the different occupancy regimes, given the age group of the first titleholder of the housing unit. The recent evolution of some of the factors that condition access to housing and public expenditure on housing is also tracked.

The third section identifies the main implications of social risks and inequalities in the access to housing. These were analysed in light of the results presented in the first two sections and the review of the scientific literature.

METHODOLOGICAL NOTE



The evolution of home ownership in Portugal is analysed in the first section of this report using data from the General Population and Housing Census from 1970, 1981, 1991, 2001 and 2011. The data on households for the last four years was provided at our request by the National Institute of Statistics (INE), and broken down into type of housing occupied, system of ownership of classic housing units (including owners with or without purchase charges), age group of the household representative, and NUTS II regions². Only classic family housing units were considered in the analysis.

It is important to note that the concept of household representative changed various times over the period under analysis (Casimiro, 2003). The head of the household in 1970, and the person responsible for the household in 1981, simply had to be designated as such by the household, without meeting any criteria defined by the Census. In 1991, the criteria ‘residing in the housing unit’ was included. As of 2001, the household representative not only had to be living in the household, but he/she also had to be aged 18 or over and was preferably the titleholder of the housing unit.

At the end of the first section of the report, the data is analysed from an intergenerational perspective focusing on households with their own home and whose representative is aged between 20 and 29 years. This is due to the recognised importance in the life cycle of the transition into adulthood, independence, and, consequently, the starting of a family, when housing is a key element (Holland & Peace, 2012).

Taking an intergenerational perspective that goes beyond the observation of age groups entails using the (often imprecise) concept of generation. A generation is generally defined as a set of people born in a certain period and who share events that characterise a specific social and geographical context (Calouste Gulbenkian Foundation, no date). In this study, we identified three generations in light of their correspondence with both the scientific literature and the specificities of the Portuguese context and events in which the housing policy evolved after the 1970s. The definition of a period of birth for a generation does not imply that those born in the following years do not belong to that same generation; in fact, these periods are flexible. However, it is essential to determine birth intervals when conducting a comparative study between generations. The three generations used in this study are defined in Table 1.

² As the INE indicated they were unable to provide the information we required for the 1970 census, we collected the data from the official INE issue (Available in https://censos.ine.pt/ngt_server/attachfileu.jsp?look_parentBou-i=67194581&att_display=n&att_download=y).

Table 1.
Concept of generation

Generation	Birth interval defined in this study	References
Generation 1 (Baby boomers)	1941/1942-1961	1943-1964 (OECD, 2019a) 1945-1965: UK (Hoolachan & McKee, 2019) 1945-1950: Japan (Hirayama & Ronald, 2008)
Generation 2 (Generation X)	1962-1981	1965-1982 (OECD, 2019a)
Generation 3 (Millennials)	1982-2000	1983-2002 (OECD, 2019a) 1982-2000 (Hoolachan & McKee, 2019)

Note: For the purposes of this study, the delimitation of the birth intervals has been adjusted to the age groups observed so that they correspond to individuals up to 29 years of age in 1970, that is, born between 1941 and 1955 and aged 20-29 in other census years.

The first generation, Generation 1, known internationally as baby boomers, corresponds to those born between 1941/42 and 1961. Generation 2, widely referred to as Generation X, is defined as those born between 1962 and 1981. Generation 3 corresponds to the so-called Millennials, born between the 1980s and the year 2000. Given that 2011 is the last census year in this study, the birth interval for this generation corresponds to those born between 1982 and 1993.

Microdata from the Survey on Income and Living Conditions (*Inquérito às Condições de Vida e Rendimento* - ICOR) of 2011 and 2017, provided by the National Institute of Statistics (INE) under the Protocol between the INE, the Foundation for Science and Technology and the General-Directorate for Education and Science Statistics (DG-EEC), is used to observe the current housing situation and its recent evolution in Portugal, which is the key element for the analysis of the social risks described in the second part of this report. This period was defined due to the lack of information on homeowners with or without purchase charges on the database used, which is only available from 2011.

The use of microdata permitted the use and crossing of several variables considered relevant to the identification of social risks in the access to housing from an intergenerational perspective, and therefore assured a more complete and robust analysis. Given the complex sampling system (which includes stratification and selection of units in several stages) and the need to correct non-responses, the extrapolation of the sample data to the Portuguese population was made using the weights associated with the observation units provided for this purpose in the respective data bases. Statistical analyses were carried out using the SPSS (Statistic Package for the Social

Sciences, version 25) software. The overestimation of the significance levels of the tests carried out was avoided by rescaling the weights so that their sum was equal to the sample size.

The analysis of the ICOR data also entailed defining an age group to associate with the observation unit (domestic households). In this case, we considered the age of the first titleholder of the housing unit.

The ‘access to housing’ concept was operationalised by means of three indicators, defined by Eurostat (2019):

- 1) The first refers to the “housing cost overburden rate”. This is observed when over 40% of the household income goes to housing-related expenses (rent, water, electricity, gas or other fuel, condominium, sanitation, maintenance and minor repairs, as well as interest on the main housing loan and insurance).
- 2) The second is identified as the “overcrowding rate”. This is when the area of the housing unit corresponds to an insufficient number of rooms for the household size and demographic profile, which is the case if the housing unit does not have the stipulated minimum number of rooms: one room for the household; one room for each couple in the household; one room per single person aged 18 or over; one room for every two unmarried persons of the same sex aged 12-17 years; one room for each unmarried person aged 12-17 years not included in the previous category; one room for every two children under 12 years.
- 3) Lastly, the third corresponds to the “material deprivation of housing” indicator. This is when the housing unit has no bathing or shower facilities; no flushing toilet; leaking water from the ceiling, damp walls, or rotting windows or floor; or insufficient sunlight on a sunny day.

A glossary can be found at the end of this report with the main concepts used regarding housing, most of which have been defined by INE (2019b), Eurostat (2019) and the Organisation for Economic Cooperation and Development (OECD, 2019c). However, there are other concepts, such as ‘youth’ which can be associated with different ages and can include persons up to the age of 35. This study uses the concept adopted in most data on youth provided by Eurostat, the INE and the OECD, as well as by the “European Union Strategy for Youth”, namely it includes only those up to the age of 29 (data analysis herein considers youth as persons up to the age of 29).

1.

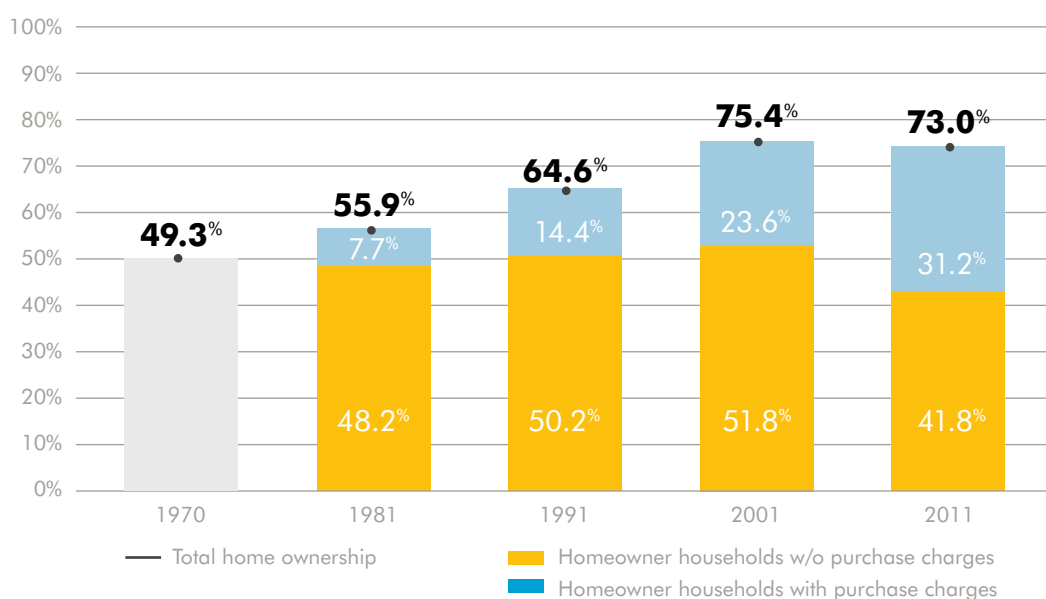
HOW HAS HOME OWNERSHIP EVOLVED IN PORTUGAL

BETWEEN DIFFERENT GENERATIONS AND WHAT ARE THE MAIN CAUSES OF THIS EVOLUTION?



The growth of home ownership was one of the major changes in contemporary societies, generally designated as societies of home ownership. In Portugal, there was a marked rise in the number of households that own their home between 1970 and 2011 (Figure 1). In the first year analysed, the percentage of households that own their home stood at 49.3% and it increased steadily over the following decades to reach 75.4% in 2001. In the period between 2001 and 2011, the percentage dropped slightly to 73% of households owning their home in Portugal. Over this period, there was also a substantial change in the composition of the households that owned their home as regards whether or not there were purchase charges. The weight of homeowner households without purchase charges fell to 57.2% of the total home ownership in 2011, below the 1981 figure of 86.1%. The weight of homeowner households with purchase charges in the total home ownership increased to 42.8% in 2011, around three times higher than the percentage observed in 1981, which was 13.9%.

Figure 1.
Evolution of the proportion of households that own their home and their composition vis-à-vis with or without purchase charges, between 1970 and 2011



Note: Data is only available on home ownership with and without purchase charges from 1981.

Source: National Institute of Statistics, I.P. - Portugal, Census 1970-2011. Authors' own calculations.

The rise in the proportion of homeowner households with purchase charges is due to a combination of multiple factors that were changing over this period but which, overall, made the purchase or construction of one's own homes by means of a home loan a more

viable and very attractive way for Portuguese families to access home ownership (Antunes, 2018; Neves, 2000). Among these factors, explained in more detail below, special note goes to incentive policies for the purchase or construction of housing, the policies discouraging the development of an extended rental market, macroeconomic conditions and policies affecting the housing sector, and the social and economic valorisation of home ownership.

In the years following the Carnation Revolution of 1974, incentive policies for housing purchase and construction stand out with the development of the subsidised credit scheme and the housing savings accounts. In 1976, when the Portuguese Constitution and the right to housing (article 65) was approved, the setting up of the subsidised credit scheme was linked to the notion not only of the right to access housing, but also of “access to home ownership for all families, regardless of their income level”, understood as a basic principal of the housing policy (Resolution of the Council of Ministers of 24 February 1976). The housing savings system, established in 1981 (Decree Law no. 149/81, of 4 June), also fostered the purchase or construction of own housing through a tax exemption on savings set up for that purpose, in articulation with credit facilities.

With the changes in the macroeconomic conditions and policies from the mid-1980s following Portugal’s entry into the now European Union, the growth in home loans was stimulated by the progressive liberalisation and deregulation of the banking sector, the steady decline in interest rates and families’ greater access to home loans (Antunes, 2018; Neves, 2000), to which the upward trend in households’ disposable income also contributed.

The lack of alternative ways of accessing housing also led to the constitution of a homeowners’ society in Portugal. Despite some measures seeking to liberalise the rental market between the 1980s and early 2000s, this was an unattractive market for landlords due to difficulties in updating rents and the automatic renewal of contracts. The limited stock of social housing and legislation that allowed the purchase of public housing by tenants did not facilitate the development of a broader social rental market targeting different population strata (Appendix A).

In addition to the policies which encouraged purchase and discouraged renting, cultural factors also explain the preference for home ownership in Southern Europe countries (Elsinga & Hoekstra, 2005). Where there was an expansion of home ownership, the values associated to it also changed. Buying a house started to be linked to success, and homeowners considered “better citizens, neighbours and even better parents” (Ronald, 2008, p. 2). Preference is also given to the accumulation of wealth provided by the purchase of housing as it can work as a safety net, especially in old age when retirement leads to a fall in income (Kemeny, 2005). The social and economic valorisation of home ownership makes renting less attractive, especially when it is related to social stigmas and low-income families, as is the case of social housing in a residual regime (Alves & Andersen, 2015).

Analysis by age groups

The evolution of home ownership among the different age groups, in the different census years, sheds light on the expansion of home ownership in Portugal and to identify inter-generational differences in the modes of access to housing. Table 2 shows the evolution of households that own their home by the age group of their representatives between 1970 and 2011. It shows that the proportion of homeowner households tends to be higher in the older age groups in every census year.

Table 2.
**Evolution of households that own their home
by age group of their representative**

		Up to 24 years	25-29	30-44	45-64	65+	Total
1970	n	10,810	35,870	285,970	513,845	288,460	1,134,955
	%	20.3%	22.9%	39.3%	55.2%	66.2%	49.3%
1981	n	48,755	93,131	404,375	663,264	401,868	1,611,393
	%	42.8%	40.7%	49.6%	59.9%	65.4%	55.9%
1991	n	35,405	103,119	556,157	802,511	513,937	2,011,129
	%	45.0%	51.4%	61.9%	67.9%	68.0%	64.6%
2001	n	49,128	149,432	758,520	1,020,204	752,466	2,729,750
	%	53.9%	67.3%	75.6%	77.4%	76.4%	75.4%
2011	n	19,009	85,065	781,389	1,143,558	915,181	2,944,202
	%	32.4%	49.4%	71.9%	75.7%	76.0%	73.0%

Note: The values in % refer to the proportion of households that own housing in each age group.

Source: National Statistics Institute, I.P. - Portugal, Census 1970-2011. Authors' own calculations.

This relationship between the mode of access to housing and the age group of the household representative can be linked to the life cycle and its implications for the mode of access to housing. In particular, the smaller proportion of households that own their home in the younger age groups may be explained by factors such as income and wealth accumulation, job and housing security, which tend to be less in early adulthood, and the age of starting a family (Dieleman & Everaers, 1994; Holland & Peace, 2012).

However, in this context, it is noted that the greatest disparity in the situation between age groups was in 1970 and in 2011. Notably, it should be pointed out that in these two years, which mark the beginning and end of the period under analysis, the proportion of households that own their home whose representative was aged 24 or below corresponded to less than half of the proportion of homeowner households in the total population.

Between 1970 and 2011, the percentage of households that own their home went up in all age groups (Table 3), notably in households whose representative was aged between 25 and 29 years, a group which saw a rise of 115.4%. In absolute terms, the increase was more relevant for the 45 to 64 year age group, with 629,713 more households owning their home in 2011 than in 1970.

Table 3.
Change rate in the proportion of households that own their home by age group of their representative, between 1970 and 2011

	Up to 24	25-29	30-44	45-64	65+	Total
1970-2011	59.3%	115.4%	82.7%	37.1%	14.8%	48.1%
1970-1981	110.4%	77.5%	26.1%	8.4%	-1.2%	13.5%
1981-1991	5.0%	26.2%	24.8%	13.5%	4.0%	15.4%
1991-2001	19.8%	31.1%	22.1%	14.0%	12.4%	16.8%
2001-2011	-39.8%	-26.6%	-4.9%	-2.2%	-0.5%	-3.2%

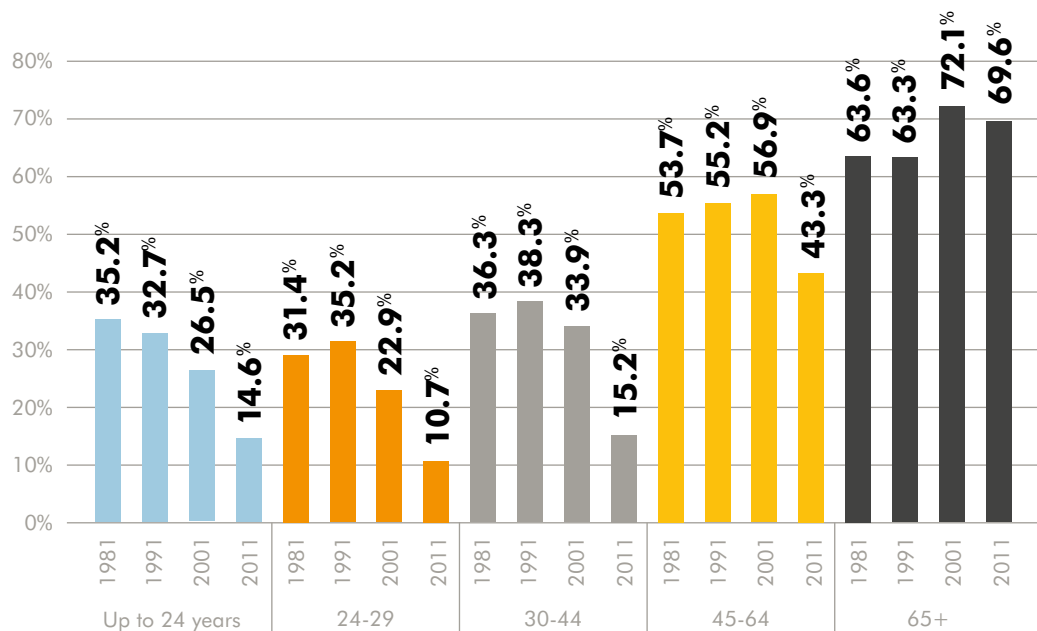
Source: National Statistics Institute, I.P. - Portugal, Census 1970-2011. Authors' own calculations.

When analysing the evolution over the different decades, it is found that the greatest increase in the total number of homeowner households was between 1991 and 2001, when it rose by 718,612, or 16.8%. By age group, the most marked relative changes, whether rising or falling, are observed in the first and last decades of the period in households whose representative was aged 24 or less, or between 25 and 29 years of age. Together, these two groups represented an increase of 85.9% between 1970 and 1981 and a decrease of 28.9% between 2001 and 2011.

As can be seen in Figures 2 and 3, the system of ownership is different depending on the age group of the household representative. The proportion of households with housing without purchase charges tends to be higher in the older age groups and the proportion of households with purchase charges tends to be lower in the over 45 age groups.

Figure 2.

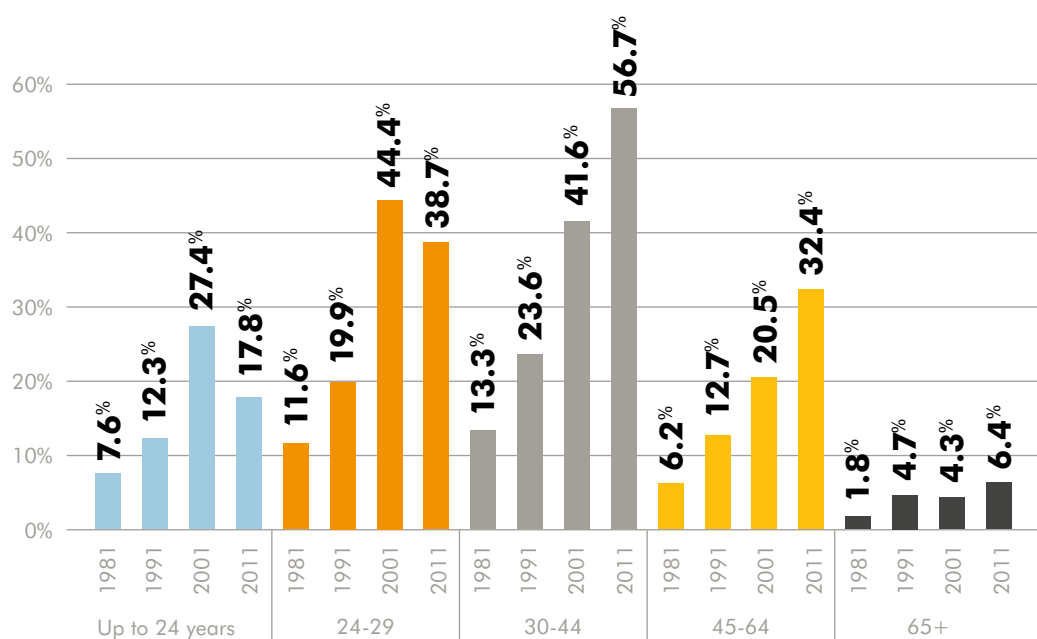
Evolution of the proportion of households without purchase charges, by age group of their representative



Source: National Statistics Institute, I.P. - Portugal, Census 1981-2011. Authors' own calculations.

Figure 3.

Evolution of the proportion of households with purchase charges, by age group of their representative



Source: National Statistics Institute, I.P. - Portugal, Census 1981-2011. Authors' own calculations.

This relationship between the system of ownership and age group can be linked in part with the systematic variations in income and wealth that are typical over the life cycle. In fact, households with a representative in the younger age groups tend to have a lower income (relative to the expected future income) and less wealth accumulation, making it opportune and necessary to use credit to purchase housing (Costa & Farinha, 2012). On the other hand, households that obtained credit at a certain point in their life to purchase their housing will repay the debt over time, and gradually move from a situation with purchase charges to one of no charges following the full payment of the debt, depending also on the maturity of the loan.

Between 1981 and 2011, the proportion of homeowners without purchase charges declined for all the age groups considered up to 64 years. This decrease was more significant in the age groups up to 44 years.

On the other hand, in the same period, the proportion of homeowner households with purchase charges increased for all age groups without exception. For representatives in the up to 64 age groups, there was a gradual increase between the census years, interrupted only between 2001 and 2011 for the up to 29 age groups, which registered a decline in this period.

Between 1981 and 1991, the most significant relative increases were seen in households with representatives aged 45 or over. Between 1991 and 2001, the most significant relative increases were seen in households with representatives aged up to 29 years.

Until the early 2000s, when the subsidised credit scheme for young people was still in force, younger homeowners were able to benefit from this measure. Between the mid-1980s and the early 1990s, some laws sought to facilitate access to credit for young people, either through the possibility of older family members guaranteeing the responsibility for payment, or the expansion and easing of access conditions (Antunes, 2018). Between 1991 and 1998, access to subsidised credit for the young became even easier, without any limit on the property value, which could be financed in its entirety and with an effort rate that exceeded that stipulated in the general subsidised regime (Neves, 2000). According to Neves (2000), the lower restrictions on the granting of subsidised credit to the young allowed high-income families to finance high-priced housing at the maximum bonus level.

Between 2001 and 2011, changes in macroeconomic conditions, the 2008 crisis and alterations in housing policies with significant repercussions on accessibility to housing credit made accessing housing through credit less viable and less attractive for households. The greatest impact was seen in the younger age groups' access and choices of mode of access to housing; among others, this is reflected in the observed data on the fall in the proportion of homeowner households with purchase charges in this period in the two younger age groups.

In fact, the upward trend in the macroeconomic performance registered after Portugal's entry into the now European Union, characterised by a relatively high rate of economic growth, a fall in the inflation rate to one digit figures from 1991 and a relatively low unemployment rate, was interrupted at the turn of the 21st century. From 2001 to 2008,

there was a period of almost stagnant economic growth, followed by a drop in real GDP between 2008 and 2013 in the aftermath of the economic crisis. Over this period, the unemployment rate quadrupled, going from 4% in 2001 to 16% in 2013 for the total population, and reaching 38% for those under 25 years, which is also four times as much as the figure for 2001.³ There was a strategic reorientation in housing policy from 2002 with incentives to rent and urban rehabilitation, to the detriment of housing credit and construction (Xerez et al., forthcoming).

The decline in young homeowners was also seen in other countries. In a comparative study of various European countries, Lennartz, Arundel & Ronald (2016) identified a fall in the rate of homeowners aged 18 to 34 years between 2007 and 2012 in all the countries analysed. The results of this study indicate that this fall is associated particularly with countries where housing was purchased with a home loan before the crisis. As a result of the crisis, banks are less likely to lend and young people, especially those in precarious jobs, are less confident about purchasing financed housing.⁴ In fact, young students from Lisbon cited poor economic circumstances as the main cause for not leaving their parents' homes during the crisis (Cairns, 2011).

Regional Analysis

The number and proportion of households that owned their home increased between 1981 and 2011 in all regions in Portugal. However, all regions except Lisbon registered a decline in the proportion of homeowner households without purchase charges in this period. The most significant rise in the proportion of households that own their home was in the Lisbon region, where it went from 34.3% in 1981 to 79.4% in 2001, and then declined to 66.4% in 2011. Despite this rise, Lisbon had the country's smallest proportion of households that own their home: in 2011, the percentage in all other regions was 70% or above. The Centre is the region with the highest proportion of households that own their home; in 2011, 81.2% of households were homeowners.

An analysis of the age groups of the household representative in the different regions (Appendix B) reveals that the national downward trend in the proportion of young homeowner households (representative aged up to 29 years) was seen in all regions in the 2001 to 2011 period. The smallest decline in young homeowner households was in the Algarve, which is also the region with the smallest percentage of this age group: 29.2% of homeowner households where the representative is aged up to 24 years and 44.4% between 25 and 29 years. The Autonomous Re-

³ The data presented, with figures rounded to the unit, are from Pordata (www.pordata.pt) and were gathered in July 2019.

⁴ In Portugal, data from the Survey on Banks on the Credit Market suggest that the slowdown in mortgage loans at the beginning of the crisis "was associated with an increase in the tightening of credit criteria, followed by a sharp reduction in demand" (Bank of Portugal, 2019: p. 4).

gions of Madeira and the Azores differ from all other regions as there was an increase in young homeowner households with purchase charges in this period: in Madeira, the percentage of homeowner households with purchase charges whose representative was aged up to 24 years and between 25 and 29 years was 11% and 40%, respectively; in the Azores, there was an 18% rise in the households whose representative was in the 25-29 age group.

Intergenerational analysis

The intergenerational differences in housing occupancy can be seen by comparing the housing occupancy regime associated to different generations, at the same phase of the life cycle (defined by a specific age group). In light of the importance of the evolution in home ownership among households where the representative is aged 29 years or below, observed above, Table 4 presents the differences in home ownership between three generations⁵ for this age group.

Table 4.
**Evolution of households aged between 20 and 29 years
that own their home, by generation**

Generations	Census	Young homeowner households					
		Total		With purchase charges		w/o purchase charges	
		%	N	%	n	%	n
Generation 1	1970*	22.3%	46.680				
	1981	40.6%	131.294	10.5%	34.022	30.1%	97.272
Generation 2	1991	49.6%	133.404	18.0%	48.417	31.6%	84.987
	2001	63.8%	193.896	40.2%	122.113	23.6%	71.783
Generation 3	2011	45.4%	102.154	34.0%	76.455	11.4%	25.699

* Aged between 15 and 29 years

Source: National Statistics Institute, I.P. - Portugal, Census 1970-2011. Authors' own calculations.

⁵ The definition of the generations for this analysis and the respective age groups in each year is explained in the "Methodological Note".

The proportion of young households that own their home increased significantly between Generation 1 (people born between 1941/1942 and 1961) and Generation 2 (people born between 1962 and 1981). This growth is due primarily to the rise in the proportion of young homeowner households with purchase charges, which quadrupled between 1981 and 2001. This period was marked by the sharp rise in home ownership and in loans for housing in Portugal, (Xerez & Fonseca 2016), and also in Southern European countries (Allen et al., 2004).

Between Generation 2 and Generation 3 (people born between 1982 and 2000), there is a drop in the total number of young households that own their home in the two property regimes (with and without purchase charges), both in relative and absolute terms.

The most extreme figures are therefore found in Generation 1, in 1970, which has the lowest number, and in Generation 3, in 2001, with the highest. On the other hand, although there is little differentiation in home ownership in young households between Generation 1, in 1981, and Generation 2, in 2011, a fundamental change can be observed as regards whether or not they paid purchase charges.

These changes in the mode of access to housing of the Millennial Generation not only reflect more structural and lasting alterations to the conditions of access in its different forms, but also the effects of the 2008 crisis; moreover, they can constitute a source and situation of inequality relative to previous generations as well as a significant social risk that should be mitigated by public policies. In some European countries, this matter has been addressed by various studies (Fuster, Arundel & Susino, 2018; Hoolachan & McKee, 2019; Majamaa, 2011), but not specifically for the Portuguese context.

When analysing home ownership in Portugal from an intergenerational perspective, it is important to characterise the relative situation of the young households of each of the generations. When comparing the proportion of young households aged between 20 and 29 years that own their home in each generation with the total proportion of homeowner households in the corresponding year (Table 5), a smaller proportion of young households that own their home is found in all the periods.

The most marked differences were registered in the young households from Generation 1, in 1970, with 54.8% fewer than the total homeowner households in the corresponding year, and from Generation 3, in 2011, with 37.8% fewer than the total homeowner households in that year.

Notwithstanding, in all the generations, the proportion of young homeowner households with purchase charges is smaller than that of the total population; Generation 2, in 2001, stands out in particular: the proportion of young homeowner households with purchase charges in that year was 70.3% higher than the total proportion of homeowner households with purchase charges. On the other hand, Generation 3 is striking as it has the smallest difference between homeowner households with purchase charges (which was 8.8% higher than the total in 2011) and the greatest difference between homeowner households without purchase charges - 73% less than the total.

Table 5.
Percentage difference between the proportion of young households that own their home and the total homeowner households in the respective year by generation

Generations	Census	Difference between young households that own their home and the total households that own their home		
		Total	With purchase charges	Without purchase charges
Generation 1	1970	-54.8%		
	1981	-27.4%	35.3%	-37.5%
Generation 2	1991	-23.2%	25.2%	-37.0%
	2001	-15.4%	70.3%	-54.5%
Generation 3	2011	-37.8%	8.8%	-72.7%

Source: National Statistics Institute, I.P. - Portugal, Census 1970-2011. Authors' own calculations.

2.

**WHAT ARE THE
MAIN SOCIAL RISKS
AND INEQUALITIES
OF THE CURRENT SITUATION
OF ACCESS TO HOUSING?**



This section seeks to identify the main social risks and inequalities in the access to housing in light of the current situation and recent evolution between 2011 and 2017. In terms of economic performance, the first three years of this period are characterised by a fall in real GDP and a rise in unemployment; this was followed by four years of positive rates in real GDP growth and a marked decline in the unemployment rate to below 2011 levels, with the 2017 rate standing at roughly half that of 2013. In general, this period is characterised by the effects of the crisis and austerity and, more recently, by a very buoyant housing market due to the increase in house prices, low interest rates on home loans and new short-term rental arrangements aimed at the growing demand from tourism, notably in the large urban centres. (Bank of Portugal, 2017).

The analysis of the recent evolution in the distribution of the housing occupancy regime generally confirms the trends observed in previous decades. The ICOR/EU-SILC data for 2011 and 2017 indicate a fall in home ownership without purchase charges and a rise in home ownership with purchase charges (Appendix C). Households where the titleholder of the property was under the age of 29 are the exception to this; in this case, the downward trend in home ownership with purchase charges continued from 2001, as described in the previous section.

The following points in this section analyse the current situation and the recent evolution in the access to housing, as well as the factors that condition this access. Public expenditure on housing is also characterised.

2.1.

ACCESS TO HOUSING

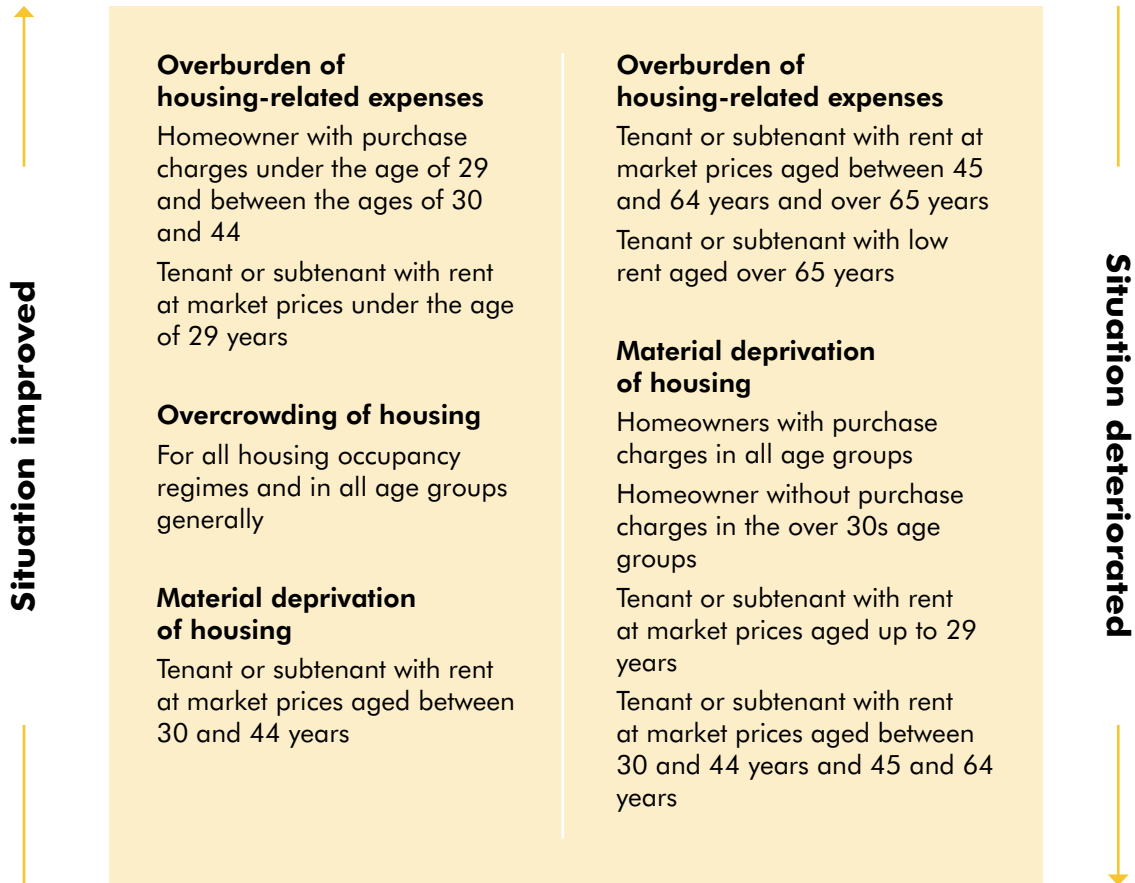
Access to housing is measured through the observation of three components: economic accessibility of housing, suitability of the number of rooms (space) and quality of housing (Dewilde & Lancee, 2013).

Given the operationalisation of the concept of access to housing, described in the methodological note, the three above-mentioned components were analysed in accordance with the occupancy regime and the age group of the first titleholder of the housing unit.

2.1.1. Evolution of the access to housing

The evolution of the access to housing based on the three identified components allows us to identify the groups in which there were significant alterations in the occupancy regime and age group of the first titleholder of the housing unit, and to distinguish those for whom the situation improved from those whose situation deteriorated. Figure 4 aggregates the main results of the analysis: the first column shows the groups identified as being in an improved situation; the second shows the groups whose access to housing deteriorated.

Figure 4.
**Evolution of the access to housing, by age group
and housing occupancy regime, between 2011 and 2017**



Source: ICOR/ EU-SILC Microdata, 2011 and 2017. Authors' own calculations.

In the case of the **overburden of housing-related expenses**, significant changes in the opposite direction can be seen in line with the housing occupancy regime and the age group of the first titleholder (Appendix D).

The proportion of overburdened households fell significantly from 47.3% in 2011 to 30.9% in 2017 among the tenants paying rent at market prices and where the first titleholder is in the youngest age group. Similarly, there was an improvement associated to the decline in the proportion of homeowners with purchase charges who are overburdened with housing-related expenses among the two youngest age groups: from 12.6% to 2.7% in the up to 29 years age group and from 7.4% to 3.1% among titleholders aged between 30 and 44 years.

The changes in the overburden of housing-related expenses could result from alterations in the disposable income and/or in the housing-related expenses. In this context, it should be noted that the median disposable household income in the groups identified as being in a better situation rose between 2011 and 2017 (Appendix E). The decline in the excessive burden for homeowners with purchase charges may also be linked to the interest rates for mortgages in the identified groups (Appendix F).

On the other hand, the proportion of households overburdened with housing-related expenses increased significantly between 2011 and 2017 among tenants paying rent at market prices in the 45 years or over age groups. There was also a significant rise in the proportion of overburdened households paying low rents aged 65 years or over, up from 3.3% in 2011 to 8.2% in 2017.

The increase in the overburden of tenants paying rent at market prices may also be linked with the rise in rent prices. Indeed, the average monthly housing-related expenses went up from 2011 for tenants paying rents at market prices in the age groups that were in a worse situation in 2017 (Appendix G).

A general improvement can be observed in the **overcrowding of housing** between 2011 and 2017, linked to a decline in the proportion of households suffering from overcrowding for all occupancy regimes and in all age groups (Appendix H). For tenants with rent at market prices whose first titleholder is aged between 30 and 44 years or over 65, overcrowding declined from 23.6% to 15% and from 9.1% to 1.9%, respectively. In the 45-64 age group, the proportion of homeowners with purchase charges that lived in an overcrowded housing unit fell from 8% in 2011 to 5.8% in 2017.

In the case of the **material deprivation of housing**, the significant changes for most of the occupancy regimes and age groups of the first titleholder indicate growing deprivation, expressed by a worse situation in the access to housing with just one exception (Appendix I).

Between 2011 and 2017, the material deprivation of housing increased for homeowners with purchase charges in all age groups. For the up to 29 years age group, it rose from 15.2% to 27%. For the 30 to 44 years age group, the share of families living in inadequate housing conditions went from 18.1% to 28.2%; and for those aged between 45 and 64, from 17.6% to 28%. Deprivation in households whose first titleholder was over 65 years increased from 15.7% in 2011 to 35.2% in 2017.

Significant increases in the deprivation of housing conditions were also registered for homeowners without purchase charges. In the 30 to 44 years age group, there was a rise from 19.5% to 32.7%; in the 45 to 64 years age group, from 22.5% to 31.5%; among the over 65s, the percentage went from 28.4% to 32.8%.

As for tenants paying rent at market prices and whose titleholder was aged up to 29 years, the percentage considered to be living in inadequate housing conditions went up from 19.4% in 2011 to 42.2% in 2017.

For tenants on low rents, the deprivation of housing conditions also increased significantly: among families where the titleholder of the housing unit was in the 30 to 44 age group, it increased from 40.9% to 64%; and in the 45-64 age group, from 34.2% in 2011 to 65.5% in 2017.

The 2008 crisis and the austerity policies that came in its aftermath may in part explain the worsening situation in the deprivation of housing conditions for the various age groups and occupancy regimes. The access to housing for the most vulnerable households deteriorated, and the serious problems of access to housing were again under discussion from 2017 (Resolution of the Assembly of the Republic nr. 48/2017). These serious problems gave rise to the creation of a programme in 2018, 1st Right, granting support for Access to Housing, due to the fact that “... despite a quantitative reduction in the lack of housing, structural problems remain in the housing sector which affect the access to decent housing by part of the population (Decree Law nr 37/2018).

2.1.2. Current situation of the access to housing

The analysis of the situation of the access to housing in 2017 permits the identification of the occupancy regimes and income quintiles in which the relative incidence of the overburden of housing-related expenses, overcrowded housing and deprivation of housing conditions were most significant for each of the age groups of the first titleholder of the housing unit (Table 6 and Appendices J, K and L).

Table 6.
Current situation of access to housing

Dimensions of Access	Groups with worse access in 2017
Overburden of housing-related expenses	Tenant or subtenant with rent at market prices, in all age groups Tenant or subtenant with low rent, aged between 30 and 44 years First income quintile, irrespective of age and housing occupancy regime
Overcrowded housing	Tenant or subtenant with rent at market prices and with low rent, aged from 30 to 45 and 45 to 64 years
Material deprivation of housing	Tenant or subtenant with low rents, in all age groups Tenant or subtenant with rent at market prices aged up to 29 years, or 45 years and over

In 2017, the proportion of tenants paying rent at market prices overburdened by housing-related expenses was in general significantly higher, irrespective of the age group. Among those under 64 years, over 30% of households were overburdened by housing-related expenses in this occupancy regime and this went up to 38% for households whose first titleholder was aged between 45 and 64. For households with the first titleholder in the 30 to 44 age group, the excessive burden of housing-related expenses was also significantly higher in the low rental occupancy regime, with an estimated figure of 24.7%.

Moreover, lower income households (first quintile), irrespective of the age or occupancy regime, face the greatest difficulties in the economic access to housing, measured by the overburden of housing-related expenses (Appendix M).

The proportion of overcrowded housing was generally greater for tenants, especially those on low rents, reaching 37.7% for the 30 - 45 age group in 2017.

In the deprivation of housing conditions, the situation is significantly worse for tenants paying low rents in all age groups, with an estimated 60% or more households living in inadequate housing conditions and going up to 68.6% for households whose first titleholder is aged up to 29 years. High figures are also observed – around 40% or over - for tenants paying rent at market prices and for those in accommodation that is rent free/part of salary in households where the first titleholder is aged 29 or younger (in the first case), or over 45 (in both cases) and reaching 44.1% for households where the titleholder is aged 65 or over and pays rent at market prices.

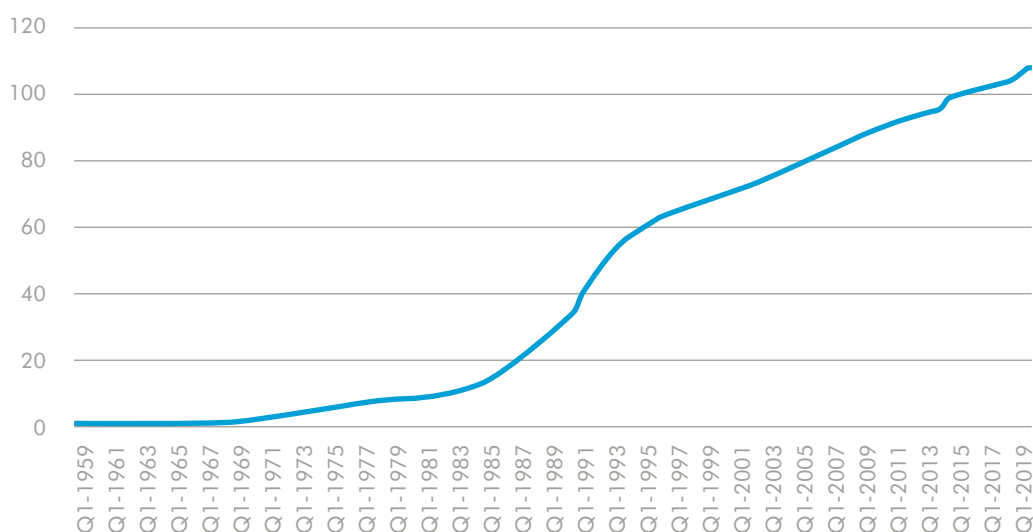
2.2. FACTORS THAT CONDITION ACCESS TO HOUSING

Various factors condition access to housing, notably in terms of its economic accessibility, which depends on both housing-related expenses (including rent and interest on the loan for the main home) and households' disposable income. In this study, we chose factors for which the variation is a major determinant of the attractiveness of the different modes of access to housing and their economic accessibility.

Rents

Following a period when rents were frozen, rent prices rose from the 1980s. Figure 5 shows the price index for rent prices between 1959 and 2018.

Figure 5.
Housing rental price index, 1959-2018 (2015=100)



Source: OECD data (2019c). <https://data.oecd.org/price/housing-prices.htm>

Law no. 46/85, of 20 September addressed the discretionary rent regime, allowing the two parties to negotiate the initial price of the rent. In addition, it stipulated the annual updating of all rents based on the updating coefficients then published in ordinances. In 1990, the Urban Lease Regime (RAU - Regime de Arrendamento Urbano) permitted the use of 5-year rental contracts and, thus, divided the market into old contracts with low, lifelong (and binding) rents, and new contracts (Antunes, 2018).

The New Urban Lease Regime (NRAU) of 2006, which sought to update old contracts, and its amendment in 2012, further liberalised this market. The alterations made to the NRAU in 2012, following recommendations by the Troika intervention in Portugal (International Monetary Fund, European Central Bank, and the European Commission), strived to stimulate the rental market. The revised NRAU introduced negotiation mechanisms between landlords and tenants and promoted the updating of old rents. The NRAU also made it possible to update low rents established in old contracts (contracts prior to 1990) more quickly, maintaining a transitional period for low income households and for the elderly. In other words, the rent in many of those contracts was still very low in 2011 but increased in the following period and, therefore, there was a greater burden of housing-related expenses in 2017 in cases where the rise in income did not accompany the rise in rents.

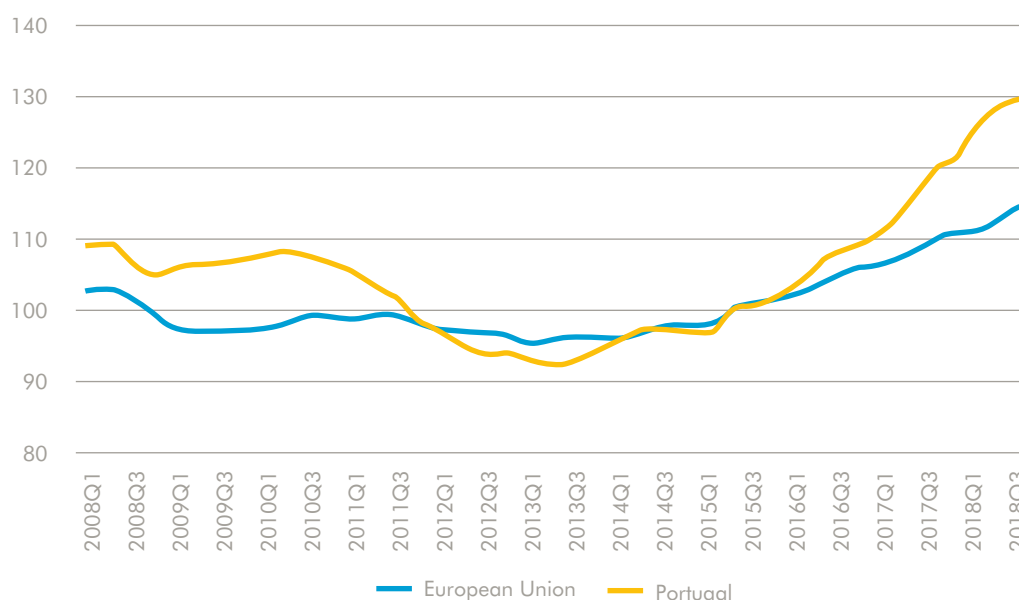
According to statistics provided by the INE (as of 2017), the average price of the new rental contracts in Portugal rose 9.3% between 2017 and 2018 to €4.80/m² (INE, 2019a). The Lisbon Metropolitan Area had the highest average of €7.00/m² and also registered

the largest increase, namely 15.5% up on the previous period. Rents in the Autonomous Region of Madeira, the Algarve and the Porto Metropolitan Area were also higher than those of the rest of Portugal. This rise in rent prices resulted in a fall in the number of new rental contracts in Portugal: 7.9% less than in 2017.

Housing prices

There was a marked upward trend in housing prices in Portugal, notably from 2015 (Figure 6). In recent years, the increase in Portugal was higher than the European Union average.

Figure 6.
Housing price index, EU and Portugal (2015=100)

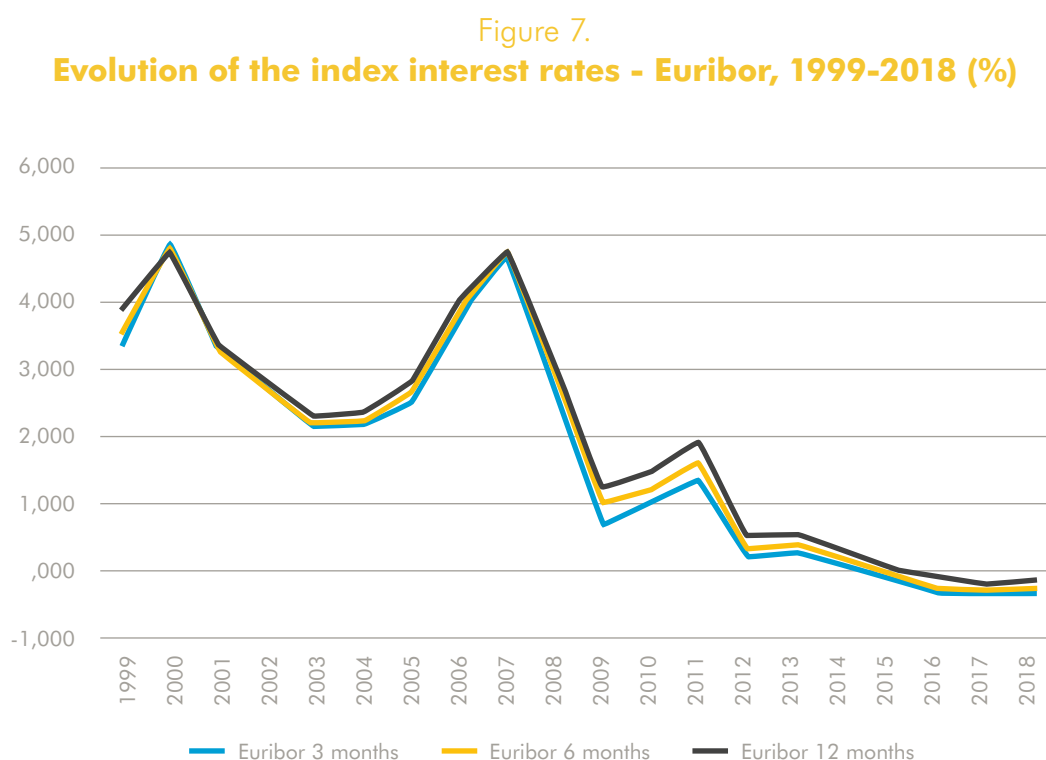


Source: Eurostat (2019) [prc_hpi_q].

An analysis of the average sale price of dwellings per square metre in Portugal reveals an increase from €830/m² at the start of 2016 to €996/m² at the end of 2018, representing a rise of 20%. In 2018, the highest average sale price was in the Lisbon Metropolitan Area (€1333/m²), the Autonomous Region of Madeira (€1207/m²), and in the Algarve (€1523 per m²) which registered the sharpest increase between 2016 and 2018. The lowest average housing prices in 2018 were in the Autonomous Region of the Azores (€720/m²), and in the Alentejo (€644/m²) which registered the smallest increase during that period.

Conditions for loans for the purchase of housing

Most home loans are taken out with a variable interest rate; this means there are fluctuations throughout the contract period and also in accordance with the interest rates in the monetary market. As Figure 7 shows, the reference index interest rates of most home loans fluctuated significantly between 2000 and 2018.

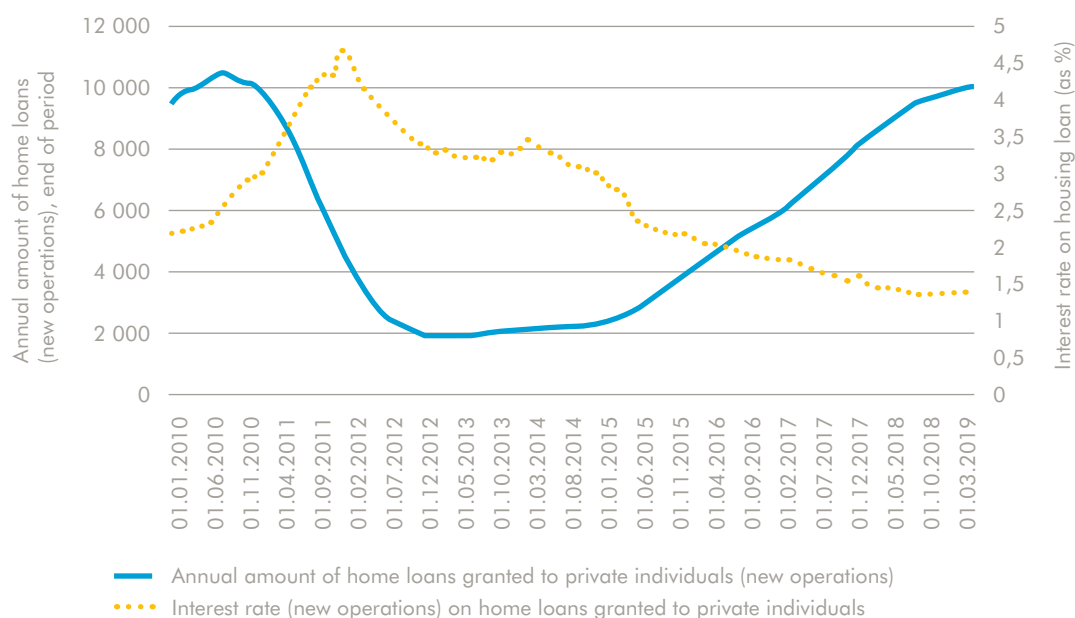


Source: Pordata (2019).

The periods which saw a rise in the interest rate, as in the case of 2004 to 2007, may have a substantial impact on the increase in the burden of housing-related expenses for homeowners, which can reach unsustainable levels. On the other hand, in periods when the rate falls, as in the case of 2007 to 2009 and 2011 to 2017, this burden tends to decline if there is no corresponding fall in household incomes.

When interest rates are low, as they are now, competition between banks makes loans less restrictive, boosted by an increase in housing prices (Bank of Portugal, 2017). Hence, there tend to be more home loans as interest rates decline (Figure 8).

Figure 8.
**Interest rates and annual rate of change
of loans for home purchase**



Source: Bank of Portugal Statistics (2019).

Disposable income

Macroeconomic variations cause fluctuations in household incomes. At times of crisis, families are particularly vulnerable as their income is not always enough to cover household expenses. A fall in income may increase the burden of housing-related expenses, which are inflexible and may be difficult to lower at short notice.

From 2011 to 2017, there was a rise in the median disposable household income of young families renting in the private market, of older homeowners without a mortgage, and homeowners with a mortgage, whose titleholder was aged up to 29 and in the 30-44-year age group (Appendix E).

Income not only influences the burden of housing-related expenses, but it also conditions the modes of access to housing. In 2017, records show that the median income per equivalent adult was higher for homeowners with a mortgage than for other regimes, notably for young households (Table 7). In the 1990s, it was primarily households with incomes in the higher quintiles and whose representative was in the younger age groups that used credit to buy housing (Neves, 1998).

Table 7.
**Median income by equivalent adult, by age
and housing occupancy regime 2017 (€/per annum)**

	Homeowner without purchase charges	Homeowner with purchase charges	Tenant or subtenant- rent at market prices	Tenant or subtenant- low rent
Up to 29 years	9745.56	14465.92	8977.00	6960.95
30-44	8815.83	10908.89	8400.00	4180.55
45-64	8706.67	11011.00	7769.57	5645.65
65+	8296.00	11277.27	8909.33	6285.33

Source: ICOR/ EU-SILC microdata, 2017. Authors' own calculations.

2.3. **PUBLIC EXPENDITURE ON HOUSING**

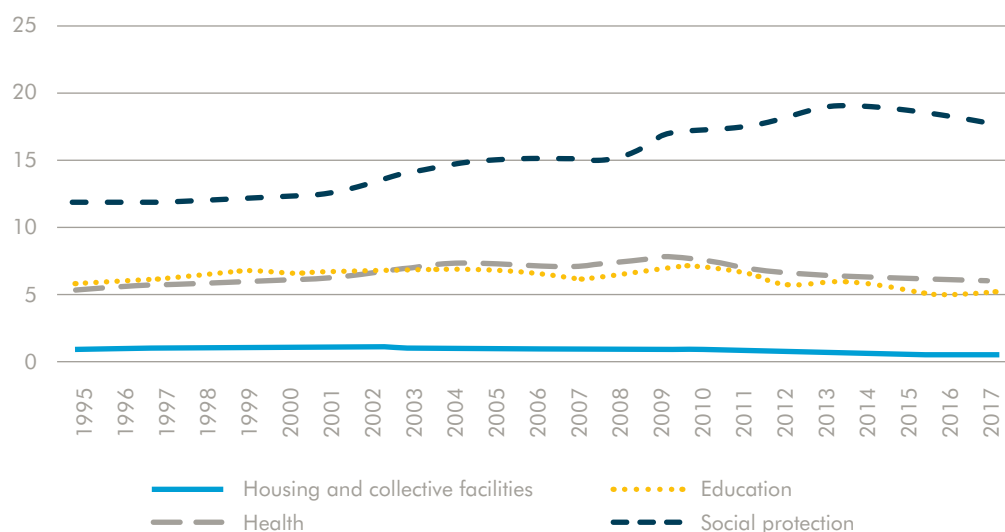
Public expenditure on housing in OECD countries has been below 1% of GDP since 1980. Although there are some differences between countries, the three main areas of spending are: old-age pensions, health, family and disability. On average, countries spend 7-8% of GDP on old age pensions, 6% on health and 2% on the family and disability. These figures have remained relatively steady since 1980 (Ortiz-Ospina & Roser, 2019).

Housing is the area of social expenditure which receives least public investment (Figure 9) in Portugal. From 1995, the highest percentage of GDP allocated to public spending on housing and collective facilities between 1997 and 2001 was 1.1%, varying in absolute figures between 1149 and 1541 million euros (see Appendix N). From 2003, the amount assigned to these areas fell to less than 1% of GDP, reaching a minimum of 0.5% in 2016 and 2017. In absolute figures, 1645 million euros was allocated to housing in 2009, and this was the highest since 1995. The budget of 965 million euros in 2016 was only exceeded in 1995 and 1996. Portugal's public expenditure on housing and collective facilities was higher than the European Union average until 2009. Thereafter, the amount allocated to the housing sector fell more in Portugal than the EU average (Xerez, Rodrigues & Cardoso, 2018).

An analysis of spending on housing and collective facilities as a percentage of total public expenditure reveals it represented between 2 and 2.7% in the late 1990s and early 2000s. From 2010, the amount declined to less than 1.3% and the lowest figure since 1995 was registered in 2017, corresponding to 1.1% of public expenditure.

Figure 9.

Evolution of public expenditure on housing and collective facilities, education, health and social protection, as % of GDP



Source: Eurostat (2019) [gov_10a_exp].

Most of the State spending on housing went to interest subsidies on home loans, which represented 73.3% of the total disbursed between 1987 and 2011 (IHRU, 2015). Table 8 details the execution of this expenditure over the period.

Table 8.

State Budget spent on housing, by programme. Amount executed between 1987 and 2011

Programmes	Executed Budget	
	Amount	%
Interest subsidies on home loans	7,046,685,145,77	73.3%
Rehousing programmes	1,353,426,012,54	14.1%
Incentives for the rental market	803,874,566,02	8.4%
Building rehabilitation programmes	166,594,609,24	1.7%
Social security rent allowances	29,223,491,09	0.3%
Direct promotion programmes	193,944,373,62	2.0%
Housing development contracts	13,868,736,35	0.1%
TOTAL	9,607,616,934,63	100%

Source: Adapted from IHRU (2015).

3.

**WHAT ARE THE
MAIN IMPLICATIONS
OF THE SOCIAL RISKS
AND INEQUALITIES
IN ACCESS TO HOUSING?**



The cyclical fluctuations in real household incomes, the growth of housing-related expenses, precarious employment, especially among the young, and the rise in unemployment, have increased the social risks of not only low-income families, but also among the middle class, hitherto shielded from these situations.

The results of this research suggest that access to housing constitutes a new social risk. The risks cover the different occupancy regimes and age groups, although the levels and categories vary. The effects of both the macroeconomic context and the factors conditioning access to housing are transversal to households, as discussed in the previous section.

The cyclical fluctuations in real household incomes, the growth of housing-related expenses, precarious employment, especially among the young, and the rise in unemployment, have increased the social risks of not only low-income families, but also among the middle class, hitherto shielded from these situations. In 2011, 7.2% of the Portuguese population lived in households overburdened by housing-related expenses, and this figure remained largely unchanged until 2017.

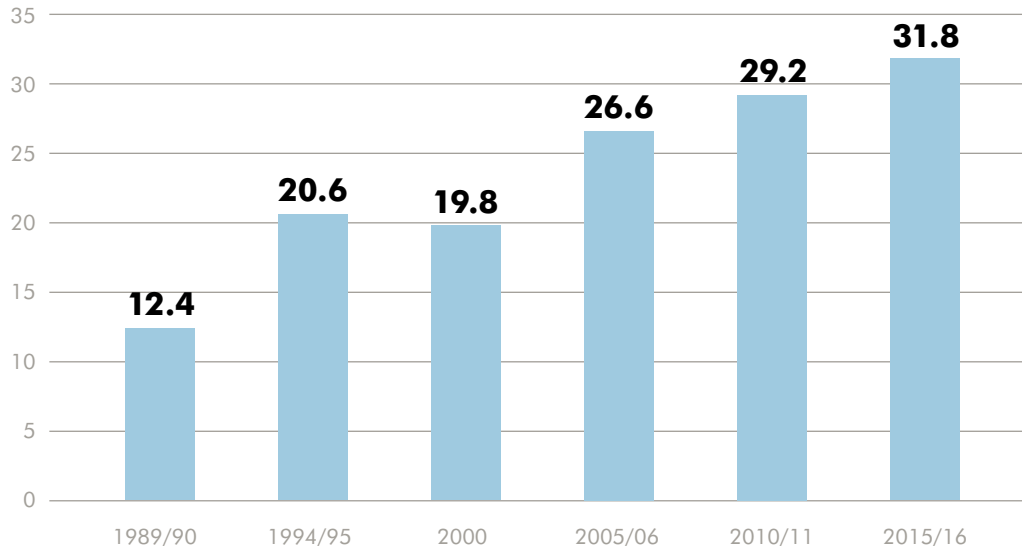
According to data from the Household Expenditure Survey (INE, 2017), households' average housing-related expenses per annum as a percentage of total expenses rose from 12.4% to 31.8% between 1989 and 2015 (Figure 10).

Housing-related expenses increased more than any other item in middle-class family budgets between 1995 and 2015. This increase, in conjunction with the rise in the costs of other consumer goods, such as health and education, led to a growth in the indebtedness of middle-class families. As a result, access to home ownership for many young people became increasingly unlikely. In many countries, the younger generations are much less likely to own their home than their parents (OECD, 2019a).

Affordable housing is currently one of the main policy concerns of governments and citizens. In a study conducted by OECD in 2014, almost half of the 35 countries involved (including Portugal) identified affordable housing as a fundamental policy objective (OECD, 2019b). More recently, in another OECD study on the risks that most affect people, housing concerns and the lack of affordable housing were among the top four risks people currently face. For around 40% of youth aged between 25 and 29 years old, this was their main risk (OECD, 2019b).

The data and scientific evidence analysed throughout this report indicate the main implications of the social risks and inequalities in the access to housing for tenants, homeowners and young people.

Figure 10.
**Evolution of households' average annual housing expenses
 (as % of their total expenses)**



Source: INE (2017).

Tenants

In this occupancy regime, economic accessibility is the main social risk for tenants in older age groups paying rent at market prices, that is, they are overburdened by housing-related expenses. For many households, housing-related expenses (which are the least flexible household expense) took on an even greater weight in their budgets due to the increase in rent prices in recent decades, as described in the previous section.

Spending a large proportion of one's income on housing-related expenses can be a social vulnerability factor, notably for medium and low-income families. If high-income families spend more than 40% of their income on housing-related expenses, they may be doing so by choice and, even after paying for housing they have enough income for the other necessary household expenses, such as food, health, education, transportation, among others (Hancock, 1993). However, for low-income families, housing-related expenses may impose constraints on paying the other necessary bills. In extreme cases, the rent is not paid, resulting in evictions and families having to depend on the help of family and friends or, worse, being homeless until they are able to rent public housing.

On the other hand, the lack of social housing stock and low investment in this sector prevent social housing from functioning as a safety net that can be used by families until their economic situation improves. Those paying low rents may also find themselves in a social risk situation due to the quality of housing access. Around 60% of tenants in this

regime in Portugal are deprived of some housing conditions. Given that housing is also a form of social stratification, the poor condition of some buildings may not only lead to health and safety risks for families, but also act as a segregation factor for them and the neighbourhoods where they live (Pato & Pereira, 2016).

In addition to investing more in the provision of public housing, policies - not just housing policies – must be articulated so that residents of some of these neighbourhoods no longer live in precarious situations.

Homeowners with purchase charges

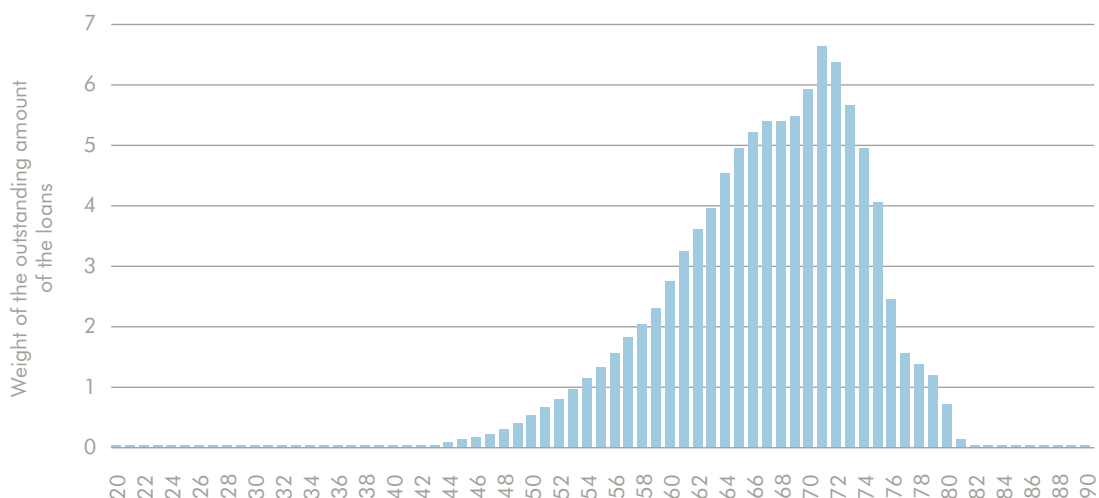
The rise in the number of families who own their home seen in Portugal over the last decades is due to the expansion of housing credit. However, when a family takes out a loan to buy a house at a time of low interest rates, it can put them in a vulnerable situation in the future (Bank of Portugal, 2017).

In fact, most of the credit to buy housing is contracted at a variable interest rate and, given the current rate of interest in the reference monetary market, it will tend to rise; this, in turn, will mean an increase in the burden of housing-related expenses if it is not accompanied by a corresponding increase in households' disposable income.

Moreover, with long maturities, many housing loan contracts encompass the retirement period of families when incomes usually fall.

Figure 11.

Distribution of the amount owed on home loans by households in June 2018, by the borrower's age when the contract reaches its term (as a percentage)



Source: Bank of Portugal (2018).

Portugal's average maturity for housing credit stood at 33 years at the end of 2016, which is one of the highest levels in Europe. Figure 11 indicates the percentage of the amounts owed on home loans relative to the borrower's age at the end of the contract term. It shows that a very large number of loans will reach their term when the contracting party is of retirement age, about 65 years old.

As the granting of credit to households by financial institutions has become less restrictive, the Bank of Portugal issued a macroprudential recommendation in 2018 with the aim of "preventing the accumulation of systemic risk in the financial system", establishing limits on maturity, LTV (loan-to-value) and DSTI (debt service-to-income) (Bank of Portugal, 2019).

This question has implications for the role played by home ownership as an income supplement in retirement. In home ownership societies, it can be considered a trade-off in relation to pensions (Castles & Ferrera, 1996). For older people who already own their home without purchase charges, their housing needs are met at a low cost and they can refinance, or sell and move to a smaller house, to supplement low pensions. This is particularly relevant for the elderly who are "rich in assets (housing) and poor in income" (Castles & Ferrera, 1996). On the other hand, if older people are still paying purchase charges, this corresponds to an expense that will vary in line with the terms of the loans contracted, as opposed to an income supplement.

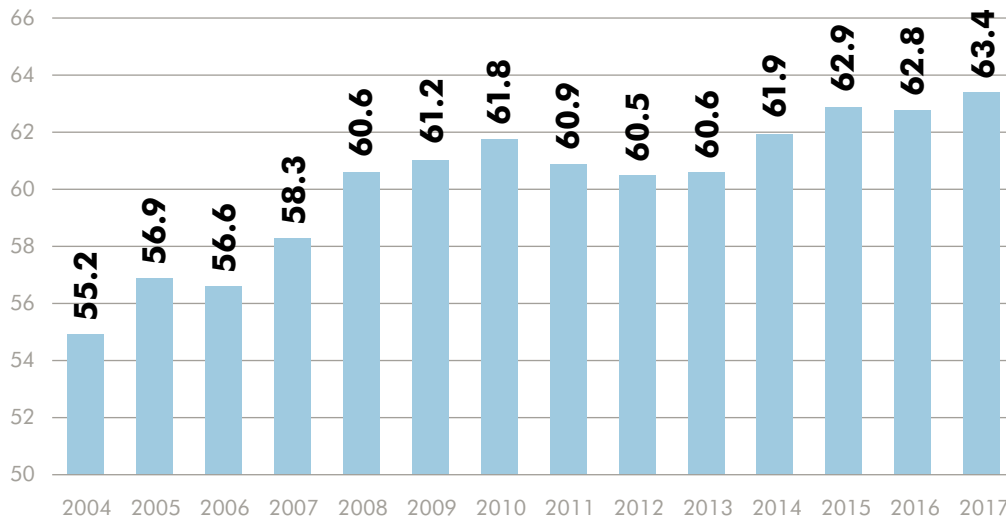
It can therefore be seen that the expansion of home ownership has a profound relationship with the changes in the Welfare State. Home ownership is the greatest wealth of most households and is therefore essential to the so-called "asset-based Welfare State" (Stebbing & Spies-Butcher, 2016). In this case, the State makes welfare provision an individual responsibility, thus reducing its costs and size.

The Young

The discussion of the implications of the new social risks of housing access is hampered by the lack of data on housing in Portugal. The housing experiences of the young are a contemporary global concern and the situation has deteriorated in many countries. It is more difficult for the young to access housing, they are more dependent on rent at market prices, there are fewer public housing responses and they remain in their parents' home for longer. The implications of young people's access to housing is a recent issue that has led to important studies (Majamaa, 2011; Clapham, Mackie, Orford, Thomas and Buckley, 2014; Forrest, 2012; McKee, 2012; Mackie, 2016; Hirayama & Ronald, 2008).

There is nothing that better characterises the Millennials and their shattered hopes than housing. For previous generations going back to the 1970s, when the baby boomers grew up, housing proved to be an important source of wealth accumulation and mobility. (...) Whereas the young in previous generation had the opportunity to have a house at the age of 30, or to rent suitable housing at affordable prices, these opportunities are now increasingly rare for young people in many parts of the country (United Kingdom) (Green, 2017, p.65).

Figure 12.
**Percentage of young adults (18-34 years)
living in their parents' home, 2004-2017**



Source: Eurostat (2019) [ilc_lvps08].

Just as with the population in general, the cost and quality of housing for young people is fundamental to their well-being and a factor of social inclusion. Accessible housing is important to the mobility of young people, who need to change jobs and pursue their studies. At the same time, a generation gap is opening up – young people in this generation spend longer living in their parents' home (Eurostat, 2016). This has been widely reported in the media in some countries, raising important political questions. However, the situation has not received much publicity in Portugal despite having one of the highest percentages of young adults (18-34 years) living in their parents' home; in fact, it rose around 8 pp between 2004 and 2017 (Figure 12).

The percentage of young people remaining in their parents' home in Southern European countries is higher than in the North (Holdsworth, 2005; Mackie, 2016). Cairns' (2011) analysis of Portugal concluded that the economic crisis had made job instability worse and lowered incomes, thus contributing to young people remaining longer in their parents' home. Recent studies conducted in Spain conclude that the situation is explained by both the crisis and the lack of suitable policies (Holdsworth, 2005; Gentile, 2016; Moreno Mínguez, 2016).

In this context, Government intervention must currently respond to two major challenges. First, guaranteeing equal opportunities for all young people to leave their parents' home and live independently; secondly, improving young people's access to housing (Mackie, 2016).

In the first challenge, it is understood that not all young people have the same opportunities to leave their parents' home and that the family context is a key part of this. The family is a source of financial support for the young and housing wealth is transferred within the family relationships (Ronald & Lennartz, 2018). For example, parents can mortgage their own home to buy a house for their children. The children of homeowners are therefore at a greater advantage than the children of tenants (Wood & Clarke, 2018). The transfer of housing wealth from the older to the younger generation tends to reproduce the socioeconomic inequalities within the generation itself. (Christophers, 2018).

Housing policies have a great influence on young people's preference for whether or not they buy their own home, and also on the fostering of their independence and their transition to adulthood (McKee, 2012). For example, some policies provide young people with incentives to rent through rent allowances as in the case of the "Porta 65" programme. However, the amount spent on this programme fell substantially in 2017 when it replaced the "Incentive to Rent for the Young" (*Incentivo ao Arrendamento por Jovens*), which had started in 1992 (IHRU, 2015).

The intergenerational differences in home ownership go beyond housing policy; they reflect the changes in the Welfare State and individualisation of the responsibility to assure welfare needs (McKee, 2012).

FINAL CONSIDERATIONS

This report, which presents a pioneering study in Portugal on the analysis of home ownership after 1980 from an intergenerational perspective, identifies the main causes, the new social risks and sets out various implications of relevance to public policies.

The growth in home ownership was one of the major changes in contemporary societies. In 1970, just 49.3% of Portuguese households owned their home but this figure rose steadily over the following decades. Over this period, the percentage of homeowners without purchase charges declined, representing 57.2% of all households that own their home in 2011, while the percentage of homeowners with purchase charges increased to 42.8% in 2011, about three times the figure for 1981 (13,9%).

The increase in the proportion of homeowner households, notably those with purchase charges, was the result of a combination of multiple causes which changed over these decades but which, taken together, made the purchase or construction of one's own home a more viable way of accessing housing.

Between 1981 and 2011, the number of households that owned their home increased in all regions of Portugal. However, all regions except Lisbon registered a fall in the proportion of homeowners without purchase charges. Whereas the Lisbon region had the lowest proportion of homeowners in the country (66.4%), the Centre had the highest proportion (81.2%) in 2011.

In the analysis of the age groups of the household representatives in the various regions, all regions registered a decline in the proportion of young households (representative aged up to 29 years) that owned their home between 2001 and 2011.

Between 1970 and 2001, there was a significant rise in the proportion of young homeowner households in generation 1 and generation 2. This rise is due largely to the growth seen in the young homeowner households with purchase charges, which almost quadrupled between 1981 and 2001. This period in Portugal was characterised by a marked growth in home ownership and in housing credit. Between generation 2 and generation 3 (Millennials), there was a decline in the number of young homeowner households, with and without purchase charges. This change in the Millennial generation, which reflects the structural alterations in the conditions to access housing and the effect of the 2008 global crisis, may constitute a source of inequality relative to the previous generations and be a significant risk that should be mitigated through public policies.

The study suggests there are new social risks, associated to the overburden of housing-related expenses and the evolution of factors that condition the access to housing. These risks affect various age groups, are linked to tenants paying rent at market prices or on low rents, and homeowners with and without purchase charges.

The increase in the overburden of housing-related expenses of tenants paying rent at market prices may be related to the sharp rise in rent prices. The 2008 crisis and austerity policies may explain the growing deprivation of housing conditions suffered by various age groups and occupancy regimes.

There has been a very marked upward trend in housing prices in Portugal, notably since 2015. In the last years, the rise registered in Portugal was higher than the European Union average. Rent prices also increased, with the average rent for new contracts

rising 9.3% between 2017 and 2018 in Portugal. The largest increase was registered in the Metropolitan Area of Lisbon, where rent prices went up over 15.5%. In this period, the high rents, the low interest rates and the ease of access to credit may explain the increase in new loans to purchase housing.

While housing-related expenses rose sharply, public expenditure on housing declined. Between 2011 and 2017, there was a fall in public expenditure on housing and it reached its lowest level (0.5% of GDP) between 2016 and 2017. Housing receives less public investment than all other areas of social expenditure.

The analysis of the evolution of home ownership between generations and the emergence of new risks and inequalities raises questions that are not in the private sphere of households or of the market; they come within the public sphere – of Governments and public policies.

The cyclical fluctuations of households' disposable income, the growth in housing expenses, precarious work situations, especially among the young, and the rise in unemployment have increased the social risks not only of low-income families but also of the middle class, who were hitherto shielded from these situations.

International studies have identified a trade-off between housing and pensions. In Portugal, the households that obtained a loan to buy their home may also face difficulties in the future. This is particularly relevant when the households obtain a loan that only reaches its term after the borrower's retirement age. As incomes tend to decline in this stage of life, this could lead to financial constraints. Moreover, when loans are contracted at low interest rates, difficulties may be further aggravated when these rates rise.

Portugal not only has one of Europe's highest percentages of young adults aged between 18 and 34 living in their parents' home, but this figure went up from 55.2% in 2004 to 63.4% in 2017. The economic crisis increased job insecurity, lowered incomes and contributed to young people remaining longer in their parents' home.

The analysis of the data and scientific evidence made throughout this study indicates the implications of the social risks and inequalities of access to housing among tenants, homeowners and the young.

The discussion and comparative analysis of the housing situation, which has recently taken place internationally, is hampered by the lack of data on housing in Portugal. The importance of the newly emerging risks urges further research and more scientific evidence on the development of public policies, similar to that developed by various Governments and international organisations.

The access to housing in Portugal has become a new social risk for a vast number of people and raises a new challenge for the Welfare State: a contract between generations.

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GLOSSARY

RENT FREE ACCOMMODATION (ICOR)

Condition in which accommodation is provided rent free by an owner, provided that the owner is not part of the household/family that occupies said accommodation.

CLASSIC HOUSING UNIT (ICOR)

Housing unit comprising one room or a set of rooms and its annexes in a building of a permanent nature or in a structurally distinct part of the building, with an independent entrance with direct access or through a garden or land to a road/path or to a common passage within the building (stairway, corridor or gallery, among others).

TENANT (ICOR)

Condition in which the holder has the right to the temporary use of a property in its entirety or in part upon payment of a rent.

BURDEN OF HOUSING-RELATED EXPENSES (ICOR)

Indicator that expresses the ratio between the annual housing-related expenses and the disposable income of the household, subtracting the social transfers related to housing from both sides of the division.

HOUSING-RELATED EXPENSES (ICOR)

Expenses related with rent, water, electricity, gas or other fuel, condominium, sanitation, maintenance and minor repairs, as well as interest on the housing loan for the principal residence and insurance.

OWNER OF THE HOUSING UNIT (Census and ICOR)

Holder of the right to ownership of the housing unit with the full and exclusive right to its use, usufruct and disposal.

HOMEOWNER (Census)

Condition in which a household member is the owner of the housing unit.

HOMEOWNER WITH PURCHASE CHARGES (Census)

Condition in which a household member is the owner of the housing unit, and a monthly payment is being made for the principal and interest owed on a loan for the purchase of owner-occupied housing.

HOMEOWNER WITH MORTGAGE (ICOR)

Condition in which the titleholder is the owner of the housing unit, and a charge is being paid for the purchase of the principal residence.

HOMEOWNER WITHOUT PURCHASE CHARGES (Census)

Condition in which a household member is the owner of the housing unit, and no monthly payment is being made for the principal and interest owed on a loan for the purchase of owner-occupied housing.

HOMEOWNER WITHOUT MORTGAGE (ICOR)

Condition in which the titleholder is the owner of the housing unit, and no charges are being paid for the purchase of the main residence.

OCCUPANCY REGIME (OR CONDITION) OF THE HOUSEHOLD'S HOUSING UNIT (Census and ICOR)

Condition whereby the household occupies all or part of the housing unit.

BELOW MARKET-PRICE RENT (ICOR)

Rent below the amount practiced in the market and which falls into one of the following regimes: controlled rent, rent subsidised by or attributed to the housing unit provided by an employer entity at a reduced price.

DISCRETIONARY RENT (ICOR)

Rental regime in which the initial amount is stipulated through free negotiation between the parties.

SUBTENANT OF THE HOUSING UNIT (ICOR)

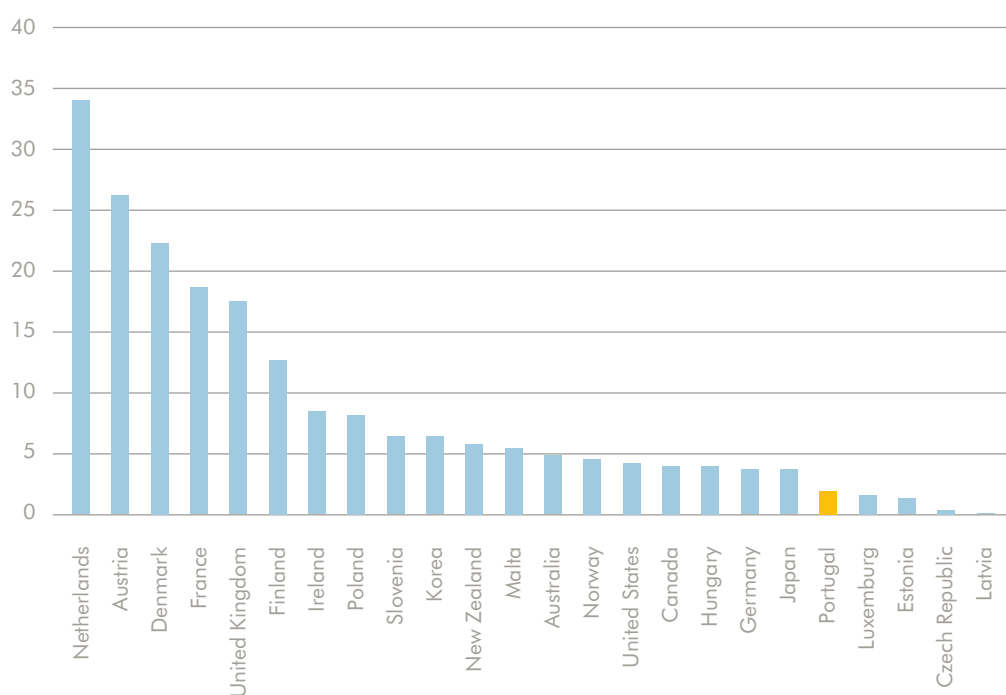
Condition in which the titleholder rents the housing unit in its entirety or in part, upon payment of a periodic fee to another entity or person not belonging to the household/family and that is the tenant of this housing unit.

TITLEHOLDER OF THE HOUSING UNIT (ICOR)

Person residing in the housing unit as the owner, tenant, subtenant or any other condition of occupancy of the household's housing unit.

APPENDICES

Appendix A.
**Relative size of rented social housing stock in the OECD,
in 2015 or last available year**



Source: Affordable Housing Database (2019).

Appendix B.
**Characterization indicators of young people (15-29 years)
 in the census years, associated with different generations**

Generations	Year	Proportion of students	Activity rate	Unemployment rate	Proportion borne by the family
Generation 1	1981	16%	69%	12%	38%
Generation 2	1991	23%	64%	9%	36%
	2001	29%	63%	10%	39%
Generation 3	2011	36%	56%	20%	47%

Source: National Statistics Institute, I.P. - Portugal, Census

Appendix C.

Distribution of homeowners, with and without purchase charges, by NUTS II region and age of household representative, 1981-2011

Region	Age of representative	1981		
		With purchase charges	Without purchase charges	Total
Alentejo	Up to 24 years	5.6%	38.3%	43.9%
	25-29	9.3%	32.1%	41.4%
	30-44	10.0%	42.4%	52.4%
	45-64	4.3%	60.1%	64.4%
	65+	1.2%	67.4%	68.6%
Algarve	Up to 24 years	4.0%	35.2%	39.2%
	25-29	7.5%	27.0%	34.5%
	30-44	9.7%	38.3%	48.0%
	45-64	4.6%	59.3%	63.8%
	65+	1.4%	71.6%	73.0%
Centre	Up to 24 years	5.0%	52.3%	57.3%
	25-29	8.3%	47.2%	55.5%
	30-44	9.4%	58.0%	67.3%
	45-64	3.6%	76.0%	79.6%
	65+	1.2%	83.9%	85.0%
Lisbon	Up to 24 years	15.4%	17.0%	32.4%
	25-29	21.8%	13.1%	34.9%
	30-44	22.1%	15.3%	37.4%
	45-64	12.6%	21.7%	34.3%
	65+	3.7%	24.0%	27.6%
North	Up to 24 years	3.5%	36.6%	40.2%
	25-29	5.4%	29.6%	35.0%
	30-44	8.2%	39.7%	47.9%
	45-64	3.9%	57.4%	61.3%
	65+	1.3%	65.8%	67.1%
Autonomous Region of Madeira	Up to 24 years	5.6%	52.2%	57.8%
	25-29	6.3%	49.1%	55.5%
	30-44	6.4%	52.6%	58.9%
	45-64	3.1%	67.4%	70.4%
	65+	1.5%	78.6%	80.1%
Autonomous Region of Azores	Up to 24 years	12.7%	42.0%	54.7%
	25-29	15.9%	38.3%	54.2%
	30-44	15.6%	51.0%	66.7%
	45-64	5.9%	74.6%	80.5%
	65+	1.6%	84.7%	86.3%

Source: National Statistics Institute, I.P. - Portugal, Census 1981-2011. Authors' own calculations.

1991			2001			2011		
With purchase charges	Without purchase charges	Total	With purchase charges	Without purchase charges	Total	With purchase charges	Without purchase charges	Total
10.8%	34.0%	44.8%	24.6%	29.4%	54,0%	17,7%	17,5%	35,2%
19.4%	32.6%	52.0%	43.6%	25.6%	69,2%	41,8%	11,3%	53,1%
24.0%	38.3%	62.3%	40.6%	36.5%	77,2%	57,2%	15,5%	72,7%
11.3%	60.3%	71.6%	20.0%	61.1%	81,1%	32,9%	45,2%	78,1%
3.9%	68.4%	72.3%	3.4%	78.4%	81,9%	5,3%	75,0%	80,3%
8.5%	27.3%	35.8%	20.3%	20.9%	41,3%	15,5%	13,7%	29,2%
17.3%	25.9%	43.2%	39.5%	19.7%	59,2%	34,1%	10,3%	44,4%
21.9%	37.2%	59.1%	38.9%	30.5%	69,4%	50,6%	13,4%	63,9%
12.3%	58.8%	71.1%	20.5%	57.8%	78,3%	31,2%	40,5%	71,7%
4.9%	69.1%	74.0%	4.2%	78.3%	82,4%	7,6%	72,7%	80,3%
7.7%	44.6%	52.3%	20.9%	37.2%	58,1%	15,3%	18,5%	33,9%
13.2%	46.0%	59.2%	38.8%	30.8%	69,6%	36,8%	13,8%	50,6%
17.2%	55.5%	72.7%	36.2%	45.9%	82,1%	56,2%	20,0%	76,2%
8.1%	74.1%	82.2%	15.2%	72.4%	87,6%	28,2%	55,6%	83,9%
2.6%	81.7%	84.4%	2.2%	87.0%	89,2%	4,2%	82,6%	86,8%
24.5%	22.6%	47.1%	35.3%	19.2%	54,5%	19,6%	12,5%	32,1%
40.6%	18.5%	59.1%	57.2%	14.3%	71,4%	40,6%	8,7%	49,3%
38.3%	21.6%	59.9%	54.8%	19.8%	74,6%	59,6%	10,8%	70,5%
20.8%	33.0%	53.8%	29.5%	38.9%	68,4%	38,8%	31,1%	69,9%
8.0%	34.3%	42.3%	8.3%	49.3%	57,6%	9,7%	53,3%	63,0%
6.8%	31.8%	38.6%	25.8%	26.0%	51,8%	17,4%	13,6%	31,1%
10.5%	30.7%	41.2%	38.5%	24.4%	62,9%	37,4%	10,7%	48,1%
15.7%	40.1%	55.9%	36.4%	35.7%	72,1%	55,0%	16,0%	71,0%
9.6%	57.6%	67.1%	16.8%	59.5%	76,4%	29,7%	44,6%	74,3%
4.4%	63.3%	67.7%	3.1%	73.2%	76,3%	4,8%	70,6%	75,5%
5.6%	56.0%	61.6%	18.2%	41.3%	59,5%	20,2%	21,3%	41,5%
7.6%	54.4%	61.9%	31.7%	40.2%	72,0%	44,5%	12,9%	57,3%
10.2%	56.5%	66.7%	28.9%	52.0%	80,9%	56,0%	21,5%	77,4%
5.9%	68.3%	74.1%	12.2%	69.5%	81,8%	29,5%	49,4%	78,9%
3.2%	76.7%	80.0%	3.2%	81.4%	84,6%	7,7%	73,0%	80,8%
13.3%	36.4%	49.7%	22.6%	35.2%	57,8%	20,5%	14,8%	35,3%
21.8%	36.3%	58.0%	35.0%	31.1%	66,1%	41,2%	10,0%	51,2%
30.1%	45.8%	75.9%	38.9%	42.1%	81,0%	58,4%	14,5%	72,9%
16.8%	69.8%	86.6%	23.7%	65.8%	89,5%	40,4%	43,2%	83,6%
6.6%	82.0%	88.5%	5.8%	86.2%	92,0%	16,5%	73,0%	89,6%

Appendix D.
**Distribution of housing occupancy regime,
 by age of first titleholder, 2011 and 2017**

Age of 1st titleholder of housing unit	Housing occupancy regime	2011	2017
Up to 29 years	Owner without purchase charges	4.6% _a	8.7% _b
	Owner with purchase charges	42.5% _a	14.8% _b
	Tenant or subtenant- rent at market prices	35.6% _a	45.3% _b
	Tenant or subtenant- low rent	4.6% _a	6.5% _a
	Rent free accommodation or as part of salary	12.6% _a	24.6% _b
30-44	Owner without purchase charges	15.6% _a	8.5% _b
	Owner with purchase charges	56.4% _a	61.1% _b
	Tenant or subtenant- rent at market prices	14.3% _a	17.1% _b
	Tenant or subtenant- low rent	3.0% _a	2.3% _a
	Rent free accommodation or as part of salary	10.7% _a	11.1% _a
45-64	Owner without purchase charges	46.9% _a	38.1% _b
	Owner with purchase charges	31.5% _a	38.4% _b
	Tenant or subtenant- rent at market prices	9.9% _a	10.9% _a
	Tenant or subtenant- low rent	5.3% _a	4.1% _b
	Rent free accommodation or as part of salary	6.3% _a	8.5% _b
65+	Owner without purchase charges	70.7% _a	72.7% _a
	Owner with purchase charges	2.7% _a	3.8% _b
	Tenant or subtenant- rent at market prices	11.3% _a	11.6% _a
	Tenant or subtenant- low rent	9.9% _a	5.8% _b
	Rent free accommodation or as part of salary	5.3% _a	6.1% _a
Total	Owner without purchase charges	44.5% _a	42.0% _b
	Owner with purchase charges	29.2% _a	31.0% _b
	Tenant or subtenant- rent at market prices	12.7% _a	13.8% _b
	Tenant or subtenant- low rent	6.2% _a	4.3% _b
	Rent free accommodation or as part of salary	7.4% _a	8.9% _b

Note: Each subscript letter indicates a year subset of survey categories, and the proportions of their columns do not differ significantly from each other at the .05 level.

Source: ICOR-EU/SILC microdata, 2017. Authors' own calculations.

Appendix E.

Overburden of housing-related expenses, by age of first titleholder, by occupancy regime of the housing unit, 2011-2017

Age of 1st titleholder of housing unit	Housing occupancy regime	2011	2017
Up to 29 years	Owner without purchase charges		4.7% _a
	Owner with purchase charges	12.6% _a	2.7% _b
	Tenant or subtenant- rent at market prices	47.3% _a	30.9% _b
	Tenant or subtenant- low rent		
	Rent free accommodation or as part of salary		5.0% _a
	Total	22.2% _a	16.0% _b
30-44	Owner without purchase charges	4.3% _a	2.1% _a
	Owner with purchase charges	7.4% _a	3.1% _b
	Tenant or subtenant- rent at market prices	36.6% _a	34.9% _a
	Tenant or subtenant- low rent	22.7% _a	24.3% _a
	Rent free accommodation or as part of salary	1.9% _a	2.7% _a
	Total	11.0% _a	8.9% _b
45-64	Owner without purchase charges	2.9% _a	4.1% _a
	Owner with purchase charges	6.2% _a	4.8% _a
	Tenant or subtenant- rent at market prices	22.4% _a	38.4% _b
	Tenant or subtenant- low rent	7.0% _a	12.7% _a
	Rent free accommodation or as part of salary	2.2% _a	4.8% _a
	Total	6.0% _a	8.5% _b
65+	Owner without purchase charges	1.9% _a	2.0% _a
	Owner with purchase charges	2.0% _a	1.6% _a
	Tenant or subtenant- rent at market prices	13.4% _a	23.2% _b
	Tenant or subtenant- low rent	3.3% _a	8.2% _b
	Rent free accommodation or as part of salary		4.0% _b
	Total	3.3% _a	5.0% _b
Total	Owner without purchase charges	2.5% _a	2.8% _a
	Owner with purchase charges	7.1% _a	3.9% _b
	Tenant or subtenant- rent at market prices	27.2% _a	32.1% _b
	Tenant or subtenant- low rent	6.8% _a	11.4% _b
	Rent free accommodation or as part of salary	1.4% _a	4.0% _b
	Total	7.2% _a	7.7% _a

Note: Each subscript letter indicates a year subset of the survey categories, and the proportions of their columns do not differ significantly from each other at the .05 level.

Source: ICOR-EU/SILC microdata, 2011-2017. Authors' own calculations.

Appendix F.

**Median disposable income of household, by age of first titleholder
of housing unit and housing occupancy regime, 2011-2017
(annual amounts in euros)**

Age of 1st titleholder of housing unit	Housing occupancy regime	Household's disposable income	2011	2017
Up to 29 years	Owner without purchase charges	Median	14466.60	12550.00
		CL below 95.0% for median	10343.45	9745.56
		CL superior 95.0% for median	24229.69	15000.00
	Owner with purchase charges	Median	15426.25	22298.72
		CL below 95.0% for median	14436.25	21135.42
		CL superior 95.0% for median	17242.95	23800.00
	Tenant or subtenant- rent at market prices	Median	11793.00	15264.00
		CL below 95.0% for median	10809.61	13840.00
		CL superior 95.0% for median	13603.80	16200.00
	Tenant or subtenant- low rent	Median	10885.00	11990.00
		CL below 95.0% for median	10020.00	9238.00
		CL superior 95.0% for median	23230.28	15708.00
30-44	Owner without purchase charges	Median	15459.84	15549.39
		CL below 95.0% for median	14013.27	13790.00
		CL superior 95.0% for median	17116.61	16714.00
	Owner with purchase charges	Median	18624.70	20280.00
		CL below 95.0% for median	17857.90	19636.00
		CL superior 95.0% for median	19472.95	20726.00
	Tenant or subtenant- rent at market prices	Median	13179.10	13708.00
		CL below 95.0% for median	11735.36	13137.00
		CL superior 95.0% for median	14087.06	14676.25
	Tenant or subtenant- low rent	Median	9327.50	8144.00
		CL below 95.0% for median	8061.50	7200.00
		CL superior 95.0% for median	10610.24	10500.00

Appendix F.

Age of 1st titleholder of housing unit	Housing occupancy regime	Household's disposable income	2011	2017
45-64	Owner without purchase charges	Median	16354.38	15870.00
		CL below 95.0% for median	15561.70	15424.00
		CL superior 95.0% for median	17194.20	16365.00
	Owner with purchase charges	Median	20782.62	20638.59
		CL below 95.0% for median	19891.13	19990.00
		CL superior 95.0% for median	21976.14	21284.56
	Tenant or subtenant- rent at market prices	Median	13888.00	13200.00
		CL below 95.0% for median	12687.50	12400.00
		CL superior 95.0% for median	15692.40	13920.00
	Tenant or subtenant- low rent	Median	10224.30	8846.00
		CL below 95.0% for median	9327.50	8050.93
		CL superior 95.0% for median	13153.71	10120.00
65+	Owner without purchase charges	Median	10070.20	11646.98
		CL below 95.0% for median	9699.77	11268.00
		CL superior 95.0% for median	10715.39	12175.47
	Owner with purchase charges	Median	17536.76	17496.50
		CL below 95.0% for median	14548.42	15977.78
		CL superior 95.0% for median	22908.85	19120.00
	Tenant or subtenant- rent at market prices	Median	10459.12	10998.00
		CL below 95.0% for median	9010.62	10335.00
		CL superior 95.0% for median	12153.90	12124.00
	Tenant or subtenant- low rent	Median	9009.50	8052.00
		CL below 95.0% for median	8244.94	7560.00
		CL superior 95.0% for median	10759.06	8455.00

Source: ICOR-EU/SILC microdata, 2017. Authors' own calculation.

Appendix G.

Median interest paid for home loan with purchase charges, by age of first titleholder of the housing unit (annual amounts in euros)

Age of 1st titleholder of housing unit	Interest paid for home loan with purchase charges	2011	2017
Up to 29 years	Median	1390.42	597.00
	CL below 95.0% for median	1313.42	552.48
	CL superior 95.0% for median	1622.46	698.61
30-44	Median	1273.33	624.00
	CL below 95.0% for median	1236.00	596.00
	CL superior 95.0% for median	1317.24	635.10
45-64	Median	1080.00	508.08
	CL below 95.0% for median	1000.00	500.00
	CL superior 95.0% for median	1126.97	552.48
65+	Median	878.16	465.74
	CL below 95.0% for median	658.62	360.00
	CL superior 95.0% for median	1150.39	592.76

Source: ICOR-EU/SILC microdata, 2011-2017. Authors' own calculations.

Appendix H.

Median total monthly cost of the housing unit, by age of the first titleholder and the housing occupancy regime, 2011-2017 (in euros)

Age of 1st titleholder of housing unit	Housing occupancy regime	Total monthly cost of housing unit	2011	2017
Up to 29 years	Owner without purchase charges	Median	77.00	132.17
		CL below 95.0% for median	77.00	120.00
		CL above 95.0% for median	121.67	152.67
	Owner with purchase charges	Median	275.00	259.25
		CL below 95.0% for median	257.83	217.00
		CL above 95.0% for median	353.17	277.33
	Tenant or subtenant- rent at market prices	Median	365.00	402.67
		CL below 95.0% for median	331.00	395.00
		CL above 95.0% for median	405.82	421.00
	Tenant or subtenant- low rent	Median	221.83	178.00
		CL below 95.0% for median	147.50	143.00
		CL above 95.0% for median	480.00	226.00

Appendix H.

Age of 1st titleholder of housing unit	Housing occupancy regime	Total monthly cost of housing unit	2011	2017
30-44	Owner without purchase charges	Median	120.33	125.00
		CL below 95.0% for median	111.50	119.00
		CL above 95.0% for median	132.50	130.83
	Owner with purchase charges	Median	276.25	212.00
		CL below 95.0% for median	265.75	210.17
		CL above 95.0% for median	283.25	216.00
	Tenant or subtenant- rent at market prices	Median	345.00	393.00
		CL below 95.0% for median	308.33	380.00
		CL above 95.0% for median	383.00	403.67
	Tenant or subtenant- low rent	Median	175.00	163.00
		CL below 95.0% for median	167.50	155.00
		CL above 95.0% for median	288.17	200.00
45-64	Owner without purchase charges	Median	110.00	130.00
		CL below 95.0% for median	105.83	128.00
		CL above 95.0% for median	116.67	133.17
	Owner with purchase charges	Median	235.00	213.33
		CL below 95.0% for median	224.67	209.00
		CL above 95.0% for median	247.02	217.83
	Tenant or subtenant- rent at market prices	Median	274.25	347.00
		CL below 95.0% for median	249.17	328.00
		CL above 95.0% for median	293.00	356.58
	Tenant or subtenant- low rent	Median	133.00	148.00
		CL below 95.0% for median	128.50	139.00
		CL above 95.0% for median	153.50	167.33
65+	Owner without purchase charges	Median	83.33	107.00
		CL below 95.0% for median	80.50	105.00
		CL above 95.0% for median	85.50	109.67
	Owner with purchase charges	Median	205.00	186.00
		CL below 95.0% for median	176.58	173.83
		CL above 95.0% for median	241.00	195.00
	Tenant or subtenant- rent at market prices	Median	165.00	254.00
		CL below 95.0% for median	148.00	241.33
		CL above 95.0% for median	190.00	268.50
	Tenant or subtenant- low rent	Median	115.67	142.00
		CL below 95.0% for median	109.00	126.08
		CL above 95.0% for median	126,50	149,33

Source: ICOR-EU/SILC microdata, 2011-2017. Authors' own calculations.

Appendix I.
**Overcrowding of housing, by age of first titleholder,
housing occupancy regime, 2011-2017**

Age of 1st titleholder of housing unit	Housing occupancy regime	2011	2017
Up to 29 years	Owner without purchase charges	27.3% _a	6.8% _a
	Owner with purchase charges	1.8% _a	1.4% _a
	Tenant or subtenant- rent at market prices	10.8% _a	8.5% _a
	Tenant or subtenant- low rent	33.3% _a	12.5% _a
	Rent free accommodation or as part of salary	6.1% _a	9.1% _a
	Total	8.1% _a	7.7% _a
30-44	Owner without purchase charges	7.4% _a	7.1% _a
	Owner with purchase charges	5.6% _a	5.1% _a
	Tenant or subtenant- rent at market prices	23.6% _a	15.0% _b
	Tenant or subtenant- low rent	20.5% _a	37.3% _a
	Rent free accommodation or as part of salary	15.1% _a	10.0% _a
	Total	9.9% _a	8.2% _a
45-64	Owner without purchase charges	5.8% _a	5.2% _a
	Owner with purchase charges	8.0% _a	5.8% _b
	Tenant or subtenant- rent at market prices	12.6% _a	12.3% _a
	Tenant or subtenant- low rent	16.5% _a	19.9% _a
	Rent free accommodation or as part of salary	9.0% _a	6.8% _a
	Total	7.9% _a	6.9% _a
65+	Owner without purchase charges	2.1% _a	2.1% _a
	Owner with purchase charges	5.9% _a	2.7% _a
	Tenant or subtenant- rent at market prices	9.1% _a	1.9% _b
	Tenant or subtenant- low rent	6.0% _a	9.3% _a
	Rent free accommodation or as part of salary	7.1% _a	4.4% _a
	Total	3.6% _a	2.7% _b
Total	Owner without purchase charges	4.2% _a	3.5% _a
	Owner with purchase charges	6.3% _a	5.3% _a
	Tenant or subtenant- rent at market prices	14.6% _a	9.6% _b
	Tenant or subtenant- low rent	12.1% _a	16.8% _a
	Rent free accommodation or as part of salary	10.6% _a	7.4% _b
	Total	7.1% _a	5.8% _b

Note: Each subscript letter indicates a year subset of the survey categories, and the proportions of their columns do not differ significantly from each other at the .05 level.

Source: ICOR-EU/SILC Microdata, 2011-2017. Authors' own calculations.

Appendix J.
**Material deprivation of housing, by age of first titleholder,
housing occupancy regime, 2011-2017**

Age of 1st titleholder of housing unit	Housing occupancy regime	2011	2017
Up to 29 years	Owner without purchase charges	36.4% _a	22.7% _a
	Owner with purchase charges	15.2% _a	27.0% _b
	Tenant or subtenant- rent at market prices	19.4% _a	42.2% _b
	Tenant or subtenant- low rent		68.8% _b
	Rent free accommodation or as part of salary	20.6% _a	29.8% _a
	Total		17.6% _a
30-44	Owner without purchase charges	19.5% _a	32.7% _b
	Owner with purchase charges	18.1% _a	28.2% _b
	Tenant or subtenant- rent at market prices	37.6% _a	31.6% _a
	Tenant or subtenant- low rent	40.9% _a	64.0% _b
	Rent free accommodation or as part of salary	25.2% _a	30.4% _a
	Total		22.5% _a
45-64	Owner without purchase charges	22.5% _a	31.5% _b
	Owner with purchase charges	17.6% _a	28.0% _b
	Tenant or subtenant- rent at market prices	43.9% _a	41.4% _a
	Tenant or subtenant- low rent	34.2% _a	65.5% _b
	Rent free accommodation or as part of salary	45.2% _a	41.0% _a
	Total		25.1% _a
65+	Owner without purchase charges	28.4% _a	32.8% _b
	Owner with purchase charges	15.7% _a	35.2% _b
	Tenant or subtenant- rent at market prices	47.8% _a	44.1% _a
	Tenant or subtenant- low rent	54.3% _a	58.2% _a
	Rent free accommodation or as part of salary	33.7% _a	37.9% _a
	Total		33.1% _a
Total	Owner without purchase charges	25.3% _a	32.3% _b
	Owner with purchase charges	17.6% _a	28.4% _b
	Tenant or subtenant- rent at market prices	40.1% _a	39.4% _a
	Tenant or subtenant- low rent	44.4% _a	62.1% _b
	Rent free accommodation or as part of salary	33.1% _a	36.0% _a
	Total		26.7% _a

Note: Each subscript letter indicates a year subset of the survey categories, and the proportions of their columns do not differ significantly from each other at the .05 level.

Source: ICOR-EU/SILC microdata, 2011-2017. Authors' own calculations.

Appendix K.
**Overburden of housing-related expenses by age group
and housing occupancy regime, 2017**

	Housing occupancy regime				
	Owner without purchase charges	Owner with purchase charges	Tenant or subtenant- rent at market prices	Tenant or subtenant- low rent	Rent free accommodation or as part of salary
	N % of column	N % of column	N % of column	N % of column	N % of column
Up to 29 years	4.8% _a	2.1% _a	31.1% _b	0.6% _a	5.1% _a
30-44	2.1% _a	3.1% _a	34.9% _b	24.7% _b	2.8% _a
45-64	4.1% _a	4.8% _a	38.4% _b	12.5% _c	4.8% _a
65+	2.0% _a	1.6% _a	23.3% _b	8.2% _c	4.0% _{a,c}

Note: the values in the same row and sub-table that do not share the same subscript are significantly different ($p < .05$) in the two-stage equality test for the column proportions. Cells without any subscription are not included in the test. The tests consider equal variances.^{1,2}

1. The tests are adjusted for all comparisons between peers of each sub-table in a row from each innermost sub-table using the Bonferroni correlation.

2. Cell counts for some categories are not whole numbers. They are rounded to the nearest whole number before performing the column proportions tests.

Source: ICOR-EU/SILC microdata, 2017. Authors' own calculations.

Appendix L.
**Overcrowding of housing by age group
and housing occupancy regime in 2017**

	Housing occupancy regime				
	Owner without purchase charges	Owner with purchase charges	Tenant or subtenant- rent at market prices	Tenant or subtenant- low rent	Rent free accommodation or as part of salary
	N % of column	N % of column	N % of column	N % of column	N % of column
Up to 29 years *	6.4% _a	1.7% _a	8.7% _a	11.5% _a	8.9% _a
30-44	7.1% _{a,d}	5.1% _a	15.0% _b	37.7% _c	9.9% _{b,d}
45-64	5.2% _a	5.8% _a	12.3% _b	19.9% _b	6.8% _a
65+	2.1% _a	2.9% _{a,b}	1.9% _a	9.3% _b	4.3% _{a,b}

Note: the values in the same row and sub-table that do not share the same subscript are significantly different ($p < .05$) in the two-stage equality test for the column proportions. Cells without any subscription are not included in the test. The tests consider equal variances.^{1,2}

1. The tests are adjusted for all comparisons between peers of each sub-table in a row from each innermost sub-table using the Bonferroni correlation.

2. Cell counts for some categories are not whole numbers. They are rounded to the nearest whole number before performing the column proportions tests.

Source: ICOR-EU/SILC microdata, 2017. Authors' own calculations.

Appendix M.
**Material deprivation of housing by age group
and housing occupancy regime in 2017**

	Housing occupancy regime				
	Owner without purchase charges	Owner with purchase charges	Tenant or subtenant- rent at market prices	Tenant or subtenant- low rent (below market price)	Rent free accommodation or as part of salary
	N % of column	N % of column	N % of column	N % of column	N % of column
Up to 29 years	22.5% _a	26.9% _a	42.3% _{a,b}	68.6% _b	29.5% _a
30-44	32.6% _a	28.2% _a	31.6% _a	64.0% _b	30.3% _a
45-64	31.5% _a	28.0% _a	41.4% _b	65.5% _c	41.0% _b
65+	32.8% _a	34.9% _{a,b}	44.1% _b	58.1% _c	37.9% _{a,b}

Note: the values in the same row and sub-table that do not share the same subscript are significantly different ($p < .05$) in the two-stage equality test for the column proportions. Cells without any subscription are not included in the test. The tests consider equal variances.^{1,2}

1. The tests are adjusted for all the comparisons between peers of each sub-table in a row from each innermost sub-table using the Bonferroni correlation.
2. Cell counts for some categories are not whole numbers. They are rounded to the nearest whole number before performing the column proportions tests.

Source: ICOR-EU/SILC microdata, 2017. Authors' own calculations.

Appendix N.

Overburden of housing-related expenses, by age of first titleholder, housing occupancy regime and income quintile, 2017

Age of 1st titleholder of housing unit	Housing occupancy regime	Income quintile				
		1	2	3	4	5
		N % of column	N % of column	N % of column	N % of column	N % of column
Up to 29 years	Owner without purchase charges	19.7% _a	0.0% ^{1,2}	0.0% ¹	0.0% ¹	0.0% ¹
	Owner with purchase charges	49.6% _a	0.0% ¹	0.0% ¹	0.0% ¹	0.0% ¹
	Tenant or subtenant- rent at market prices	84.4% _a	60.4% _a	18.0% _b	21.6% _b	7.7% _b
	Tenant or subtenant- low rent	1.4% _a	0.0% ¹	0.0% ¹	0.0% ¹	0.0% ^{1,2}
	Rent free accommodation or as part of salary	17.8% _a	0.0% ¹	0.0% ¹	0.0% ¹	0.0% ¹
30-44	Owner without purchase charges	9.1% _a	0.0% ¹	0.0% ¹	0.0% ¹	0.0% ¹
	Owner with purchase charges	27.0% _a	2.8% _b	1.2% _b	0.9% _b	0.0% ¹
	Tenant or subtenant- rent at market prices	76.0% _a	36.3% _b	29.8% _{b,c}	18.2% _{c,d}	7.7% _d
	Tenant or subtenant- low rent	38.7% _a	3.6% _b	0.0% ¹	0.0% ¹	0.0% ^{1,2}
	Rent free accommodation or as part of salary	13.4% _a	0.0% ¹	0.0% ¹	0.2% _b	0.0% ¹
45-64	Owner without purchase charges	16.1% _a	0.6% _b	1.0% _b	0.8% _b	0.0% ¹
	Owner with purchase charges	37.8% _a	4.3% _b	1.6% _{b,c}	0.4% _c	0.3% _{c,d}
	Tenant or subtenant- rent at market prices	82.5% _a	45.8% _b	18.6% _c	13.3% _c	0.0% ¹
	Tenant or subtenant- low rent	24.7% _a	5.8% _b	0.0% ¹	0.0% ¹	0.0% ¹
	Rent free accommodation or as part of salary	14.1% _a	3.2% _b	0.0% ¹	0.0% ¹	0.0% ¹
65+	Owner without purchase charges	9.3% _a	0.3% _b	0.9% _b	1.0% _b	0.2% _b
	Owner with purchase charges	9.5% _a	0.0% ¹	4.5% _a	0.0% ¹	0.0% ¹
	Tenant or subtenant- rent at market prices	72.5% _a	26.2% _b	21.7% _b	13.8% _b	2.1% _c
	Tenant or subtenant- low rent	20.8% _a	1.8% _b	0.0% ¹	0.0% ¹	0.0% ¹
	Rent free accommodation or as part of salary	11.9% _a	0.0% ¹	0.0% ¹	2.3% _a	0.3% _a

Note: Each subscription letter indicates a year subset of the survey categories, and the proportions of their columns do not differ significantly from each other at the .05 level.

Source: ICOR-EU/SILC microdata, 2017. Authors' own calculations.

Appendix O.

Evolution of public expenditure on housing and collective facilities, in millions of euros, % of Gross Domestic Product (GDP) and % of total public expenditure, between 1995 and 2017

Year	Millions of euros	% GDP	% of total public expenditure
1995	724.5	0.8	1.9
1996	867.7	0.9	2.1
1997	1,149.1	1.1	2.6
1998	1,211.0	1.1	2.6
1999	1,344.7	1.1	2.6
2000	1,465.9	1.1	2.7
2001	1,541.3	1.1	2.6
2002	1,466.5	1.0	2.4
2003	1,260.3	0.9	1.9
2004	1,225.4	0.8	1.7
2005	1,193.9	0.8	1.6
2006	1,353.5	0.8	1.8
2007	1,405.6	0.8	1.8
2008	1,570.8	0.9	1.9
2009	1,645.0	0.9	1.9
2010	1,162.1	0.6	1.2
2011	1,082.0	0.6	1.2
2012	1,060.3	0.6	1.3
2013	1,094.1	0.6	1.3
2014	1,127.6	0.7	1.3
2015	1,123.4	0.6	1.3
2016	965.7	0.5	1.2
2017	1,008.5	0.5	1.1

Source: Eurostat (2019).

