



REDUCING  
HOUSING  
INEQUALITIES

# National report on housing inequalities – Poland

An extract from Deliverable 2.1, “*Contextualized analysis of the housing situation – Papers on (sub)national trends*”, of the ReHousIn project

December 2024

## FOREWORD

This report is an extract from Deliverable 2.1, “*Contextualized analysis of the housing situation – Papers on (sub) national trends*”, of the ReHousIn project. The deliverable examines the housing landscape in nine European countries from 1990 onward: Austria, France, Hungary, Italy, Norway, Poland, Spain, Switzerland, and the United Kingdom.

The full version of the deliverable is available [here](#).

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Author(s)	Szymon Marcińczak, Bartosz Bartosiewicz (UNIŁODZ)
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This document has been prepared in the framework of the European project [ReHousIn](#) – “Contextualized pathways to reduce housing inequalities in the green and digital transition”.

The ReHousIn project aims to spark innovative policy solutions towards inclusionary and quality housing. To achieve this, it investigates the complex relationship between green

transition initiatives and housing inequalities in European urban and rural contexts and develops innovative policy recommendations for better and context-sensitive integration between environmentally sustainable interventions and socially inclusive housing.

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# NATIONAL REPORT ON HOUSING INEQUALITIES – POLAND

## Executive Summary

This report examines Poland's socio-economic conditions, housing market dynamics, and trends in housing inequality and development over the past 30 years. The transition from a centrally planned to a market economy in the 1990s brought challenges such as high unemployment and declining domestic consumption. Following EU accession in 2004, economic stabilization, lower inflation, and expanded access to European markets spurred GDP growth by over 60%. More recently, post-pandemic recovery and geopolitical instability, including the war in Ukraine, have led to inflation and GDP fluctuations.

Poland's population has declined by over 2% in the last decade, with projections indicating a further drop to 35.3 million by 2040. Aging is a pressing concern, with seniors (65+) expected to make up 25% of the population. Economic growth has brought nominal wage increases, doubling in the 1990s and rising 60% between 2019 and 2023, though inflation-adjusted gains remain modest. Poverty rates have declined to 12–14%, and unemployment reached a historic low of 5% in 2023.

Environmental trends highlight progress in Poland's energy transition, with coal reliance falling from 90% in 2000 to 65% by 2023 and renewable energy surpassing 20% of the energy mix. CO<sub>2</sub> emissions have dropped by 75% over two decades, but Poland remains one of the EU's largest emitters. Rising energy consumption and inflation have strained household budgets further, underscoring the importance of energy efficiency in housing development.

Poland's housing stock has grown by 35% over three decades, now totaling 16 million dwellings. Recent construction has focused on improving housing quality, aided by rising incomes and accessible mortgages. Over 80% of households live in privately owned homes, with mortgages financing approximately 10% of properties. Municipal housing, now only 5% of the market, is diminishing due to privatization. Housing prices have surged, with primary market prices up 50% since 2015 and secondary market prices nearly doubling. Rental prices have risen by 60%, driven by inflation, refugee demand, and reduced housing loan accessibility. Affordability has improved slightly in the primary market but has worsened in the secondary market due to rapid price increases. Persistent housing shortages, price inflation, and limited government intervention continue to hinder market accessibility.

Housing quality has improved markedly since EU accession, particularly in thermal comfort and structural integrity. Overcrowding rates have dropped from over 40% in the 2000s to 30% in the 2010s, thanks to increased housing production and population decline. However, urban-rural disparities persist, with rural areas experiencing inferior housing standards, despite better conditions in noise and sunlight exposure. Neighborhood quality has improved, with reduced pollution and crime rates, though urban areas face higher risks of environmental hazards compared to rural areas.

Housing costs remain a significant burden, with over 90% of households perceiving them as such since 2010. Small households, students, retirees, and immigrants face the highest burdens, while those with higher education experience less strain. Detached houses are more affordable than apartments, while rental housing, especially unsubsidized, is the least affordable option. Ownership dominates, with 80% of residents in owner-occupied homes due to mass privatization in the 1990s. Territorial disparities persist, with rural eastern Poland enjoying better affordability than wealthier urbanized western regions, although the gap has narrowed since 2005. Urbanization patterns reveal a growing prevalence of apartments in intermediate urban areas and a predominance of detached houses in rural regions.

In conclusion, Poland's housing landscape reflects significant progress alongside persistent challenges. Improvements in quality and neighborhood conditions are tempered by affordability issues, demographic decline, and environmental pressures. Strategic efforts to address housing shortages, promote energy-efficient construction, and adapt to demographic changes will be vital to ensuring sustainable growth and improved living conditions for all.

## INTRODUCTION

Poland, officially the Republic of Poland, is a country in Central Eastern Europe. It extends from the Baltic Sea in the north to the Sudetes and Carpathian Mountains in the south. Poland shares land borders with Lithuania and Russia to the northeast, Belarus and Ukraine to the east, Slovakia and the Czech Republic to the south, and Germany to the west. The territory is characterized by a varied landscape, mainly relatively flat lowlands and highlands, with settlements spread rather evenly across the country. Importantly, Poland ranks very high among European countries with a highly polycentric settlement structure.

Poland is the 5<sup>th</sup> most populous member state of the European Union (EU), with less than 38 million people, and the fifth largest EU country by land area, covering a combined area of 312,696 km<sup>2</sup>. The capital and largest city is Warsaw (approximately 1.9 million people); other major urban centres include Kraków, Wrocław, Łódź, Poznań, and Gdańsk. Notably, with more than 3 million people, the most populous urban area in Poland is the Upper Silesia conurbation.

Poland was a socialist country for almost 50 years (from 1944 to 1989). This had a substantial impact on the path of economic development in the 21<sup>st</sup> century. After the demise of socialism in 1989, Poland had a generally obsolete industrial structure, undeveloped road infrastructure, and, most importantly, severe housing shortages. Poland joined the EU in 2004, which is often perceived as the symbolic end of the post-socialist transition. Importantly, accession to the EU boosted economic growth, institutional development (particularly in the financial sector), and infrastructure development. Poland is a semi-presidential republic with a bicameral legislature comprising the Sejm and the Senate. It has a unitary system of government and is composed of 16 voivodeships.

# 1 SOCIO-ECONOMIC AND HOUSING CONDITIONS

## 1.1 Demography, Economy, Environment and Society

### 1.1.1 Macroeconomic Trends at the National Levels

The development trajectory of the Polish economy over the past 30 years can be divided into three distinct periods. The first period corresponds to the transition from a centrally planned economy to a market economy, spanning the 1990s and early 2000s. The second period encompasses the years from Poland's accession to the European Union (EU) in 2004 until 2020, which marked the onset of the COVID-19 pandemic. The third period, the current phase, began in 2021. Since 1995, Poland has demonstrated continuous GDP growth, with the exception of 2020 due to the pandemic, despite varied domestic and international economic conditions across these periods. The initial phase of rapid economic growth concluded in the early 21st century, disrupted by global economic crises and domestic challenges, including political pressures stemming from high social expenditures and market-related issues, such as decreasing domestic consumption and investment alongside rising unemployment. Cumulative GDP growth for the period from 1996 to 2003 was 33.6% (Figure PL1).

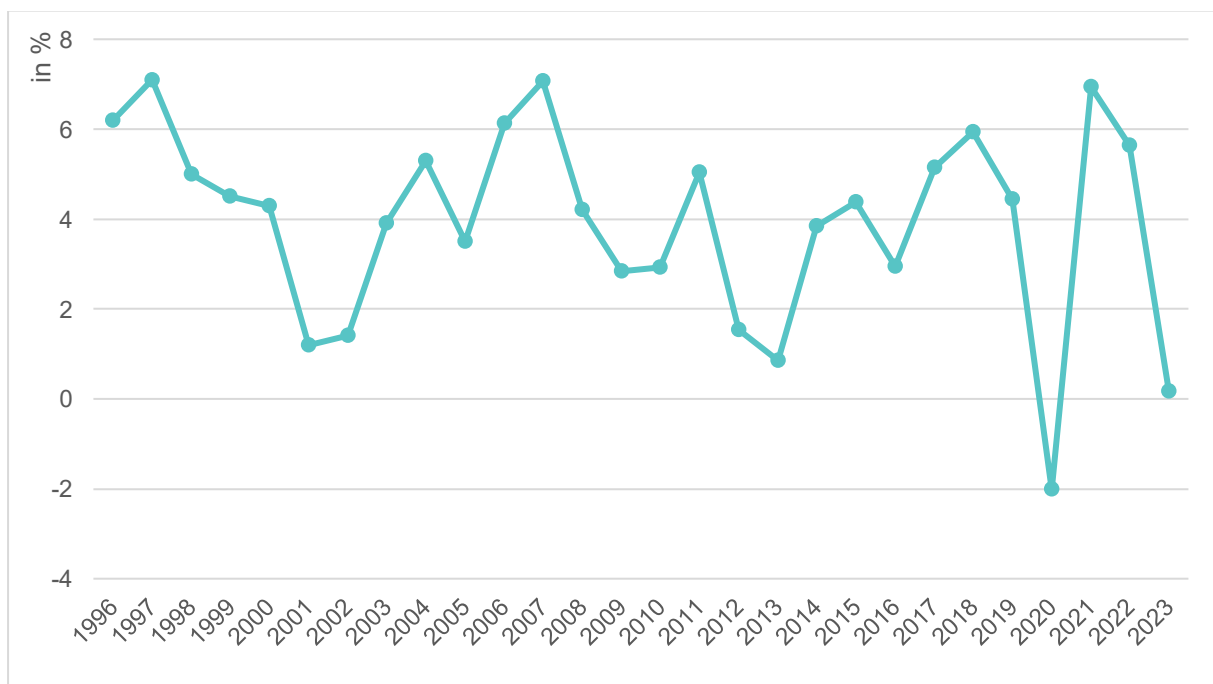


Figure PL1: GDP growth dynamics in Poland (1995–2023). Source: own elaboration based on Statistics Poland

In the subsequent period, Poland's entry into the EU acted as the primary catalyst for economic expansion, offering unrestricted access to European markets and, over time, access to the EU labour market. This phase saw monetary stabilization, low inflation (occasionally leading to deflation, with cumulative inflation at 30%), and declining interest rates (from 5.2% in 2005 to 1.7% in 2019). In particular, the latter factor played a significant role in the housing market, as low interest rates contributed to increased accessibility of mortgage loans, which during this

period financed the purchase of approximately half of all housing units (Raport roczny ...). (Figure PL2). From 2004 to 2019, cumulative GDP growth exceeded 60%, more than double the EU average. During this period, the share of public sector debt in GDP increased by 10%, reaching 61.7% in 2019, although fluctuations occurred throughout the period.

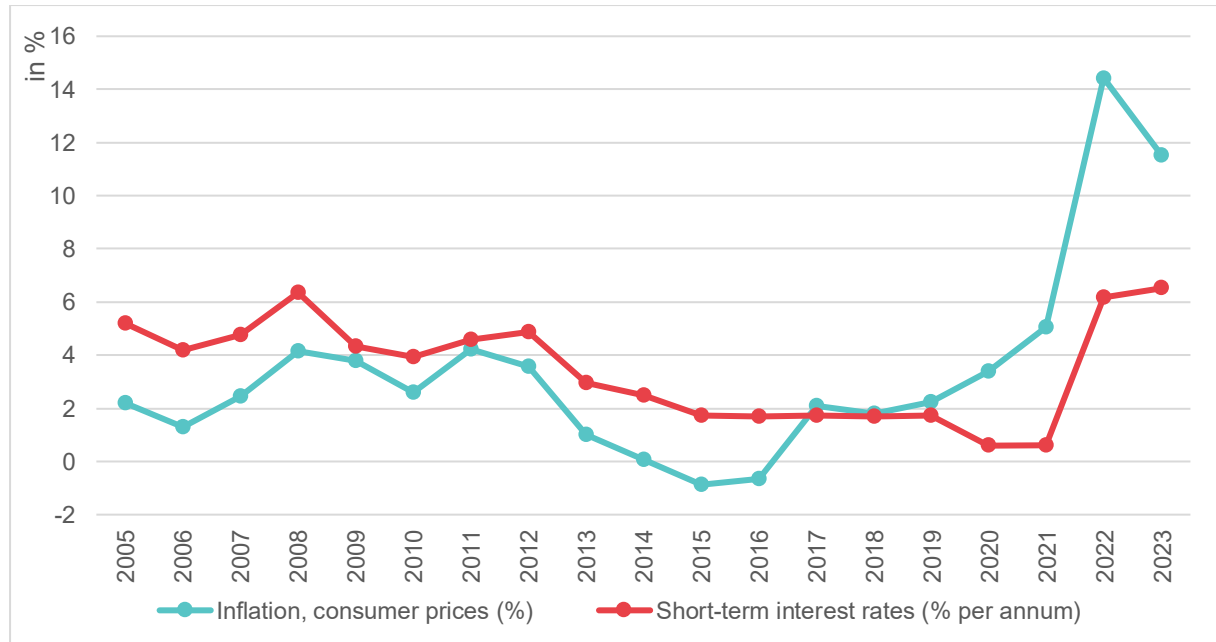


Figure PL2: Inflation and short-term interest rates (2005-2023) Source: own elaboration based on Statistics Poland

The current period has introduced new economic challenges due to the COVID-19 pandemic and geopolitical instability, including the Russian invasion of Ukraine, which has driven significant increases in energy prices. These factors have contributed to rising inflation, with cumulative inflation reaching 31% over the past three years (2021–2023). This inflationary pressure has led to an increase in unemployment, consequently reducing domestic consumption. However, GDP growth is projected at 3–3.5% for 2024, with 2023 being an exception in terms of GDP fluctuations.

### 1.1.2 Socio-economic and Demographic Trends

Poland has a population of approximately 37.6 million (2023). Since the mid-1990s, this population has been in gradual decline, with a decrease of over 2%—roughly 900,000 people - in the past decade alone (Figure PL3).

Population loss, however, is unevenly distributed. The regions at the greatest risk of depopulation are rural and peripheral areas, particularly those in the eastern, northeastern, and northwestern parts of the country. This trend also affects urban centres, including major post-industrial cities. By contrast, population growth is mainly concentrated in suburban areas surrounding large and medium-sized cities, as well as in the regions of Pomerania and Lesser Poland, traditionally associated with higher birth rates. Projections suggest that Poland's population will decrease to 35.3 million by 2040, with individuals over the age of 65 comprising 25% of the total population (Figure PL3).



Unfavourable demographic trends are largely influenced by natural population movement, which remained near zero during the first 15 years of the 21st century but has recently turned negative, primarily due to a sharp decline in birth rates. Between 2017 and 2023, the number of births dropped from 400,000 to 272,000, and the fertility rate fell from nearly 1.5 to 1.26, marking the lowest rate recorded in the 21st century. This trend aligns with an increase in the average age at which women have their first child, which rose by six years—from 23 to 29—between 1990 and 2023. Additionally, the proportion of foreign-born women giving birth in Poland has grown significantly, from 0.5% in 2015 to 5.5% in 2022, with Ukrainian women accounting for 80% of this group in that year. The death rate also increased modestly from 2017 to 2023, with a notable spike during the COVID-19 pandemic, resulting in an excess of approximately 50,000 deaths over the baseline of 400,000 in 2017.

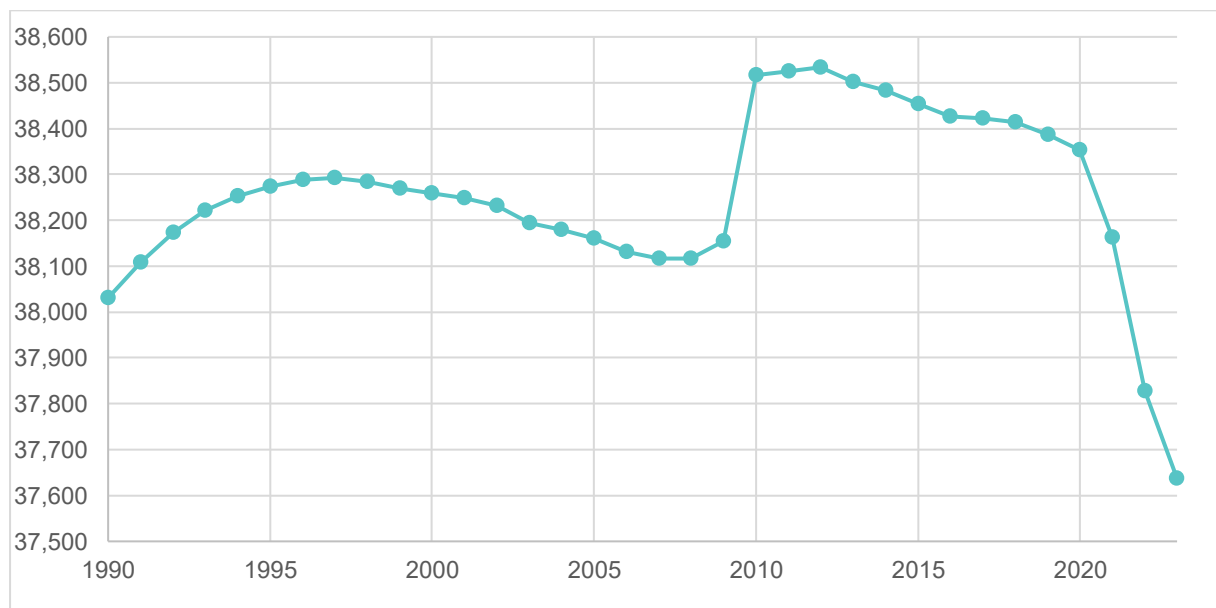


Figure PL3: Total population (1990-2023). Source: own elaboration based on Statistics Poland

*NOTE: The significant change in population numbers between 2009 and 2010, as well as between 2019 and 2020, is the result of a change in the population measurement methodology adopted by the Statistics Poland*

These demographic shifts have had a marked impact on the age structure of Poland's population. Since 1990, the proportion of individuals aged over 65 has doubled, rising from 10.1% to 19.9% in 2023, with the most significant increase occurring over the past decade (from 15% in 2014). Concurrently, the proportion of those under 14 years of age has declined from 24.9% to 15% (Figure PL4).

Since the 1990s, Poland has experienced a negative net migration rate, with the largest outflows occurring shortly after the country's accession to the European Union (EU) in the years 2005–2007. However, since 2015, the migration balance has turned positive, primarily due to an influx of Ukrainian and Belarusian nationals. Over this period, the number of foreigners residing in Poland has increased fivefold, reaching approximately 450,000 in 2023, according to Statistics Poland. This figure excludes around 950,000 Ukrainian refugees (UNHCR 2024). Outflows of foreigners from Poland are considerably smaller, amounting to 73,000 in 2021, reflecting a 25% increase over the previous decade (Figure PL5).

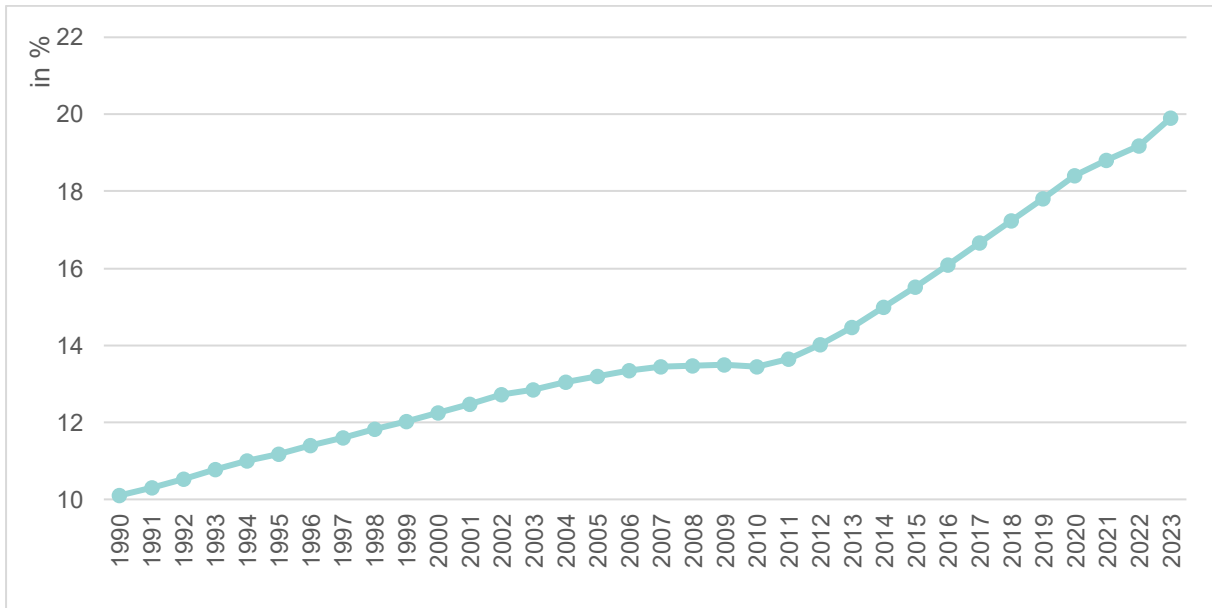


Figure PL4: Share of population 65 years or over (1990-2023). Source: own elaboration based on Statistics Poland

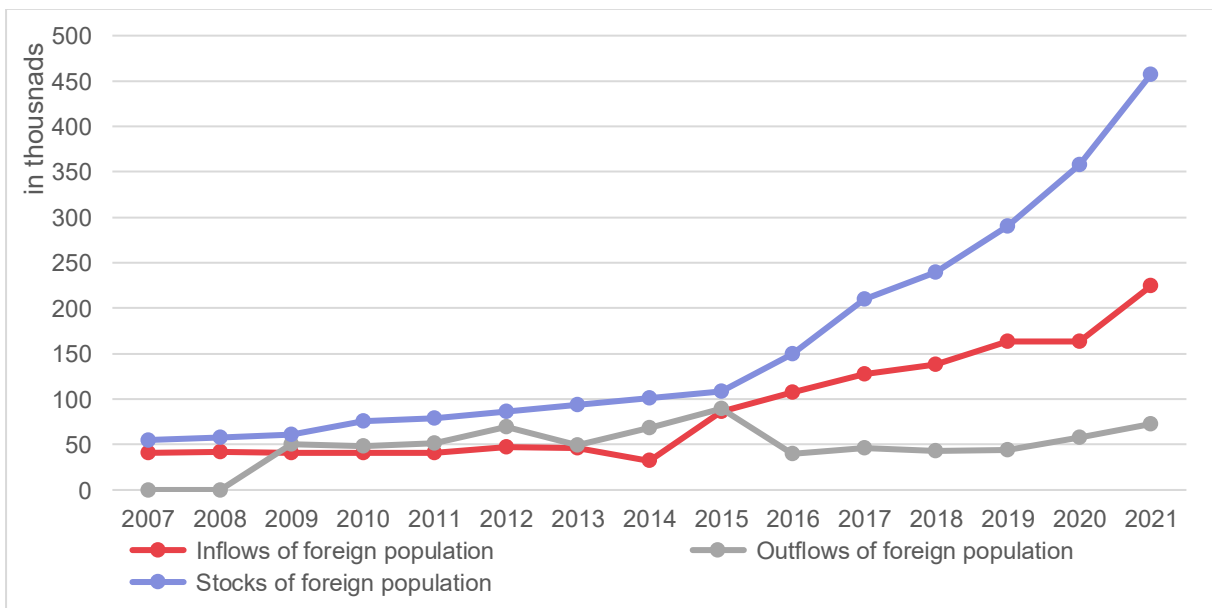


Figure PL5: Foreign population (2007-2021). Source: own elaboration based on Statistics Poland

Poland’s socio-economic situation over the past 30 years has been shaped by dynamic shifts driven by several key factors: the successful transition from a centrally planned economy to a market economy, EU accession, and strategic utilization of global economic growth, particularly during the second decade of the 21st century. Nominal wages have shown continuous growth since the 1990s, with the most rapid increases observed in the mid-1990s (doubling between 1995 and 1999) and again in the past five years, with wages rising by 60% from 2019 to 2023 (Figure PL6). However, when adjusted for inflation, the real growth rate since 2019 is approximately half that of the nominal rate. Rising income levels have been accompanied by a decline in poverty rates—decreasing by 20% over the past two decades—

currently affecting 12% to 14% of the population, depending on the methodology used (OECD and Statistics Poland, respectively). Similarly, while social assistance spending as a proportion of GDP has decreased from 19% to 16.9% over the past 30 years, actual spending has consistently increased when GDP growth is considered.

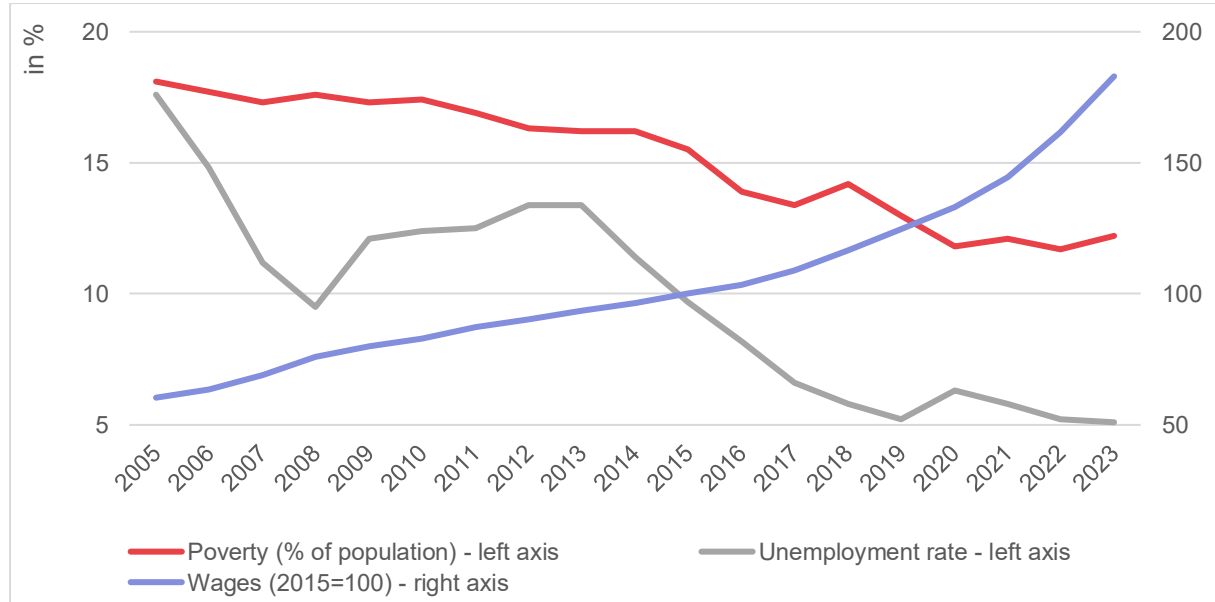


Figure PL6: Poverty index, unemployment rate and wages (2005-2023). Source: own elaboration based on Statistics Poland

Socio-economic trends are also reflected in changes in the unemployment rate, which has been influenced by both domestic economic conditions and global market fluctuations. Despite a general decline in unemployment over the past three decades—reaching a historic low of 5% in 2023—temporary increases in unemployment have coincided with global economic crises.

### 1.1.3 Environmental and Energy Trends

Poland’s energy sector and environmental protection efforts follow distinct trends compared to most EU countries. At the start of the 21st century, over 90% of Poland’s electricity and heat production relied on hard coal and lignite. Environmental standards for pollutant emissions were relatively lenient, and regulatory systems operated on a limited scale. Over the past 25 years, however, there has been a significant shift in the energy mix, with coal’s role diminishing and alternative energy sources increasing. By 2023, coal’s share in energy production fell to a historic low of 65%, while renewable sources accounted for over 20% of the energy mix. This transition contributed to a 75% reduction in CO<sub>2</sub> emissions over the past two decades, with current emissions levels at 114.8 million tons of CO<sub>2</sub> equivalent. Despite this progress, Poland remains one of the largest CO<sub>2</sub> emitters in the EU, currently accounting for 11.5% of the EU’s total emissions. Although this represents a decrease from previous years, Poland remains among the EU’s leading emitters. Greenhouse gas emissions have also declined, dropping by 15% over the last 15 years to 900 tons per capita by the end of 2022—a figure that remains 20% above the EU average (Eurostat Office data).

Within household energy consumption, heating constitutes the largest share (62%), followed by water heating (18%). Recent years have seen increased energy usage for water heating and cooking, each rising by 20%. Since 2015, total household energy consumption has grown by 10%, although this trend has fluctuated over time (Figure PL7). Increased energy consumption aligns with rising energy prices. Electricity prices, for example, have risen by more than 20% over the past 15 years, with the sharpest increase occurring in the most recent year as the Polish government removed some price caps. Natural gas prices have followed a similar upward trend, though they have exhibited greater volatility due to fluctuations in international markets. However, electricity prices have been partially insulated from global market shifts due to Poland’s protective state policies in this sector (Figure PL8).

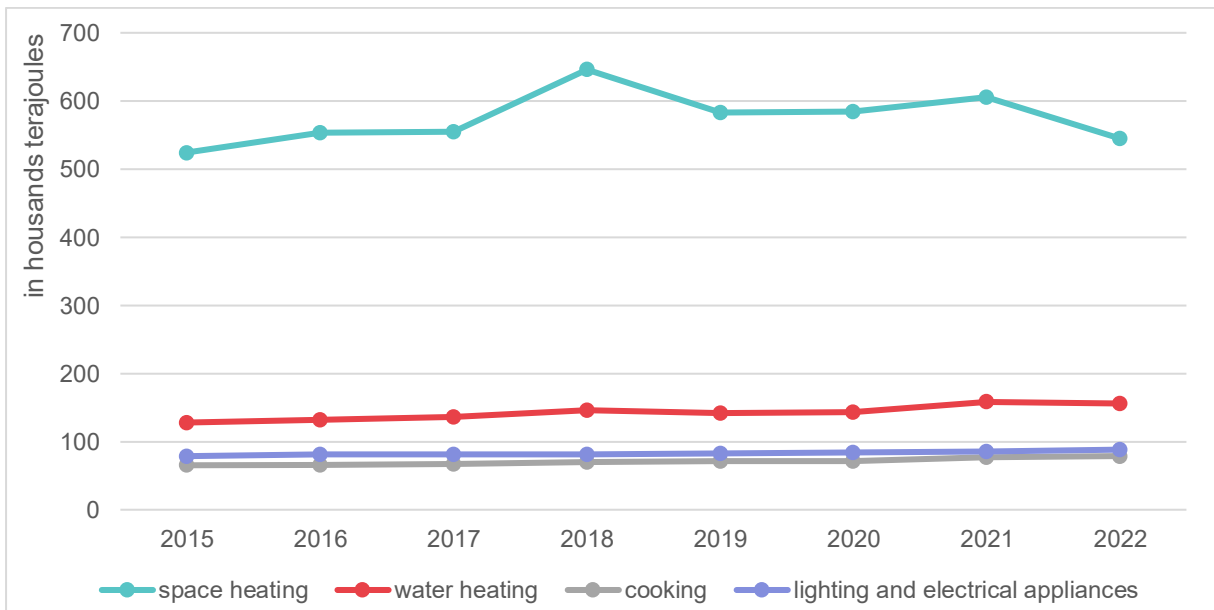


Figure PL7: Final energy consumption in households (2015-2022). Source: own elaboration based on Eurostat Office data

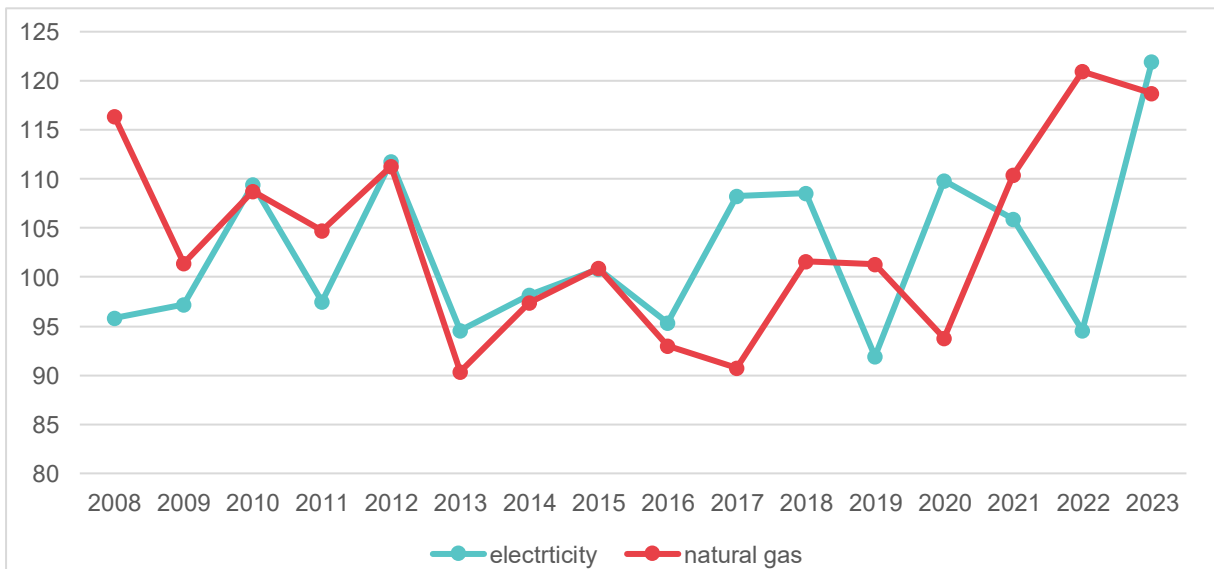


Figure PL8: Energy prices changes for households (2008-2023) (2007=100). Source: own elaboration based on Eurostat Office data

## 1.2 Housing Sector

### 1.2.1 Housing Stock Development and Tenure Structure

Poland currently has nearly 16 million housing units, reflecting a growth of over 35% in housing stock over the past 30 years. This growth, although steady, became more pronounced within the last five years (Figure PL9). Since 1995, the number of newly built housing units has been gradually rising, with the total number tripling from 1995 to 2023. Prior to 2015, annual housing investments fluctuated; however, after 2015, a stable upward trend emerged, with the annual number of newly built units increasing by more than 50%. Specifically, from 1995 to 2005, 930,000 new units were constructed, followed by 1.4 million in the subsequent decade, and nearly 1.8 million in the most recent period.

Several factors have driven the dynamic growth in housing construction. Primarily, Poland's favourable economic conditions—largely unaffected by global economic crises—have played a key role, alongside rising personal wealth and improved access to mortgage loans. Additionally, the relatively low quality of existing housing conditions (discussed in the following chapter) has fuelled demand for newer housing. In recent years, government policies, such as social benefits (e.g., the 500+ program providing financial support for families with children) and programs offering preferential mortgage loans for first-time homebuyers (e.g., “Startup Loan”), have further supported housing demand. Additionally, rising inflation over the last three to four years has spurred new housing investments, as real estate has become a secure investment option for both corporations and individuals.

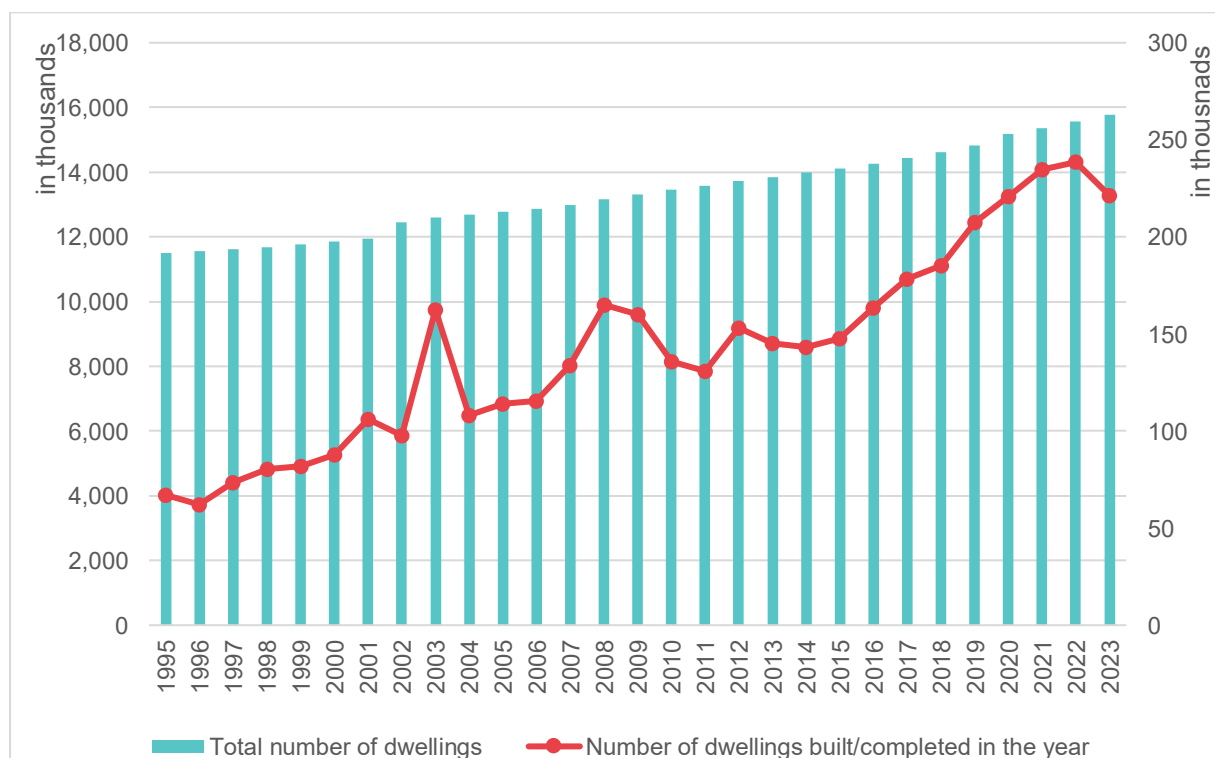


Figure PL9: Total number of dwellings and number of dwellings built/completed (1995-2023). Source: own elaboration based on Statistics Poland

The increase in new construction has shifted the age composition of Poland’s housing stock. Twenty years ago, housing units constructed before the 1990s made up 80% of the housing stock, a share that has since declined to under 60% (Figure PL10).

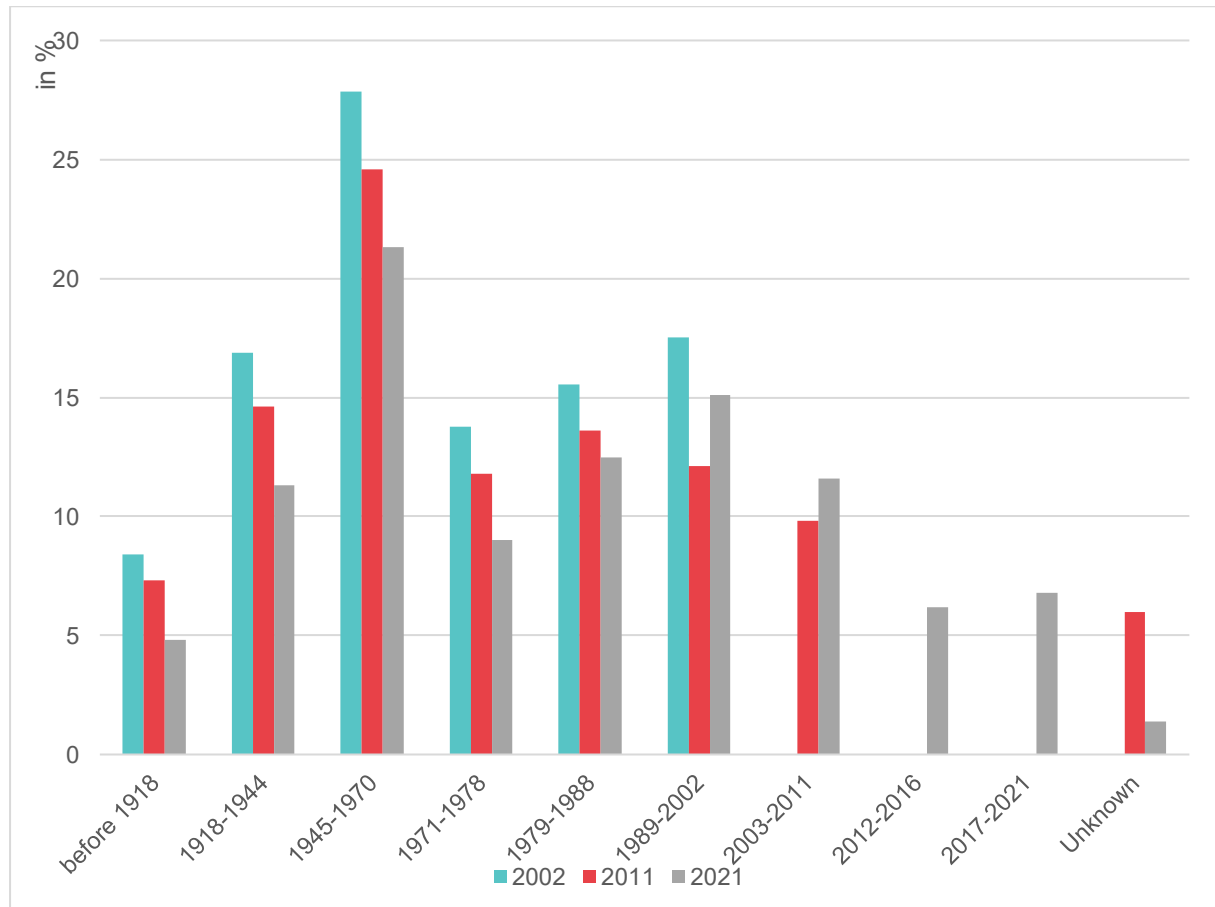


Figure PL10: Residential buildings by year of construction (% of total residential building stock).  
Source: own elaboration based on Statistics Poland

Housing ownership in Poland is predominantly private (Figure PL11). Individual owners hold 80% of the housing stock as of 2020, a figure that has increased by 10 percentage points since 2009. Housing cooperatives are the second-largest ownership group, though their share has declined due to privatization; these cooperatives primarily own apartment blocks built during the 1960s and 1970s. Newly formed cooperatives are relatively rare. Local municipalities, holding approximately 5% of the housing stock, are the third-largest group of owners; their share has similarly declined due to privatization. Municipal housing primarily comprises older buildings, often pre-war structures that remained state-owned until the 1990s, especially in urban areas where municipalities inherited nationalized properties after World War II.

Other ownership groups hold minor shares. A small segment of housing remains under workplace ownership, a vestige of the previous political system, with properties owned by state-run enterprises like mines and hospitals, where employees often reside.

This ownership structure is reflected in the tenure types of households. Over 80% of Polish households live in privately owned units, with 10% of these homes mortgaged. Approximately 5% of households rent on the private market, while the remainder reside in municipal or cooperative housing (Table PL12).



Figure PL11: Dwellings by type of owner (%). Source: own elaboration based on Statistics Poland

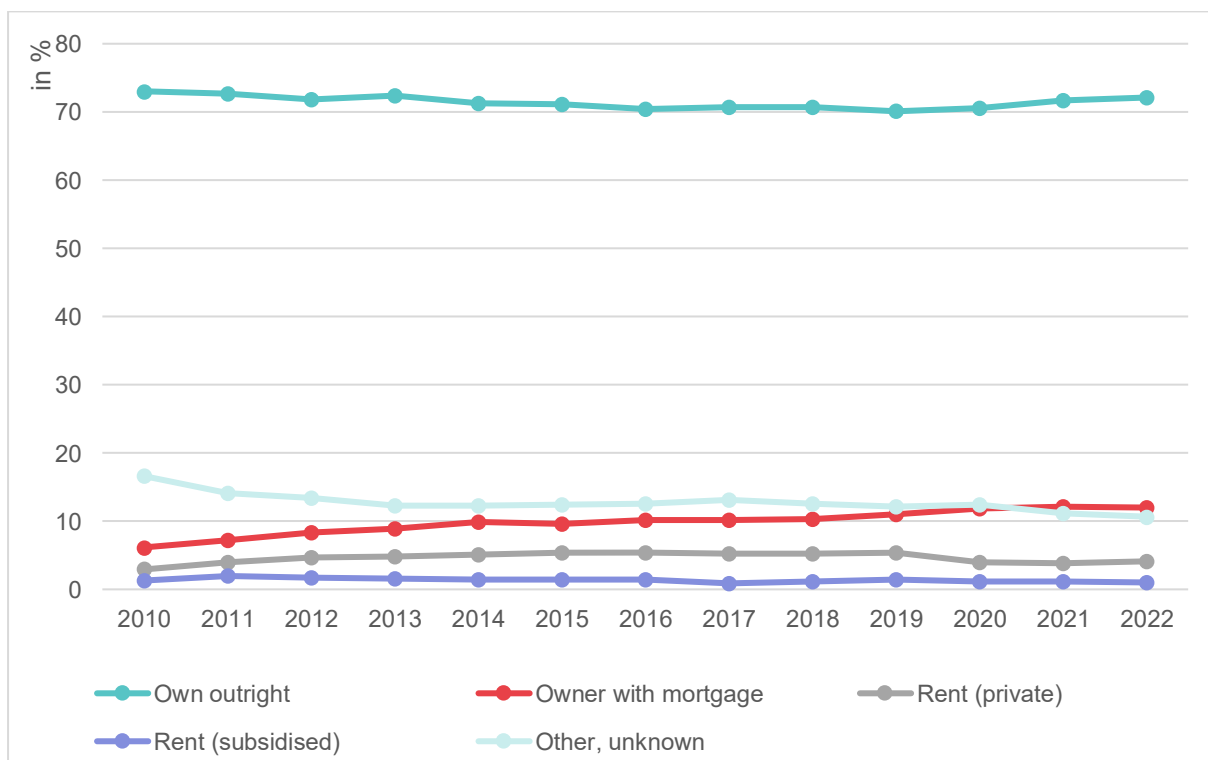


Figure PL12: Share of households in different tenure types (%). Source: own elaboration based on Statistics Poland

## 1.2.2 Housing Expenses

The Polish housing market is characterized by considerable dynamism and continuous evolution, with housing prices steadily increasing for over a decade. However, the primary and secondary housing markets display distinct pricing trends. In the primary market, the average transaction price per square meter has risen by 50% since 2015 (Figure PL13), with the most substantial increases observed in smaller apartments (up to 40 m<sup>2</sup>), where prices now exceed €2,100 per square meter. Larger apartments are approximately 10% less expensive. Prices also vary significantly by location, with the highest costs in cities such as Warsaw, Kraków, Wrocław, and Gdańsk, followed by other large cities, their suburbs, and popular tourist destinations.

The secondary market has exhibited even stronger price growth, with the average price per square meter nearly doubling. Currently, prices in the secondary market closely mirror those in the primary market, differing by no more than 10% across various apartment sizes (Figure PL14). The spatial distribution of prices remains consistent between the primary and secondary markets.

Housing affordability presents a distinct trend across these markets. In the primary market, affordability has generally improved since 2010 and has stabilized over the past five to six years. In contrast, affordability in the secondary market improved until 2017, after which it began to decline—a shift likely driven by the more rapid price increases in this segment.

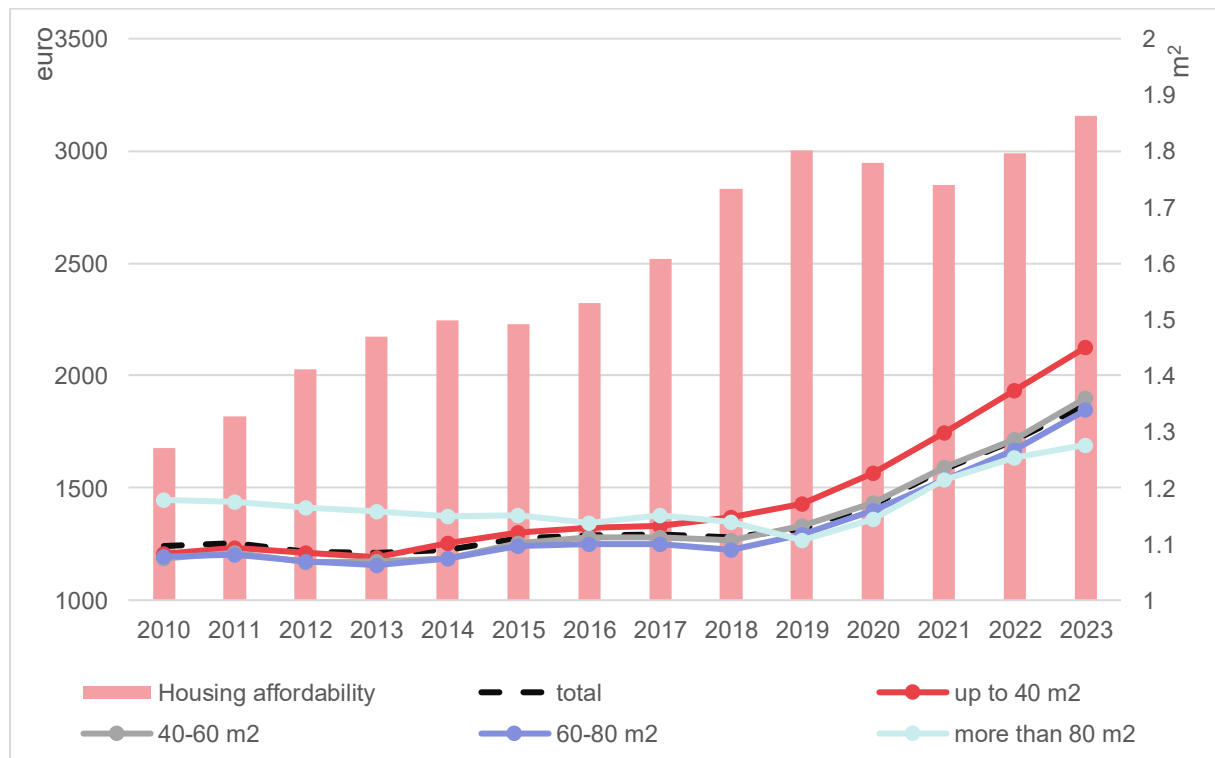


Figure PL13: Transactional price per square meter of an apartment on the primary market depending on the apartment size (in euro) and housing affordability (number of square meters of an apartment that can be bought with the average monthly household income) (2010-2023). Source: own elaboration based on Central Statistical Office data



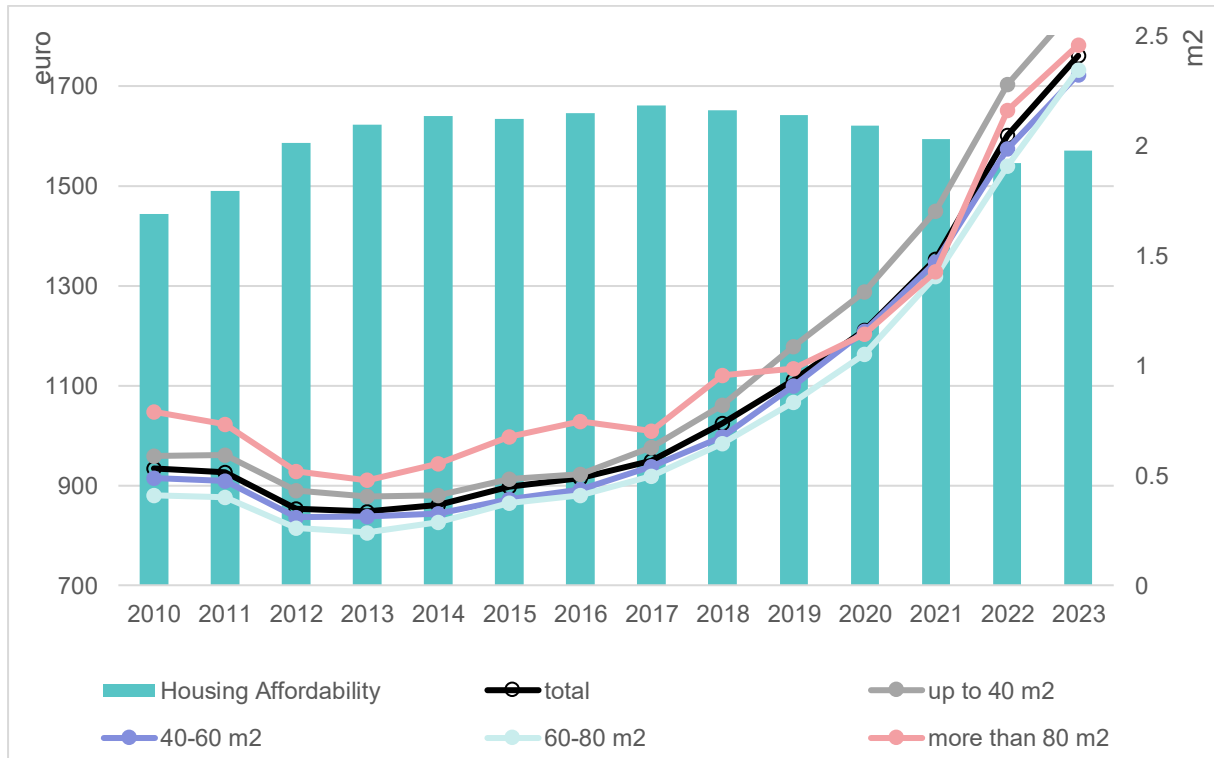


Figure PL14: Transactional price per square meter of an apartment on the secondary market depending on the apartment size (in euro) and housing affordability (number of square meters of an apartment that can be bought with the average monthly household income) (2010-2023). Source: own elaboration based on Central Statistical Office data

The factors driving housing prices in Poland largely parallel those influencing construction market dynamics. Persistent shortages from the socialist era, favourable economic conditions, and rising affluence among Poles have collectively increased housing demand. Additionally, the influx of middle- and upper-middle-class Ukrainian refugees, many of whom seek to purchase homes, has further impacted demand and pricing. Price growth is also fuelled by post-pandemic inflation and an increased focus on real estate as a form of investment, a trend often described as "housing financialization." Government initiatives, such as preferential loan programs, have further influenced housing prices.

As housing prices rise, rental prices have also surged. However, comprehensive and dynamic statistics on rental prices are limited. Based on the available housing rent price index (Figure PL15), rental prices have increased by approximately 60% since 2015, with a notable surge in the last two years. Contributing factors include the heightened rental demand from Ukrainian refugees, limited access to housing loans, and rising interest rates, which have reduced creditworthiness, particularly among younger Poles.

Despite the changing housing market, state intervention remains limited. Government expenditure on housing has declined significantly, with spending on housing construction alone dropping from 1.7-1.8% of total government expenditure at the start of the 21st century to 0.6% in 2022.

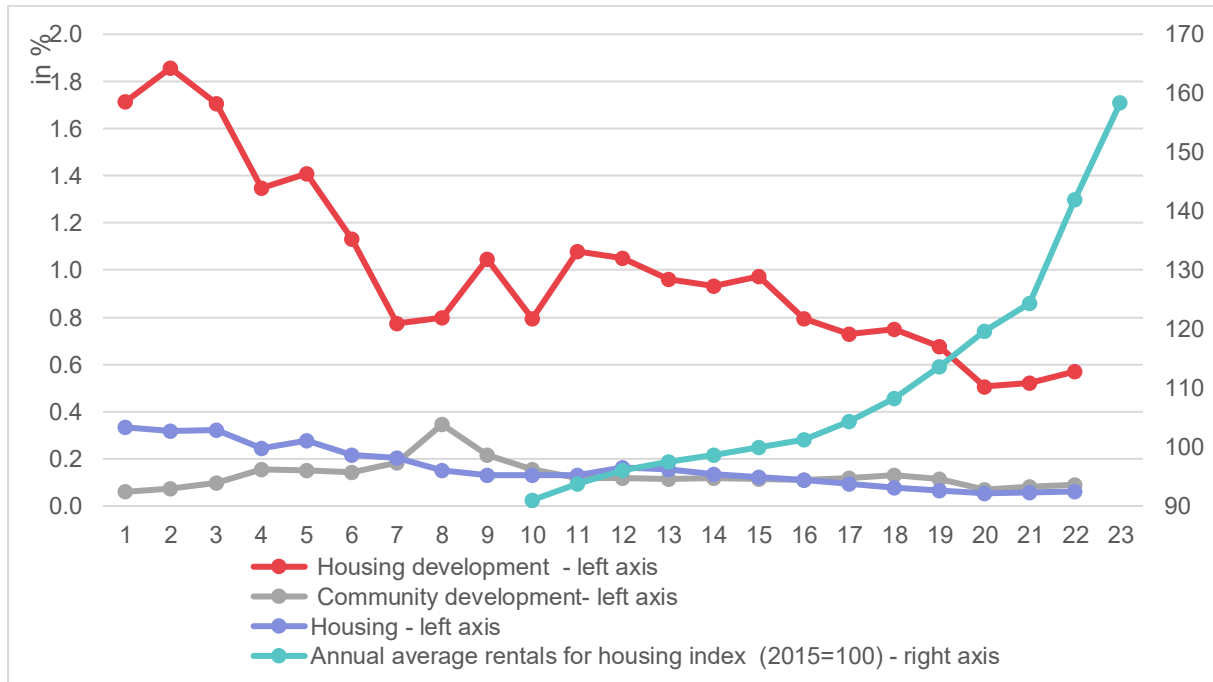


Figure PL15: Government Expenditures on housing (% of total expenses) and actual rentals for housing index (2015 = 100). Source: own elaboration based on OECD data

## 2 MAJOR TRENDS IN HOUSING INEQUALITY DEVELOPMENT IN POLAND IN THE 21<sup>ST</sup> CENTURY

### 2.1 Housing and Neighbourhood Quality

The quality of housing can be assessed in various ways, with one of the most significant indicators being whether individuals live in overcrowded homes. In Poland, overcrowding rates were highest during the 2000s, with more than 40% of residents living in overcrowded apartments or homes (Figure PL16). The situation improved during the 2010s, as the national overcrowding rate declined by more than 10%. This trend can be attributed, on the one hand, to the overall population decline in Poland during the 2010s and, on the other hand, to a marked increase in housing production after 2010. Nevertheless, the overall rate of overcrowding remains relatively high, with approximately 30% of the population still residing in overcrowded apartments. This persistence suggests that the new housing supply has not been sufficient to fully address the housing shortages originating in the socialist era.

The issue of overcrowding in Poland is closely linked to the degree of urbanization. Interestingly, there is little difference in overcrowding rates between densely populated and sparsely populated areas. This finding is somewhat counterintuitive, as a substantial share of housing in medium-sized and large cities in Poland consists of panel-block apartments constructed during the socialist era, which are well known for their small sizes. Intermediate areas, in terms of urbanization, consistently exhibit the lowest rates of housing overcrowding. Notably, small and medium-sized cities—often classified as intermediate areas—frequently belong to the category of shrinking cities in Poland.

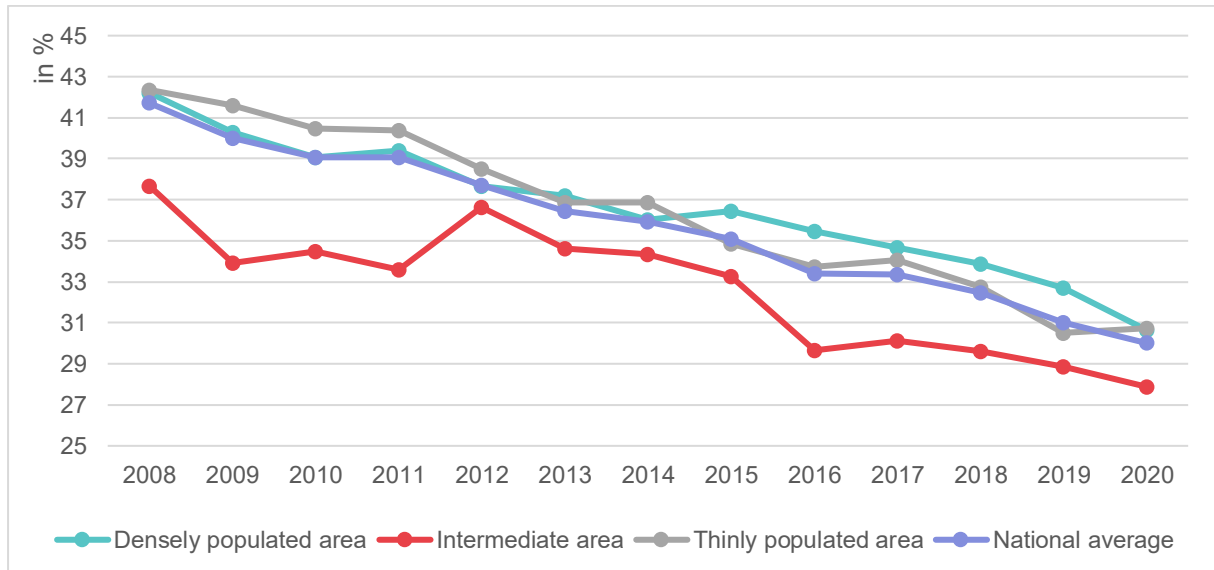


Figure PL16: Share of people living in overcrowded homes (in %). Source: own elaboration based on EU-SILC database

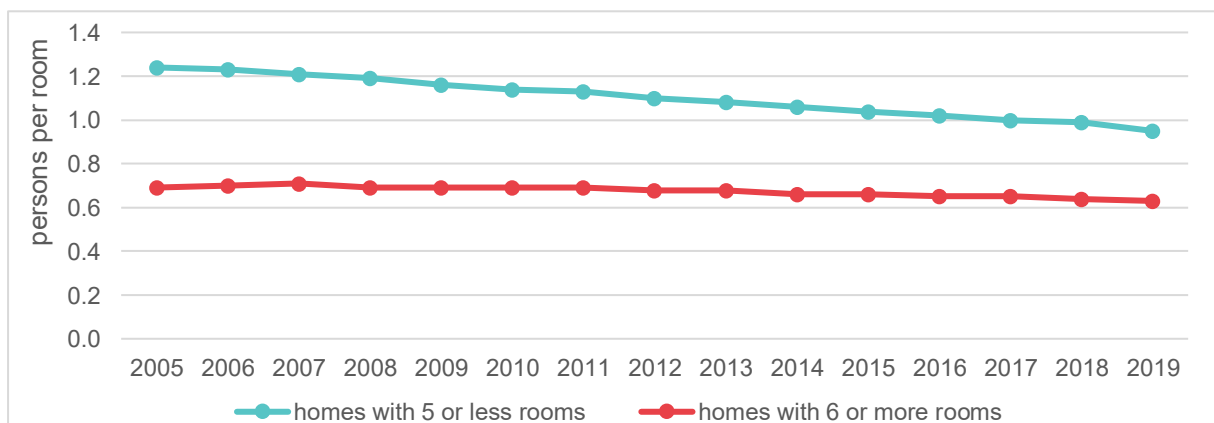


Figure PL17: Number of persons per room. Source: own elaboration based on EU-SILC database

The number of persons per room is another indicator of housing overcrowding (Figure PL17). This measure reveals a very similar trend to that presented in Figure PL16. More specifically, the number of persons per room has consistently decreased since 2005. This process has been more prominent in the group of smaller apartments/houses (with five or less rooms). Importantly, in this category of housing stock, the indicator reached the value of one person per room no sooner than in 2017.

The quality of the housing - such as the ability to keep the home warm, the lack of indoor flushing toilet, shower and bath, and a leaking roof, damp walls, floors or foundation, or rot in window frames or floor – is an equally important aspect of housing stock, which substantially impacts the quality of life. Assuming that the great majority of apartments and houses in Poland (more than 90%) had access to flushing toilet and/or bathroom, we decided to focus on the other aspects of housing quality. Figure PL18 illustrates changes in housing quality in Poland. The first thing to notice is that the quality of housing greatly improved in the late 2000s (during the first years after the Poland’s accession to the EU). The improvements were especially manifested in the declining share of homes with a leaking roof, damp walls, floors or

foundation, or rot in window frames or floor, and in the growing number of households who are enjoying thermal comfort.

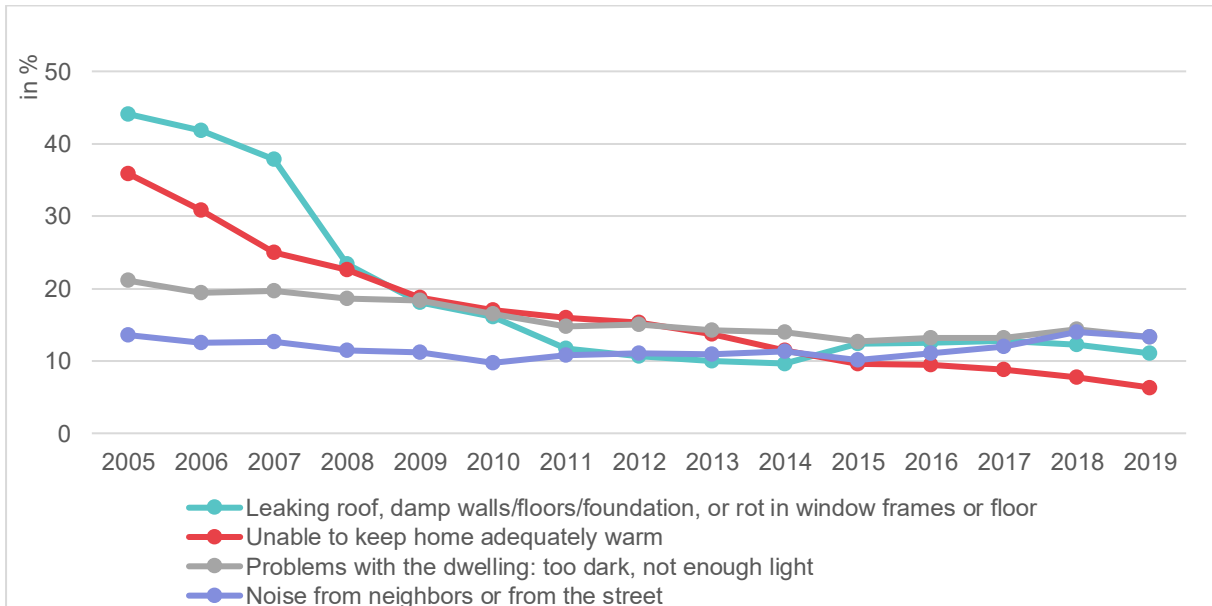


Figure PL18: Housing quality in Poland (2005-2019). Source: own elaboration based on EU-SILC database

The quality of housing in Poland is highly sensitive to the degree of urbanization (Figures PL19-PL21). Specifically, housing quality tends to decline as the level of urbanization decreases—rural (sparsely populated) areas exhibit poorer housing standards compared to densely populated urban areas. Notably, however, the disparity in thermal comfort between rural areas and highly urbanized regions virtually disappeared by 2019. Finally, the rural housing stock appears to outperform that of densely populated areas in aspects such as exposure to excessive noise and lack of sunlight.

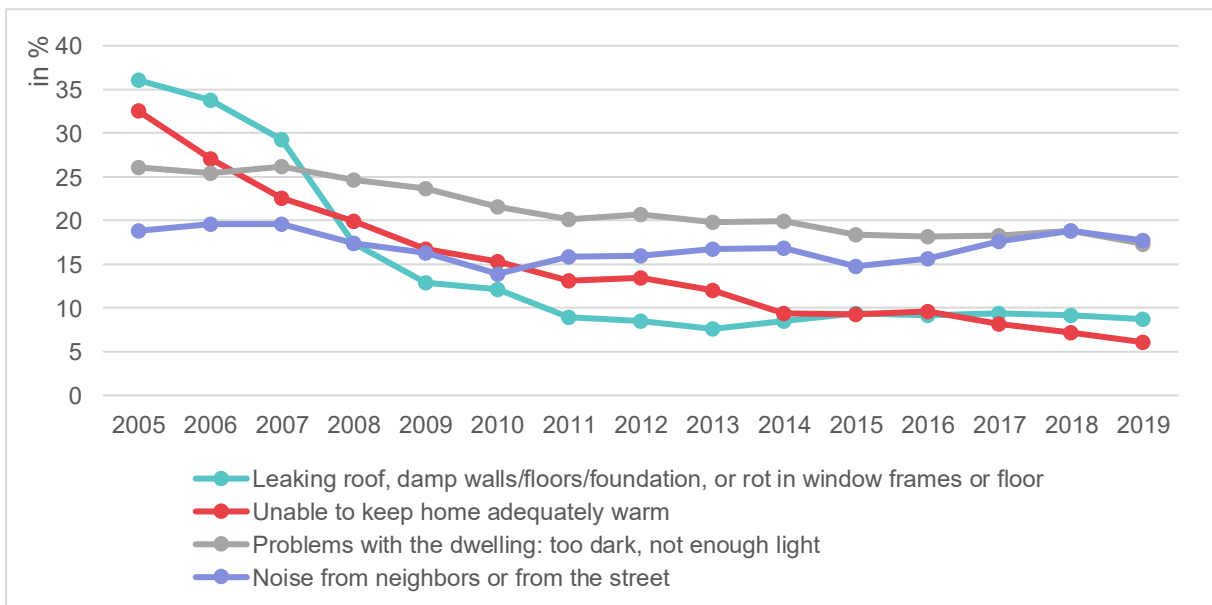


Figure PL19: Housing quality in densely populated areas in Poland (2005-2019). Source: own elaboration based on EU-SILC database

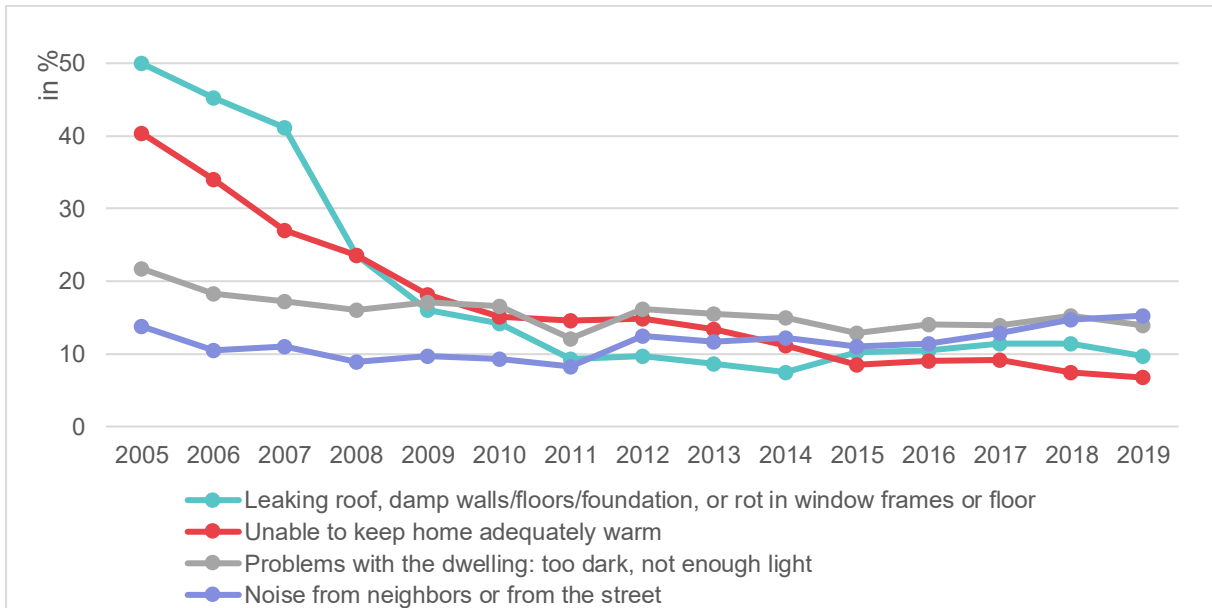


Figure PL20: Housing quality in intermediate areas in Poland (2005-2019). Source: own elaboration based on EU-SILC database

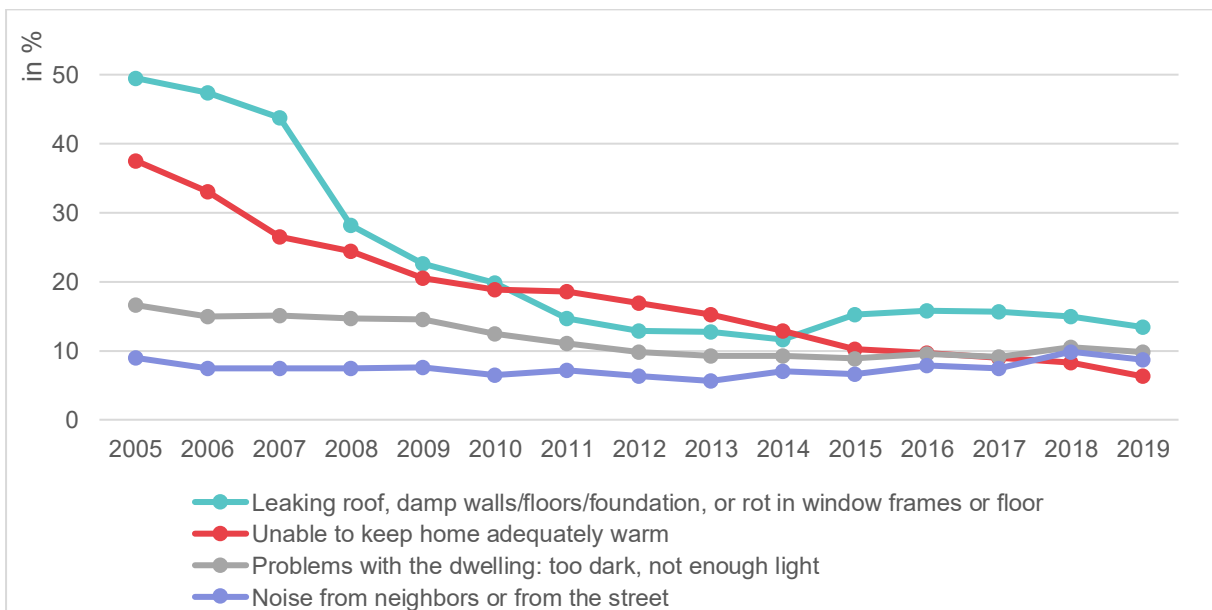


Figure PL21: Housing quality in thinly populated areas in Poland (2005-2019). Source: own elaboration based on EU-SILC database

The quality of a neighborhood, particularly elements such as exposure to environmental hazards or crime, violence, and vandalism, significantly affects one's quality of life. Similar to the trends observed in housing quality, the overall quality of neighborhoods has generally improved over the past 15 years (Figure PL22). Unsurprisingly, the issue of overexposure to environmental and social hazards is more pronounced in densely populated areas (Figures PL23-PL25). While the population in densely populated areas faces higher levels of crime, violence, and vandalism compared to those in rural areas, environmental issues tend to be more prevalent in sparsely populated regions, contributing to lower neighborhood quality. The

intermediate areas, in terms of urbanization, exhibit a trend similar to that observed in rural areas.

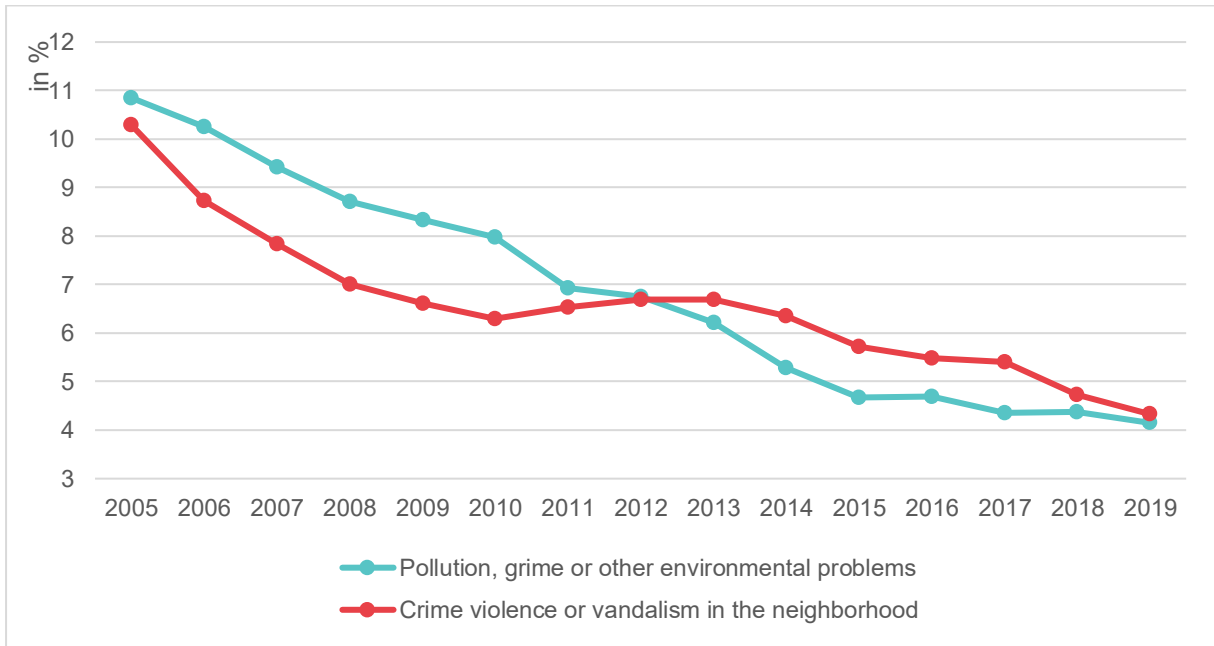


Figure PL22: Neighbourhood quality in Poland (2005-2019). Source: own elaboration based on EU-SILC database

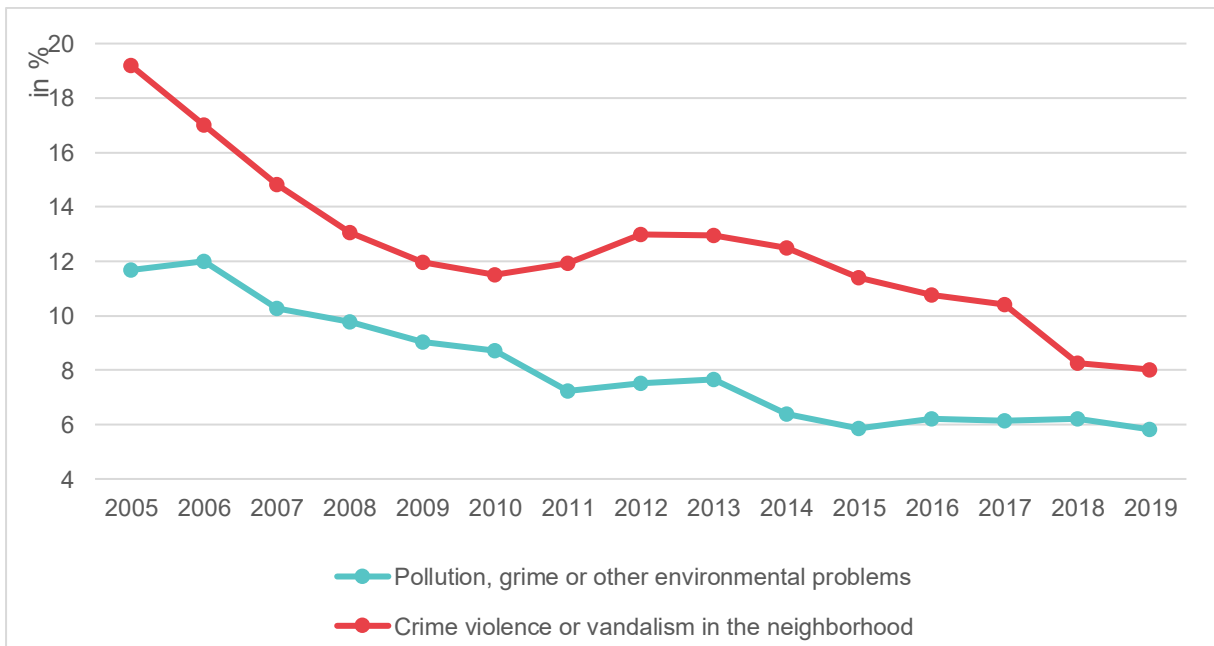


Figure PL23: Neighbourhood quality in densely populated areas in Poland (2005-2019). Source: own elaboration based on EU-SILC database

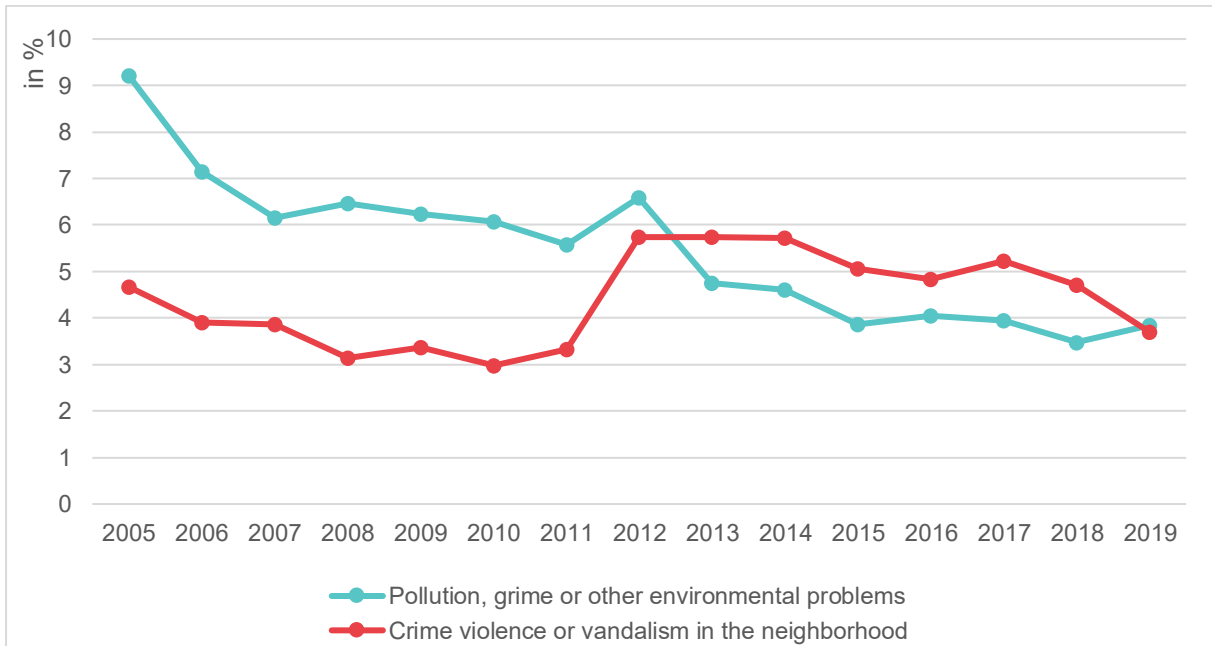


Figure PL24: Neighbourhood quality in intermediate areas in Poland (2005-2019). Source: own elaboration based on EU-SILC database

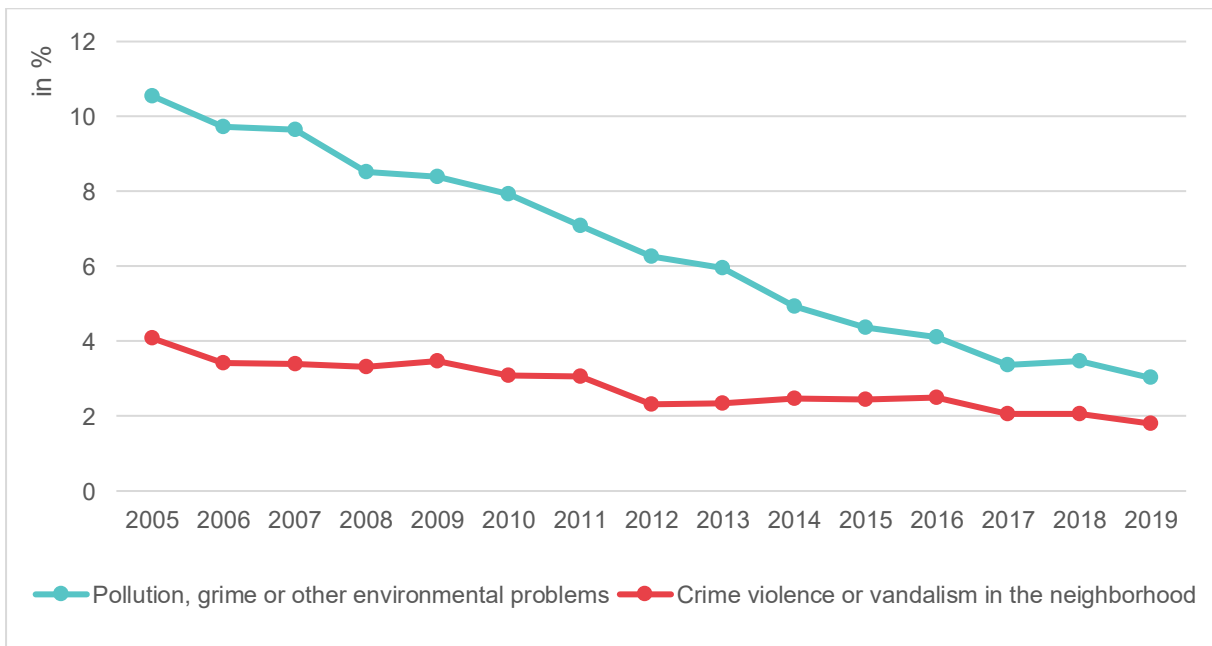


Figure PL25: Neighbourhood quality in thinly populated areas in Poland (2005-2019). Source: own elaboration based on EU-SILC database

## 2.2 Housing Cost

Housing costs and their relationship to household disposable incomes—referred to as housing cost burden (HCB)—are crucial indicators of housing affordability. This section examines both the subjective and objective dimensions of housing (over)burden in Poland. Figure PL26

presents the subjective evaluation of housing expenditures. It is evident that the vast majority of households in Poland (more than 90% since 2010) consider housing expenditures to be a burden on their budget. Specifically, over 50% of households classify total housing expenditures as a "heavy burden." This proportion increased by approximately 20% in 2010, when Poland experienced the delayed effects of the global financial crisis. Conversely, the share of households that do not perceive housing expenditures as a burden has halved since 2010, with approximately 5% of households in Poland now considering housing costs to be not burdensome at all.



Figure PL26: Self-perceived financial burden of total housing costs. Source: own elaboration based on EU-SILC database

### 2.2.1 Housing Cost Burden per Socio-economic and Demographic Conditions

The demographic, social, and economic characteristics of households are arguably more influential in determining the intensity of housing cost burden (HCB). Ethnic and racial differences in HCB intensity reveal an interesting pattern (Figure PL27). Prior to 2016, it was difficult to distinguish a clear trend in HCB intensity across different ethnic and racial groups in Poland. However, this trend became more pronounced in 2017, coinciding with an increased inflow of immigrants, particularly from non-EU countries. As a result, immigrants from third countries have experienced the highest HCB since 2018, while the HCB for the host population (those born in Poland) has remained the lowest.



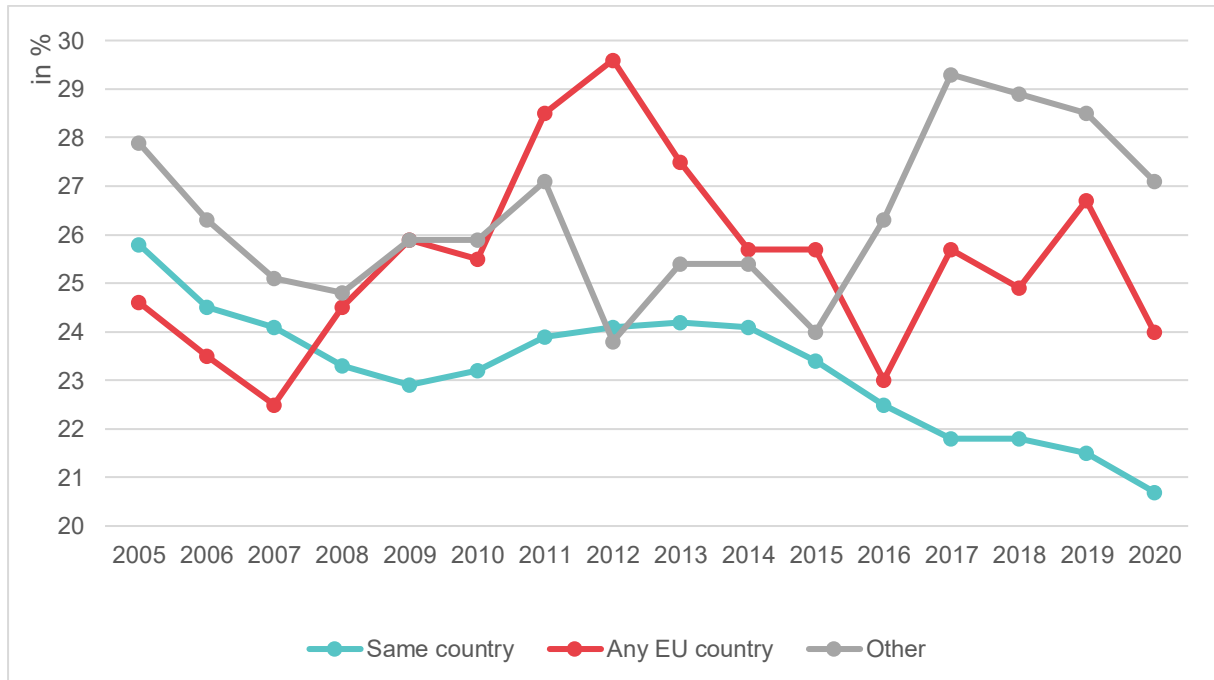


Figure PL27: Share of total housing costs in total disposable income by country of birth in Poland.  
 Source: own elaboration based on EU-SILC database

The social status of residents, as indicated by their education level, is clearly related to the intensity of housing cost burden (HCB). However, it is difficult to assert unequivocally that housing burden decreases with higher educational attainment (social status) in Poland (Figure PL28). Nevertheless, individuals with higher education consistently experience lower HCB compared to those in other educational categories. Notably, the gap in HCB intensity between the highest and lowest social groups (those with the highest education versus those with lower secondary or primary education) widened in the late 2010s.

Differences in HCB according to the economic status of residents provide additional insights into housing affordability in Poland (Figure PL29). The most notable observation is that students experience the highest HCB, as this economic group is solely composed of households where housing costs exceed 40% of disposable income. In general, the working population tends to have lower HCB rates compared to those who are retired or disabled. These results, when considered alongside the data on social status, suggest that individuals in higher socioeconomic positions are more privileged in terms of relative housing

expenditures.

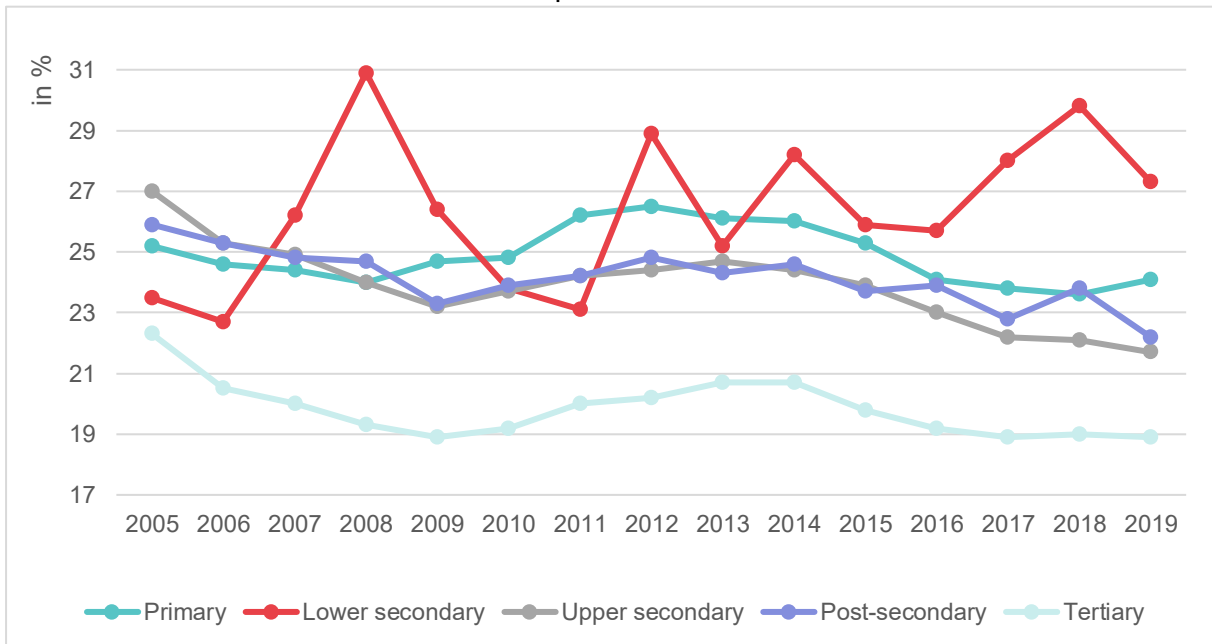


Figure PL28: Share of total housing costs in total disposable income by education level in Poland. Source: own elaboration based on EU-SILC database

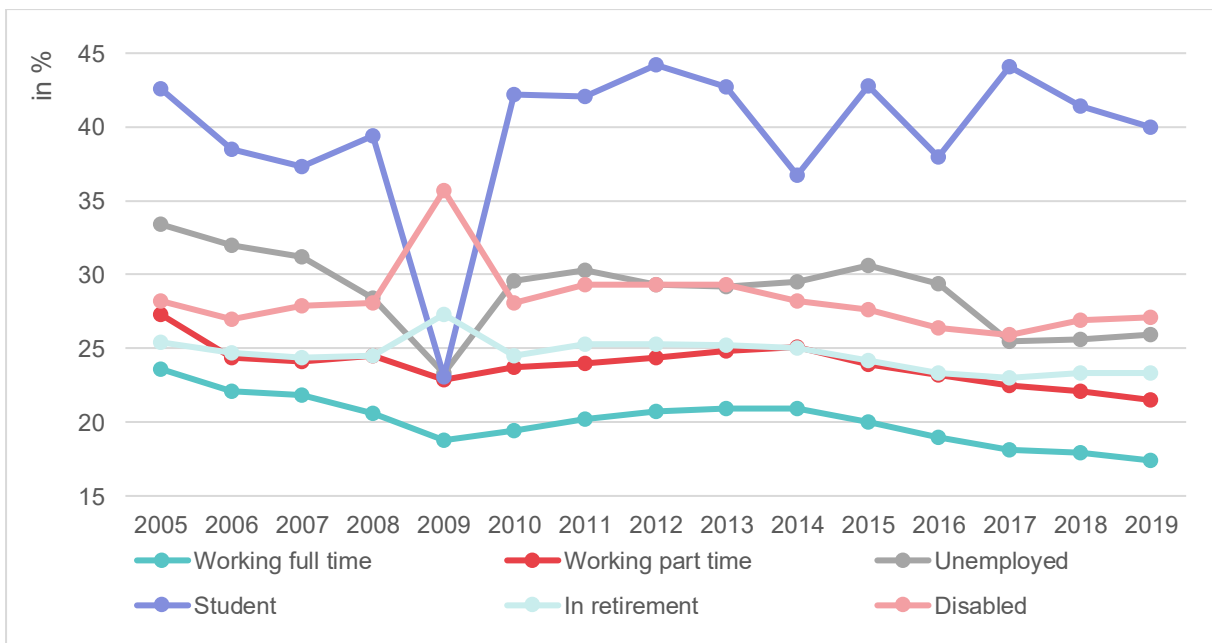


Figure PL29: Share of total housing costs in total disposable income by self-defined economic status. Source: own elaboration based on EU-SILC database

### 2.2.2 Housing Cost Burden per Household Type

Differences in the share of housing expenditures relative to disposable income are particularly pronounced across household categories (Figure PL30). Smaller households, especially one-person households and single-parent households, allocate a higher proportion of their income to housing compared to other types of households. In contrast, households with or without

dependent children consistently experience the lowest housing burden. Notably, the average housing burden for one-person households has been twice as high as that of other households with dependent children.

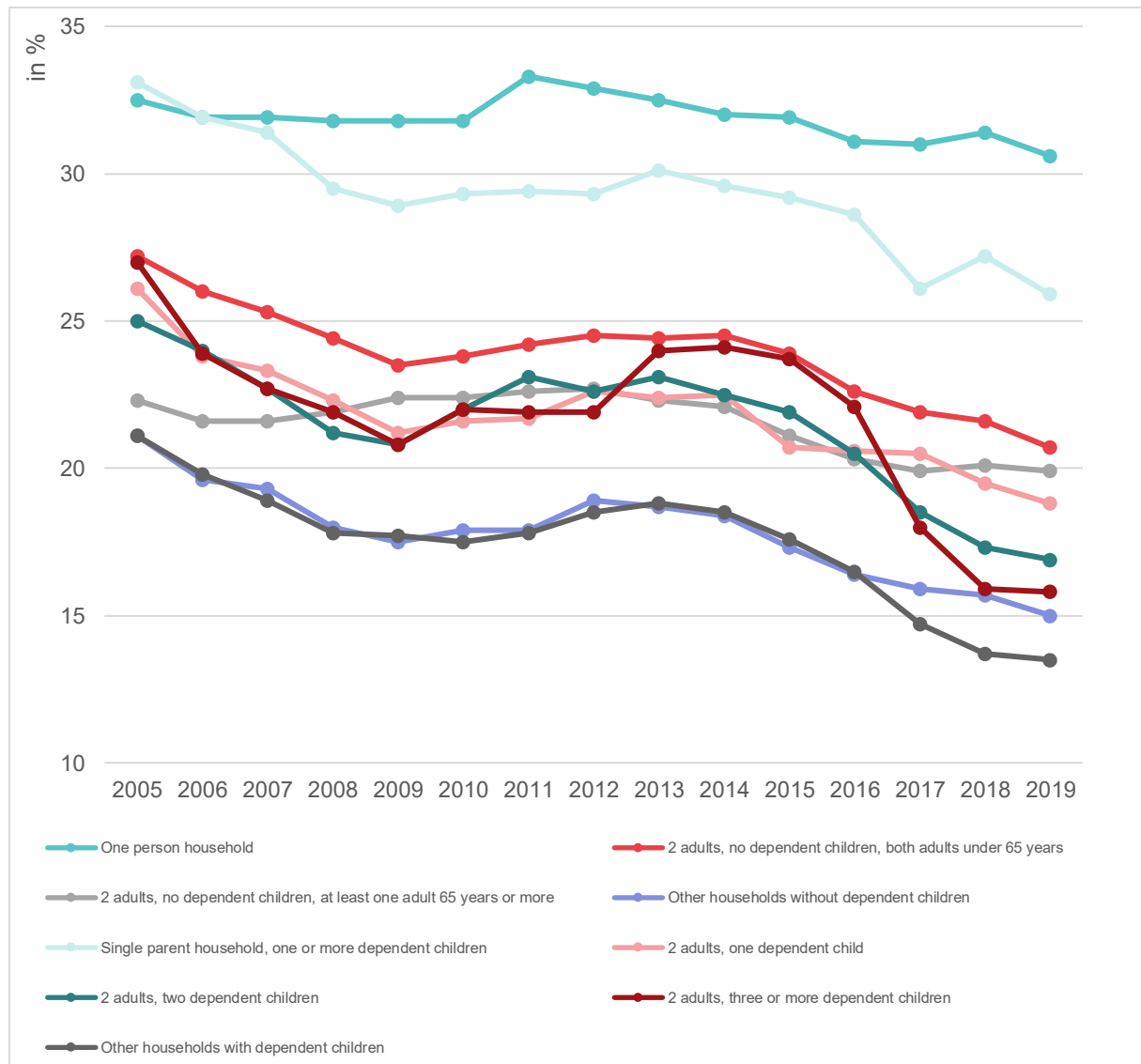


Figure PL30: Share of total housing costs in total disposable income by household type in Poland. Source: own elaboration based on EU-SILC database

### 2.2.3 Housing Cost Burden per Tenure and Building Type

The type of housing, defined by both dwelling type and tenure status, ranks equally high among the factors influencing housing cost burden (HCB) in Poland. Differences in dwelling type reveal a clear trend—living in a house (either detached or semi-detached) appears more affordable than living in an apartment (Figure PL31). This pattern has remained consistent over time. Additionally, the most significant reduction in HCB occurred among apartments in buildings with more than 10 dwellings.

The differences in housing tenure structure also illustrate a distinct trend (Figure PL32). Notably, owner-occupiers generally live in the most affordable housing sector in terms of

housing expenditures. Interestingly, households that own their homes spend a smaller proportion of their disposable income on housing costs than those residing in apartments provided free of charge (the second most affordable sector). In contrast, the highest HCB rates are found in the rental sector, both subsidized (below market rent) and unsubsidized rental housing. The relatively high HCB in the subsidized rental sector can be explained by the fact that this sector often houses low-income households, for whom even below-market rent represents a significant financial burden. Meanwhile, the HCB in unsubsidized rental housing (the least affordable sector) is, on average, almost 15% higher than in owner-occupied housing.

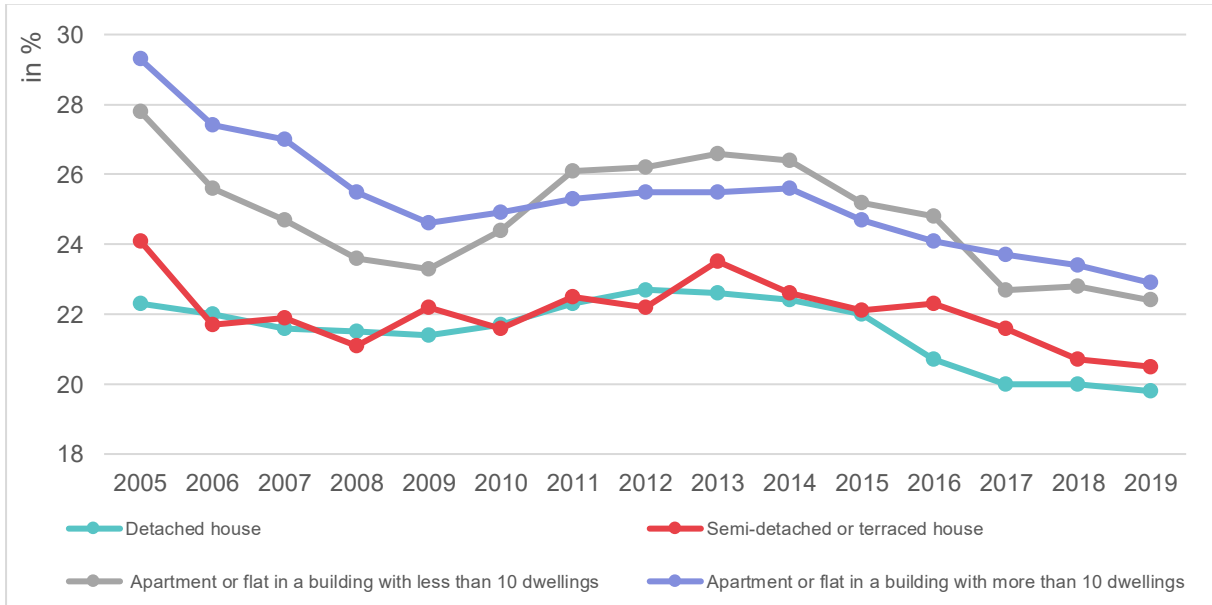


Figure PL31: Share of total housing costs in total disposable income by type of dwelling in Poland. Source: own elaboration based on EU-SILC database

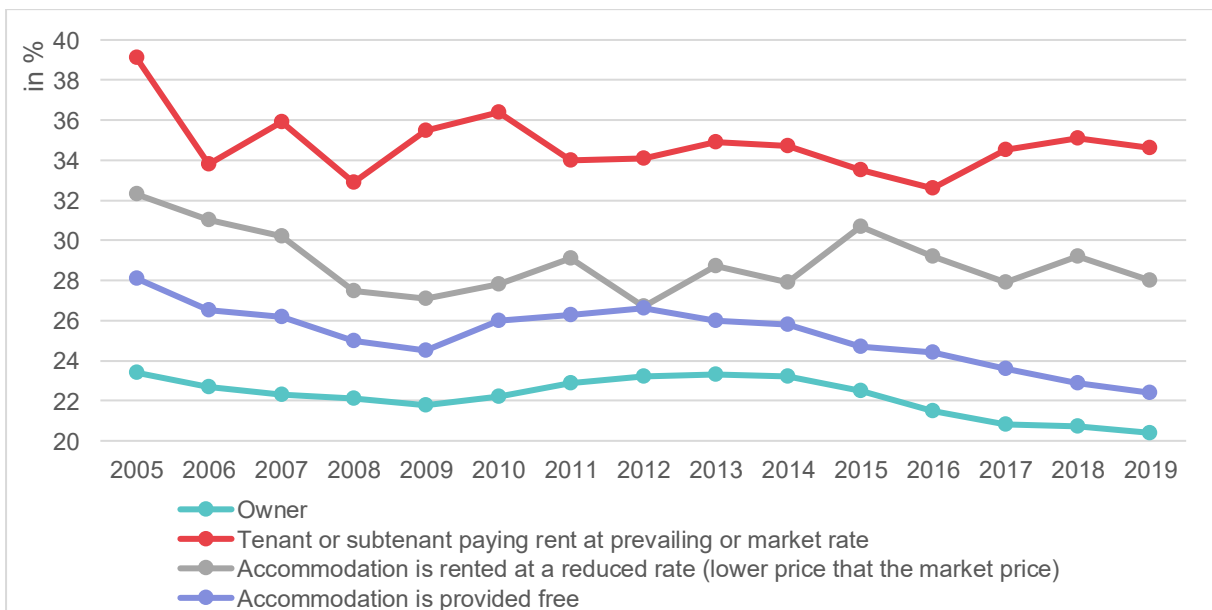


Figure PL32: Share of total housing costs in total disposable income by tenure status in Poland. Source: own elaboration based on EU-SILC database

## 2.2.4 Territorial Difference of Housing Costs Burdens

The results presented in Figure PL33 show that the share of total housing costs relative to disposable income has been declining since 2005. Housing burden also appears to be sensitive to the level of urbanization. Households in densely populated areas have experienced the highest housing burden, while residents of sparsely populated (rural) areas have enjoyed the highest housing affordability in terms of housing expenditures. Moreover, the gap in housing burden between densely and sparsely populated areas has narrowed over time.

Figure PL34 illustrates regional variation in housing expenditures. Due to significant changes in the delimitation of NUTS1 regions in Poland in 2018, we limit our analysis to the years 2005–2017. The results indicate that the HCB was lowest in the least economically developed NUTS1 area, the East microregion, which predominantly consists of rural areas. In contrast, the housing burden was higher in the more developed macro-regions of Western Poland (NUTS regions PL4 and PL5). However, the regional gap in housing burden remains relatively small, not exceeding 3%, and has remained stable over time.

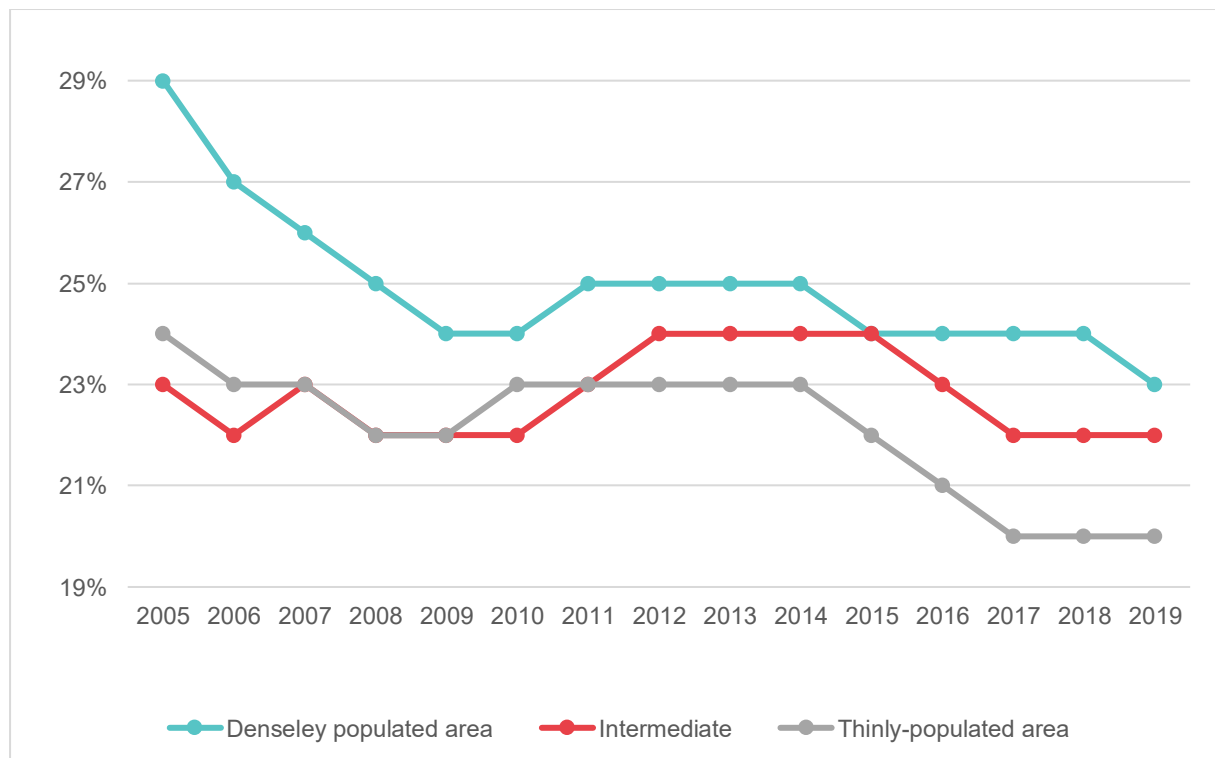


Figure PL33: Share of total housing costs in total disposable income by urbanization level in Poland.  
Source: own elaboration based on EU-SILC database

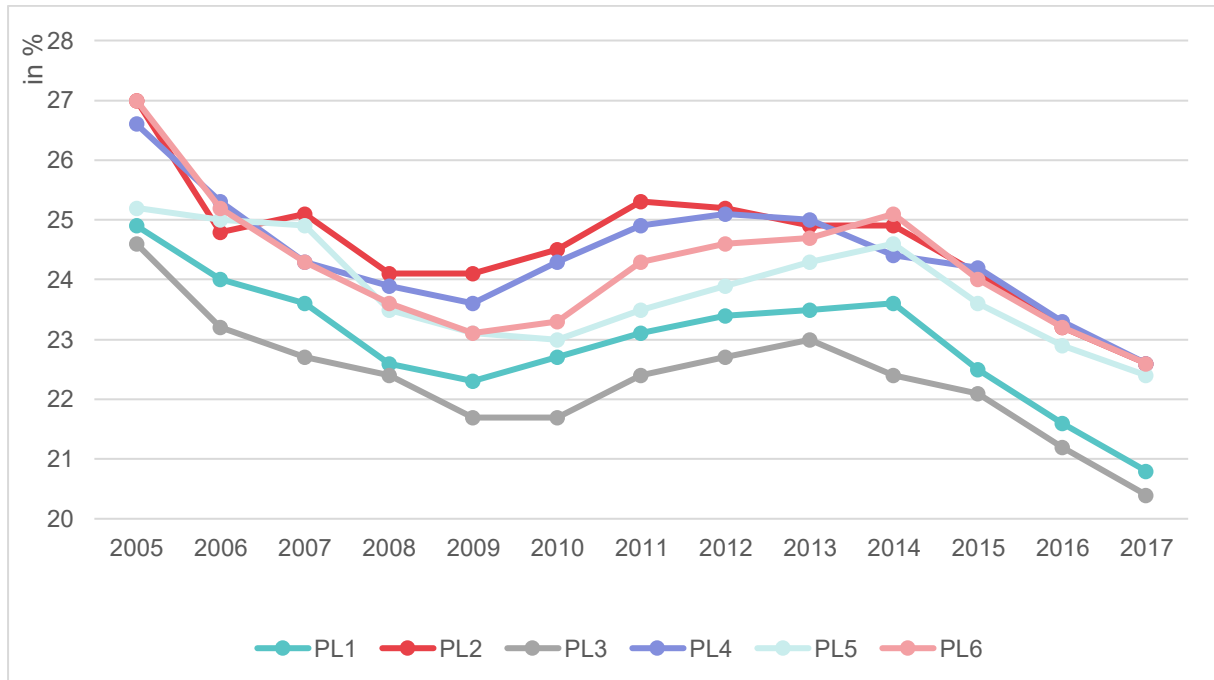


Figure PL34: Share of total housing costs in total disposable income by NUTS1 regions in Poland.  
Source: own elaboration based on EU-SILC database

## 2.3 Housing segmentation

In this section, we examine the issue of housing segmentation, defined as the distribution of households across different types of dwellings and tenure. Table PL1 presents the distribution of households by dwelling type. Unsurprisingly, the type of dwelling is strongly correlated with the degree of urbanization. The majority of the population in densely populated areas resides in apartments within larger apartment buildings, and this trend slightly increased in the late 2010s. Interestingly, the share of the population living in both larger and smaller apartment buildings more than doubled in intermediate urbanized areas between 2005 and 2019. Although the sharp increase in this category's share in 2012 may be partially attributed to changes in the EU-SILC survey methodology, we believe that the results reflect a clear trend. This trend suggests that intermediate areas have undergone densification. Conversely, the share of the population living in detached houses in sparsely populated areas has increased, largely at the expense of apartments in larger buildings.

Table PL1: Dwelling types by degree of urbanization in Poland.

Year	Degree of urbanization	Detached house	Semi-detached or terraced house	Apartment or flat in a building with less than 10 dwellings	Apartment or flat in a building with more than 10 dwellings
2005	1	14.11	3.31	12.98	69.60
2005	2	76.62	3.68	5.01	14.68
2005	3	59.38	6.30	12.17	22.15
2006	1	15.14	4.05	12.52	68.28
2006	2	78.12	2.80	5.00	14.07

2006	3	59.50	5.97	12.39	22.14
2007	1	15.58	4.21	11.26	68.96
2007	2	77.99	3.31	4.33	14.37
2007	3	60.09	5.92	12.65	21.35
2008	1	16.32	3.99	11.23	68.46
2008	2	78.26	4.38	3.31	14.05
2008	3	60.92	6.37	11.60	21.11
2009	1	16.30	3.85	11.36	68.50
2009	2	77.60	3.72	3.40	15.29
2009	3	61.38	5.93	11.21	21.47
2010	1	17.95	3.72	11.30	67.04
2010	2	76.68	3.25	3.42	16.65
2010	3	62.85	5.85	11.29	20.02
2011	1	17.77	3.86	10.48	67.90
2011	2	78.19	2.94	3.64	15.23
2011	3	61.75	5.78	11.00	21.47
2012	1	14.41	3.83	10.13	71.64
2012	2	45.57	4.91	9.78	39.74
2012	3	72.30	5.53	9.47	12.69
2013	1	14.74	4.37	10.08	70.81
2013	2	46.29	5.49	9.06	39.16
2013	3	72.48	6.10	9.37	12.05
2014	1	13.90	4.38	9.57	72.15
2014	2	44.36	5.21	9.60	40.83
2014	3	71.28	6.55	9.87	12.29
2015	1	13.81	4.16	9.73	72.31
2015	2	44.17	4.89	10.38	40.56
2015	3	71.43	6.56	10.04	11.96
2016	1	14.06	4.33	9.70	71.91
2016	2	44.97	5.44	10.82	38.77
2016	3	71.76	6.59	10.41	11.24
2017	1	12.85	4.82	10.28	72.05
2017	2	43.86	5.43	10.67	40.03
2017	3	70.09	6.51	11.14	12.26
2018	1	12.70	4.59	10.71	72.01
2018	2	43.54	5.29	10.41	40.76
2018	3	69.99	6.31	11.74	11.96
2019	1	12.93	4.91	10.42	71.74
2019	2	40.33	5.52	11.24	42.91
2019	3	69.41	6.31	11.58	12.69

*Source: own elaboration based on EU-SILC database*

The tenure structure of housing in Poland is shown in Figure PL35. The sharp increase in owner-occupied housing and the corresponding decrease in housing provided for free in 2010 can be attributed to changes in the methodology of the EU-SILC survey. While the share of owner-occupiers seems to align with data from other sources, the relatively significant share of housing provided for free warrants attention. We suspect that cooperative housing may be included in this category in Poland. If this is the case, the significant changes in tenure structure in 2010 can be attributed to the privatization of cooperative housing. In summary, the tenure structure in Poland reflects a 'hyper-ownership' model, with approximately 80% of the population living in owner-occupied homes. This hyper-ownership model emerged in the

1990s, following the mass privatization of state-owned housing and the establishment of a capitalist system after the collapse of socialism in 1989.

Unsurprisingly, the tenure structure is sensitive to the degree of urbanization. As shown in Figure PL36, owner-occupied housing is most prevalent in sparsely populated and intermediate areas. The second most common tenure type is housing provided for free. Although the share of free housing has remained slightly higher in densely populated areas (approximately 15% after 2010), it is also present in less populated areas, accounting for around 10% of housing after 2010. As mentioned, the significant share of this housing type may be influenced by the methodology used in the EU-SILC survey. In densely populated areas, this category may primarily represent cooperative housing, while in sparsely populated areas, it may include housing occupied by multiple households, such as younger households living with their parents in rural areas.

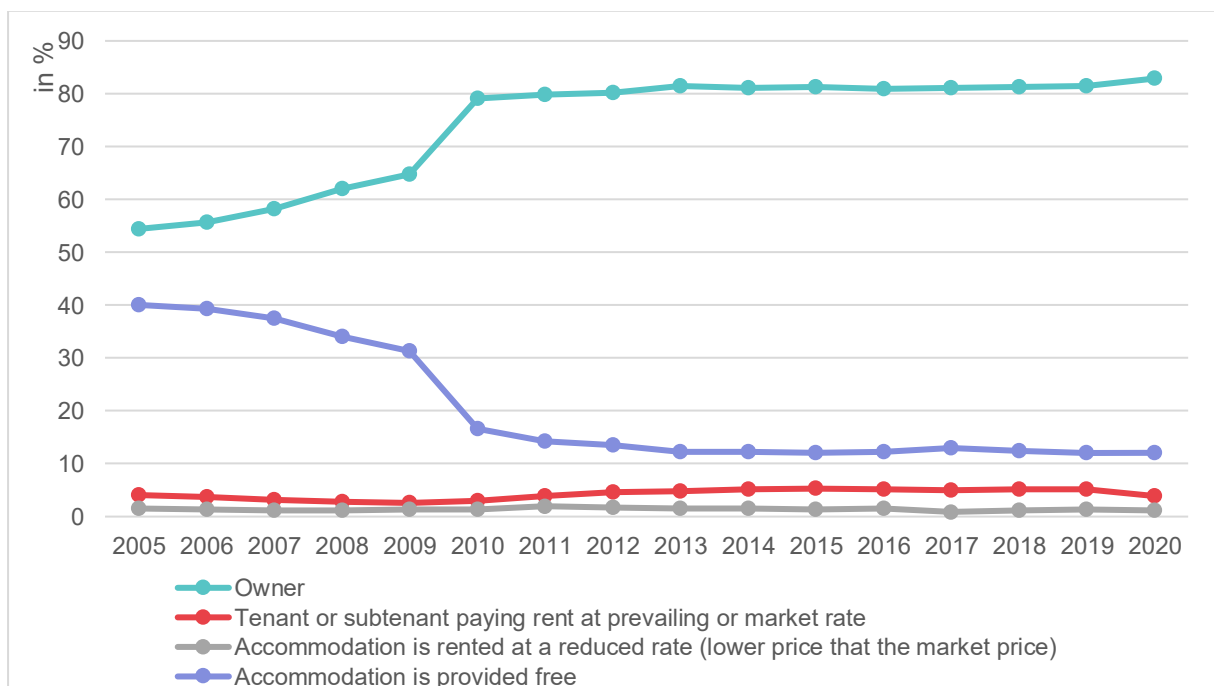


Figure PL35: Tenure structure of housing in Poland: Source: own elaboration based on EU-SILC database



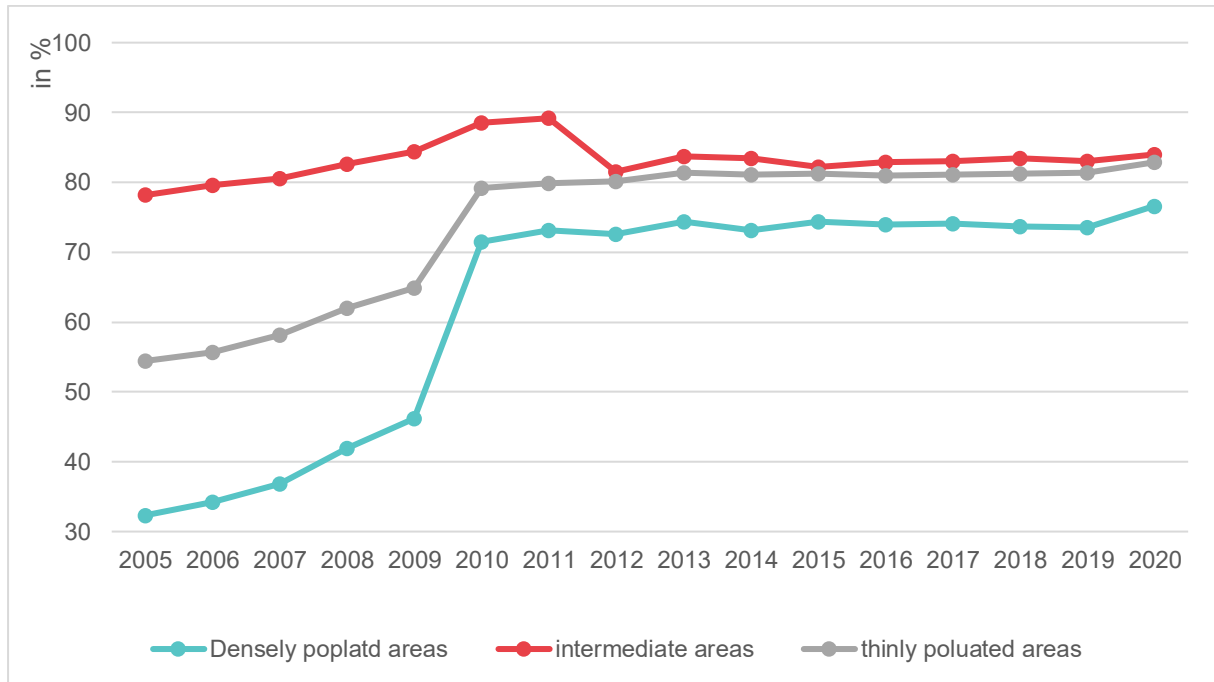


Figure PL36: Share of owner-occupied housing by degree of urbanization. Source: own elaboration based on EU-SILC database