

Housing Affordability in Andorra

Ana Lariau and Michelle Tejada

SIP/2025/151

IMF Selected Issues Papers are prepared by IMF staff as background documentation for periodic consultations with member countries. It is based on the information available at the time it was completed on February 9, 2024. This paper is also published separately as IMF Country Report No 24/58.

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Prepared by Ana Lariau and Michelle Tejada

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SELECTED ISSUES PAPERS

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Principality of Andorra

Prepared by Ana Lariau and Michelle Tejada

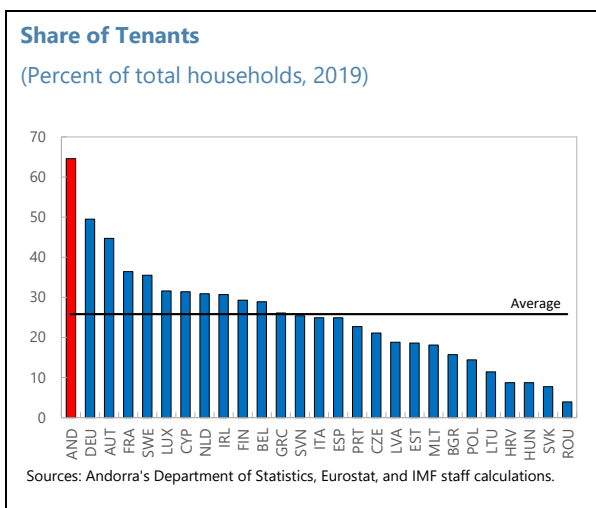
HOUSING AFFORDABILITY IN ANDORRA¹

Housing affordability is an increasing social and economic concern for Andorra. Changing demographics and increasing real estate prices and rents combine to create a housing affordability issue in Andorra. This paper shows a granular analysis of housing affordability, exploiting microdata from the Survey of Living Conditions, to identify the groups that are most affected and better inform and target housing policies. Evidence that affordability is lower for renters and that Andorra is a renter-dominated real estate market combines to create a housing affordability issue. Low-income and low-skilled workers are disproportionately affected. This study analyzes the evolution and characteristics of housing demand and supply dynamics in the country, which indicates a supply and demand mismatch in the affordable segment of the Andorran housing market as well as insufficient fluidity which exacerbates the shortage of short-term rentals and complicates the hiring of foreign workers. A multipronged policy approach is needed, and a careful balance is needed to minimize market distortions while increasing the stock of housing in the medium-term.

A. Introduction

1. A major political issue in Andorra, housing affordability is also macro-critical. This paper investigates the determinants of the current housing stress to draw policy recommendations.

Rising housing affordability concerns result in socio-economic difficulties, distributional issues, and impacts the attractiveness of Andorra as a working and, to some extent, as an investment destination. The limited supply of housing due to the country's geography and the sustained demand for rental housing have pushed up rents, leading to the emergence of a housing affordability problem, especially among certain groups. The lack of affordable housing makes the labor market less attractive, especially for foreign and seasonal workers, and may affect foreign investment decisions for companies that cannot secure housing for their workers, thus limiting potential growth. In a recent sentiment survey, conducted in the first half of 2023, 67 percent of the population considers that housing affordability needs to improve, compared to only 3 percent in 2015.



2. The housing affordability issue in Andorra is directly related to its exceptionally high share of tenants, associated with a growth model reliant on immigration. Generally, housing affordability tends to be lower for renters than for owners. As of 2019, nearly 65 percent of households were renting the property they lived in. This was well above the share of tenants in other rent-oriented markets such as Germany, and in the EU as a whole, which had an average share of

¹ Prepared by Ana Lariau and Michelle Tejada (both EUR).

tenants below 30 percent. The Andorran economy and labor market are highly dependent on temporary migrant workers and permanent residents. As shown in Table 1, nearly 60,000 immigration authorizations were in force in 2022 – equivalent to 62 percent of the total population.² Almost half of them have resided in the country for more than 10 years and have likely established roots in the country. Yet, such a large number of immigrants, who are more likely to be tenants (due to prospects of future mobility of those that do not have rooting in the country and/or limited access to mortgages), puts additional pressure on the rental market. Anecdotal evidence indicates that the demand for rental housing may have increased further during and in the aftermath of the pandemic due the arrival of a large number of foreign residents to Andorra, resulting in a 7 percent population increase. These new residents were attracted by the country's quality of life, security, infrastructure (particularly high-speed Internet), low taxes, and high labor demand.

Table 1. Andorra: Number of Immigration Authorization in Force by Type
(Percent of total population)

| Type of Immigration Permit | | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|--|------|------|------|------|------|
| Work & residence | Permanent | | | | | |
| | <1 years | 2.8 | 2.7 | 2.3 | 2.5 | 3.4 |
| | 1-5 years | 6.7 | 7.9 | 8.7 | 8.7 | 8.7 |
| | 6-10 years | 3.6 | 3.2 | 3.2 | 3.4 | 4.0 |
| | 11-15 years | 8.3 | 7.3 | 6.0 | 4.7 | 3.6 |
| | 16-20 years | 5.1 | 5.7 | 6.0 | 6.4 | 6.5 |
| | >20 years | 18.3 | 18.3 | 18.6 | 18.6 | 18.5 |
| | School staff | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 |
| | Temporary | 2.1 | 2.2 | 2.3 | 1.1 | 3.3 |
| | Temporary - Studies, research, internship, sports training | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| | Temporary - Workers of international companies | 0.3 | 0.3 | 0.2 | 0.3 | 0.6 |
| Work w/o residence (fronterers) | Permanent | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 |
| | Temporary | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Work w/o residence (other) | | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Residence (family reunification, residence w/o work, other) | <1 years | 1.1 | 1.1 | 1.0 | 1.1 | 1.4 |
| | 1-5 years | 4.5 | 4.6 | 4.7 | 4.5 | 4.2 |
| | 6-10 years | 2.3 | 2.3 | 2.2 | 2.4 | 2.7 |
| | 11-15 years | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 |
| | 16-20 years | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 |
| | >20 years | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 |
| Total | | 60.5 | 60.9 | 60.8 | 59.3 | 62.4 |

Source: Andorra's Department of Statistics and IMF staff calculations.

3. A data-driven analysis is key to adequately inform housing policies. Until recently, data on the residential housing market and on housing affordability was very limited. A new System of Housing Statistics, which systematizes a large amount of residential housing indicators, along with a tool that simulates the supply and demand of rental housing, allows further investigation. These new resources add to the existing set of housing statistics—including on affordability—that were already reported by Andorra's Department of Statistics. The aim of this study is to complement these initiatives by producing a granular analysis of housing affordability, exploiting microdata from the

² Out of them, 82 percent were associated with a work authorization, either temporary or permanent, and most of them entailed residence in the country. Access to citizenship in Andorra requires 20 years of residence.

Survey of Living Conditions, with the purpose of better identifying the groups that are most affected by this problem and better inform and target housing policies. In addition, this study analyzes the evolution and characteristics of housing demand and supply dynamics in the country.

B. Rental Affordability in Andorra: Stylized Facts

4. Due to the large share of tenants, the problem of housing affordability in Andorra is one of rental affordability, which is typically higher than owners' affordability. Given this, the analysis in this section will focus on two widely used measures of rental affordability used in the literature: the housing cost overburden rate and the rent-to-income ratio. These measures are defined as follows:

- *Housing cost overburden rate*: Share of population within households whose housing costs (including rent, mortgage payments, services, etc., net of housing allowances) represent more than 40 percent of the total disposable income of the household (net of housing allowances).
- *Rent-to-income ratio*: Median across households of the annualized rent as a share of disposable household income.

5. Tenants in Andorra tend to be foreigners, with smaller household size, and with lower levels of education and income. Before diving into the rental affordability issue, it is important to characterize who are the tenants in Andorra. Table 2 provides descriptive statistics by ownership status from the Survey of Living Conditions:

- *Tenants have lower income than owners*. The average annual disposable income of tenants is about 30 percent the one of owners with mortgage, and 40 percent the one of owners without mortgage.
- *Tenants have smaller households*. The average household size is close to three members for owners with mortgage, slightly lower for owners without mortgage, and about 2 for tenants who therefore demand smaller housing units.
- *Tenants are mostly foreigners*. In most households that are tenants (nearly 65 percent), the reference person is a foreigner, while the opposite happens in households who are owners.
- *Tenants tend to have a low-educated reference person* (about 40 percent), owners with mortgage tend to have a middle-educated reference person (about 40 percent), and owners without mortgage tend to have a more even distribution in terms of educational attainment of the reference person (with a slight bias towards higher education levels).
- *Finally, the reference person is generally employed in households that are tenants* and owners with mortgage tends to be employed, while is more likely to be inactive (possibly retired) in households that are owners without mortgage.

Table 2. Andorra: Descriptive Statistics

| | 2018 | | | 2019 | | | 2020 | | |
|---|----------|----------------------|-------------------------|----------|----------------------|-------------------------|----------|----------------------|-------------------------|
| | Tenants | Owners with mortgage | Owners without mortgage | Tenants | Owners with mortgage | Owners without mortgage | Tenants | Owners with mortgage | Owners without mortgage |
| Average annual disposable income (euros) | 32,430.0 | 53,470.4 | 56,664.1 | 36,258.8 | 56,125.4 | 55,781.2 | 38,581.2 | 48,643.6 | 58,908.2 |
| Average size (number of members) | 2.1 | 2.6 | 2.2 | 2.1 | 2.7 | 2.2 | 2.1 | 2.7 | 2.1 |
| Share by nationality (percent) | | | | | | | | | |
| Nationals | 28.4 | 59.0 | 52.8 | 27.0 | 55.3 | 55.1 | 28.8 | 53.2 | 60.4 |
| Foreigners | 71.6 | 41.0 | 47.2 | 73.0 | 44.7 | 44.9 | 71.2 | 46.8 | 39.6 |
| Share by educational attainment (percent) | | | | | | | | | |
| Low education | 43.9 | 29.5 | 28.1 | 44.3 | 27.5 | 30.5 | 40.6 | 22.0 | 34.4 |
| Middle education | 32.2 | 42.5 | 36.2 | 34.6 | 38.6 | 34.8 | 36.2 | 41.6 | 29.2 |
| High education | 23.9 | 28.0 | 35.7 | 21.2 | 33.9 | 34.7 | 23.2 | 36.4 | 36.4 |
| Share by employment status (percent) | | | | | | | | | |
| Share of employed | 78.0 | 89.2 | 52.8 | 79.7 | 93.1 | 55.3 | 80.9 | 93.3 | 52.6 |
| Share of unemployed | 0.9 | 0.0 | 0.8 | 1.2 | 0.0 | 0.7 | 2.0 | 3.2 | 0.0 |
| Share of inactive | 21.1 | 10.8 | 46.4 | 19.1 | 6.9 | 44.0 | 17.2 | 3.5 | 47.4 |

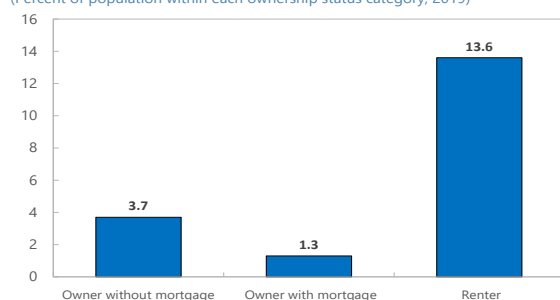
Source: Andorra's Department of Statistics and IMF staff calculations.

Note: The (weighted) shares by nationality, educational attainment and employment status are computed based on the characteristics of the reference person in the household.

6. Andorra ranks relatively well on affordability for each ownership type, but the disproportionately high share of tenants results in a deep rental affordability issue. Andorra's overall overburden rate ranks in the top 5 within the region, with 13.9 percent of the population facing housing costs above 40 percent of their income in 2019. However, a disaggregation of the data shows that the overburden rate is around or below regional averages among owners and renters separately. The homeowners overburden rate is estimated at 3.7 percent and 1.3 of owners without mortgage and owners with mortgage, respectively. In contrast, the overburden rate for renters is estimated at 13.6 percent, lower than the regional average but close to four times higher for tenants than for owners. Indeed, the overburden rates are significantly higher for tenants in all countries, but in Andorra, it affects a much larger share of the population, which explains the significant overburden rate on aggregate. Renters dominate the housing market across income levels. 62 percent of the total population lived in rented houses in 2019. By income level, 35.9 percent of those in the highest quintile were tenants in the same year, compared with 70.7 percent and 81.6 percent of those in the first and second quintile, respectively.

Housing Cost Overburden Rate by Ownership Status

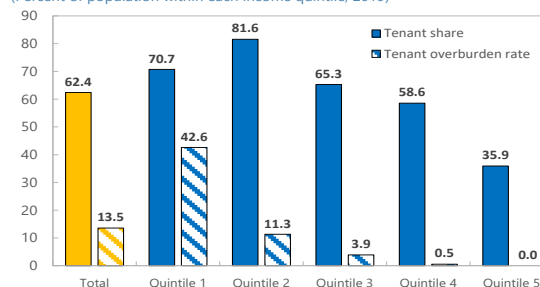
(Percent of population within each ownership status category, 2019)



Sources: Andorra's Department of Statistics, and IMF staff calculations.

Tenant Share and Overburden Rate by Income Quintile

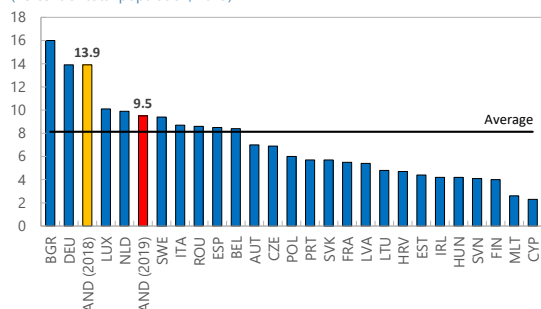
(Percent of population within each income quintile, 2019)



Sources: Andorra's Department of Statistics, and IMF staff calculations.

Housing Cost Overburden Rate

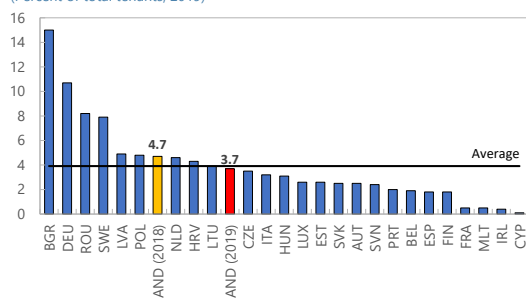
(Percent of total population, 2019)



Sources: Andorra's Department of Statistics, Eurostat, and IMF staff calculations.
Note: Greece is an outlier and was excluded from the chart.

Housing Cost Overburden Rate: Owners without Mortgage

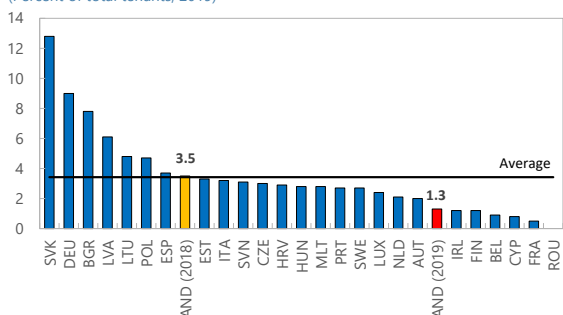
(Percent of total tenants, 2019)



Sources: Andorra's Department of Statistics, Eurostat, and IMF staff calculations.
Note: Greece is an outlier and was excluded from the chart and the average.

Housing Cost Overburden Rate: Owners with Mortgage

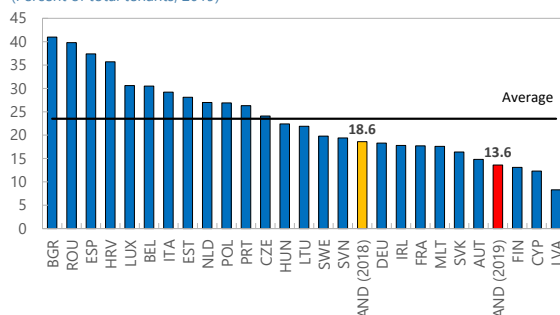
(Percent of total tenants, 2019)



Sources: Andorra's Department of Statistics, Eurostat, and IMF staff calculations.
Note: Greece is an outlier and was excluded from the chart and the average.

Housing Cost Overburden Rate: Tenants

(Percent of total tenants, 2019)

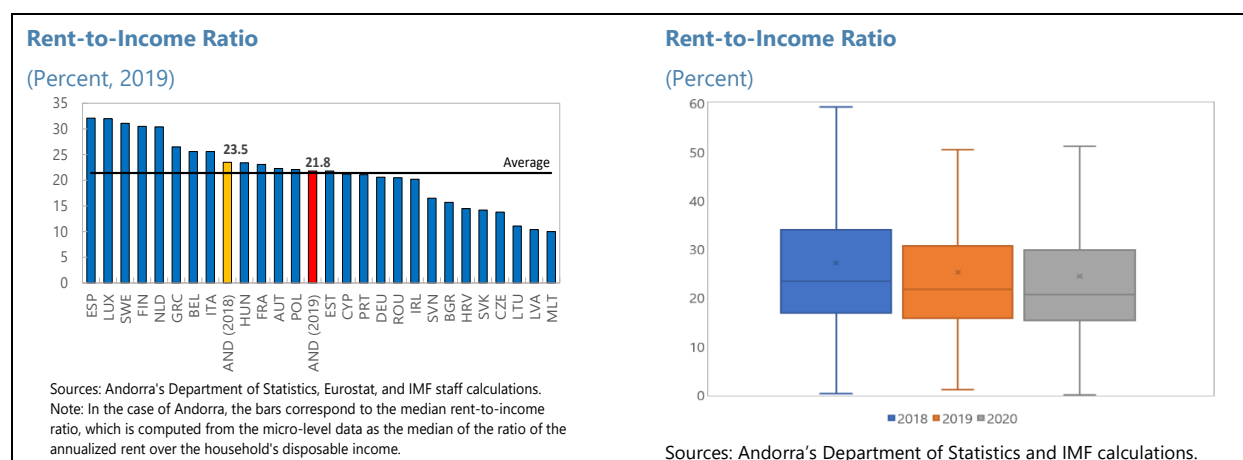


Sources: Andorra's Department of Statistics, Eurostat, and IMF staff calculations.
Note: Greece is an outlier and was excluded from the chart and the average.

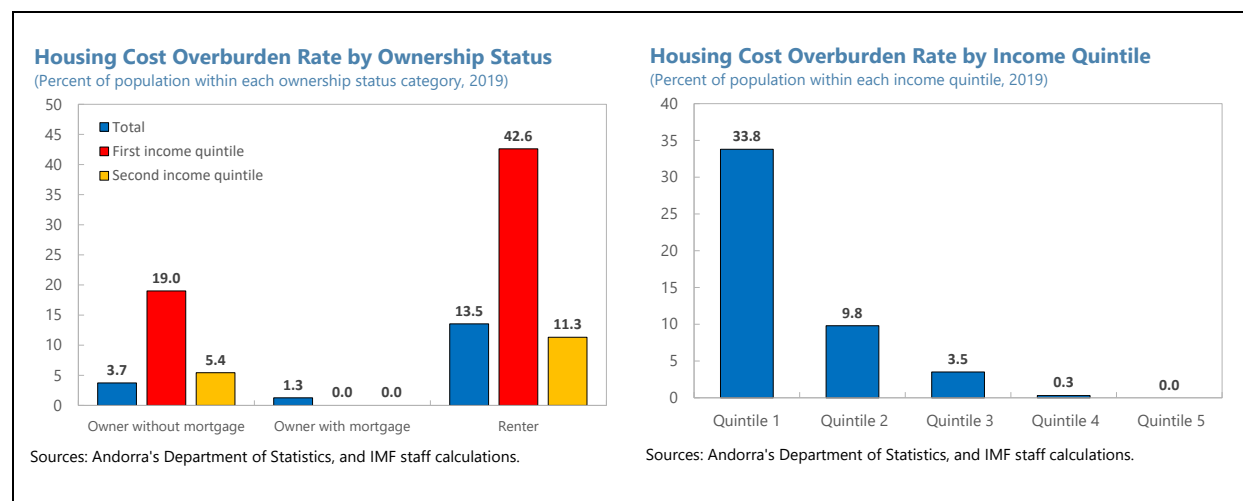
7. Even though the rent-to-income ratio is broadly in line with European levels, the overburden rate in Andorra is among the highest in the region—primarily driven by the large share of tenants. On average, rents in Andorra prior to the pandemic were about 20 percent of disposable income, close to the average for the EU. The housing cost overburden rate, on the other hand, was well above the EU average. While in the EU there was 7 percent of the population with housing costs representing more than 40 percent of the disposable income, in Andorra this share was 9.5 percent in 2019. While the housing cost overburden rate declined in 2019 in line with an improvement in real disposable income compared to the previous year, it remains among the highest in the region.

8. The aggregate indicators, however, hide significant heterogeneity, calling for a more granular analysis. For example, the box and whiskers chart of the rent-to-income ratio shows that the median of the rent-to-income ratio of Andorran households is slightly above 20 percent, fairly stable across all years in the sample (with just a small decline towards recent years). However, the interquartile range is wide, of about 15 percentage points. And for some households, the rent-to-income ratio could go above 50 percent. This requires a more granular analysis of the data, as shown below, to better understand what are the households that need to devote a higher share of their income to cover housing costs.

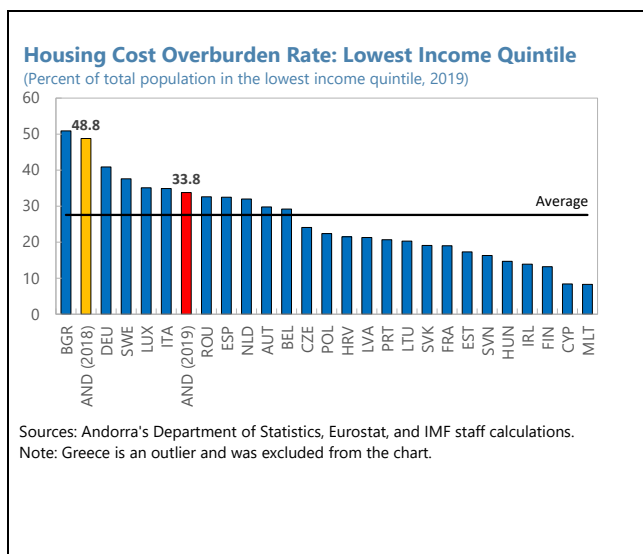
9. Within the lowest income quintile, tenants are the ones suffering the most from housing cost overburden. The disaggregation of the data shows that about 42.6 percent of renters and 19 percent of owners (without mortgage) in the lowest income quintile are overburdened by housing cost. As the income level rises to the second quintile, the housing cost overburden rates drop to about ¼ of the rates for those at the bottom of the income distribution. Moreover, about 70 percent of those in the lowest income quintile are renters and almost 2/3 of them are facing affordability problems.



10. Affordability is mostly an issue for low-income households, a particularly vulnerable segment of the population. These are likely to be low-skilled workers, essential to the service sector – a critical component of the Andorran workforce. The housing cost overburden rate for those in the lowest income quintile is among the highest in the region, estimated at 34 percent in 2019. The overburden rate declines to 10 percent in the second income quintile, while those at the top of the income distribution generally do not face housing affordability issues in Andorra.

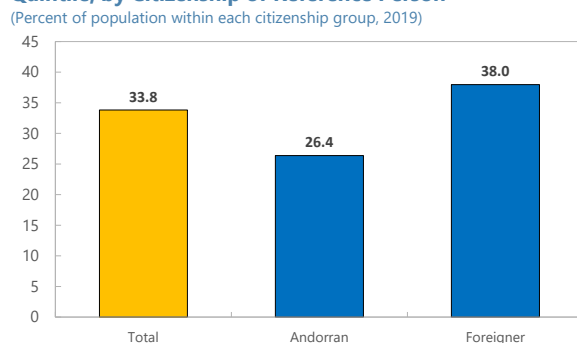


11. Moreover, within the lowest income quintile, the most overburdened households are those in which the reference person is a foreigner, high-skilled, or unemployed. Close to 40 percent of foreigners in the lowest quintile residing in Andorra are overburdened by their housing costs compared to 26 percent of Andorrans in the same income group. Furthermore, almost half of those with at least a bachelor's degree in said income group face housing affordability issues; while this may seem counterintuitive, it could potentially reflect a mix of housing locations,

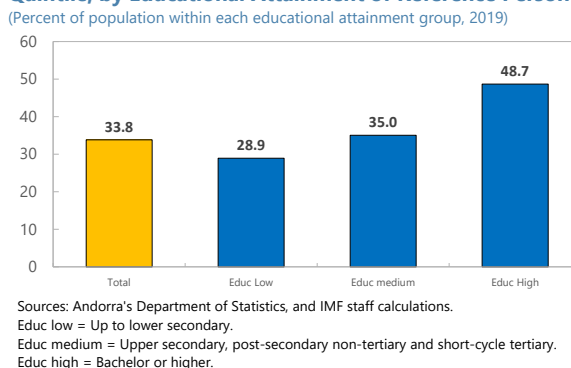


12. preferences, length of stay and access to housing support. In addition, 61 percent of the unemployed in the lowest quintile are facing housing affordability pressure as their income is likely reduced to unemployment benefits and other social assistance.

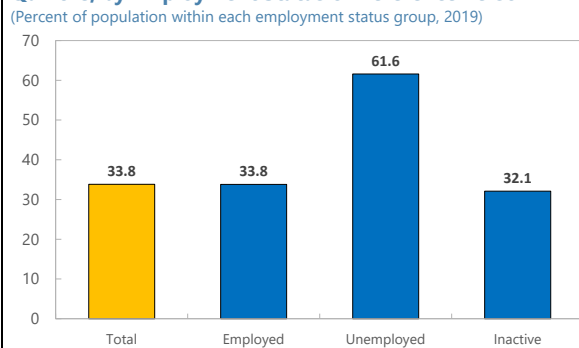
Housing Cost Overburden Rate in the Lowest Income Quintile, by Citizenship of Reference Person
(Percent of population within each citizenship group, 2019)



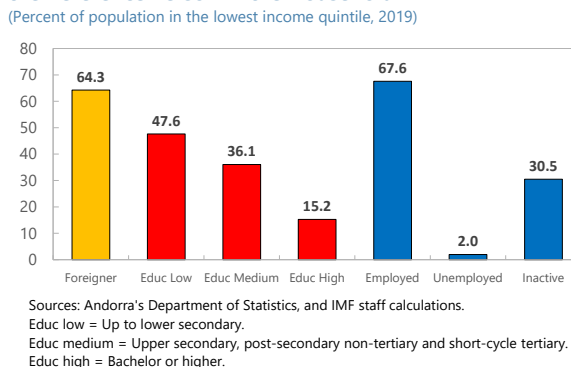
Housing Cost Overburden Rate in the Lowest Income Quintile, by Educational Attainment of Reference Person
(Percent of population within each educational attainment group, 2019)



Housing Cost Overburden Rate in the Lowest Income Quintile, by Employment Status of Reference Person
(Percent of population within each employment status group, 2019)



Shares in the Lowest Income Quintile, by Characteristics of the Reference Person in the Household
(Percent of population in the lowest income quintile, 2019)

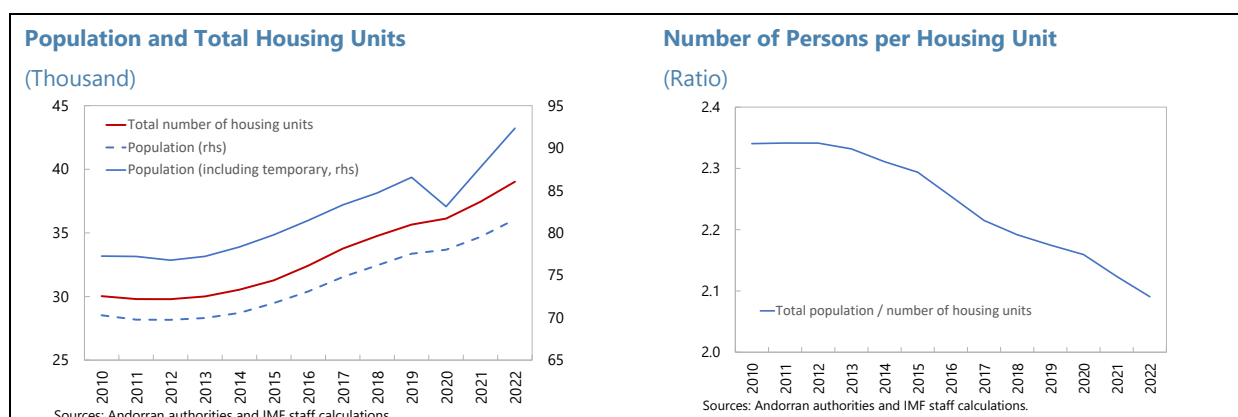


13. This analysis has been limited by the constraints imposed by the data. There are four issues related to data availability that have prevented us to analyze the impact of temporary and/or seasonal foreign workers on housing affordability, as well as the post-COVID trends. First, the survey does not include information on the immigration status of the reference person in the household, only about the nationality. Second, temporary/seasonal foreign workers are excluded from the survey, even if they are a group that adds significant pressure to the rental housing market, as all seasonal workers can be assumed to be renters. Third, the data for 2020 could be biased by the support package provided to renters during the COVID pandemic and, therefore, the analysis does not incorporate 2020 data. Four, data availability is limited to 2020, not capturing the most recent price developments and most acute increases that would magnify the results.

C. A Growing Housing Market Imbalance

14. The dynamics of housing supply and demand shape the housing market. The demand for housing is affected by a range of factors including population growth, economic conditions, and lifestyles preferences. The number of households is the main determinant of the quantitative demand for housing. The level of wealth influences the characteristics of the demand through preferences for certain features and, in some cases, also by increasing the demand for housing with investment purposes or as secondary residences. The supply of housing depends on the pre-existing inventory, availability of land, the cost of construction materials, and government policies, among others. The interaction between supply and demand – including the degree of housing rotation – determines the prices of housing and its affordability. When the supply of housing is inelastic, as is generally the case in Andorra, prices rise faster as the increasing demand translates into higher prices instead of greater construction activities.

15. At the aggregate level the data does not point to the existence of a housing market imbalance, but a closer look indicates a shortage of affordable housing and insufficient fluidity in the market. On the supply side, the total number of dwellings has increased in line with population and there has been a slight decline in the average number of people per housing unit. The trend is similar when the population is augmented with the seasonal workers. However, there is insufficient supply to match the demand for more affordable units as prices for residential real estates and rental dwellings have increased faster than wages and the mobility in the market has been reduced. Demand pressure also comes from demographic changes beyond population growth. The average household size is decreasing with a greater number of people living alone or forming smaller families, increasing the demand for houses in general and for smaller houses. Greater immigration also puts pressure on the demand for new rental or buying contracts. In addition, seasonal workers temporarily increase the need for short-term housing each year, especially during the winter season. The number of seasonal workers has doubled in the past eight years, while the number of available short-term rental housing has decreased as tenants stay longer in their current lease. All of these dynamics lead to a supply and demand mismatch in the affordable segment of the Andorran housing market.



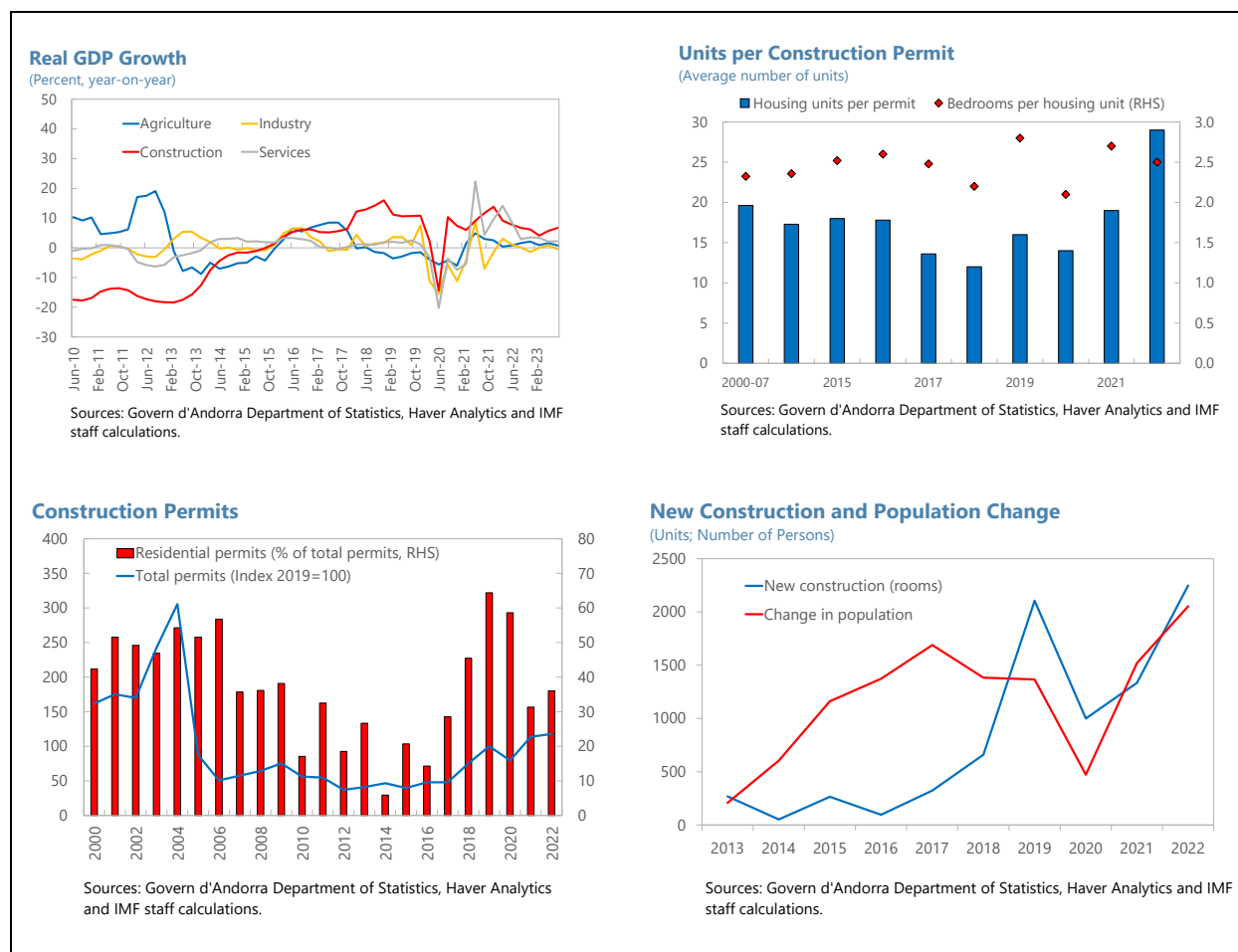
16. Data on the stock and characteristics of available houses in Andorra is limited, but the authorities are using administrative data from different sources to better assess supply. A study conducted in 1990 shows that there were 21,627 homes at the time, of which 65 percent were used as primary residence. Back then, properties for housing constituted 55 percent of the total properties in the country (3,641 building units), of which 10 percent were detached or semi-detached houses and 90 percent were apartments. However, data on the evolution of the supply of housing since then is very limited. To better assess the housing market in the country, the authorities conducted a Real Estate Census in 2021 using administrative data from different sources. The 1990 and 2021 datasets are not fully comparable but, at the aggregate level the estimated number of properties in the country increased from 6,653 to 10,468, of which 3,442 were intended mainly for housing. The data also shows that the number of housing units in the country has almost doubled since 1990 in line with population, reaching 41,215 units in 2021.

| Table 3. Andorra: Housing and Properties Stock by Type | | | |
|---|---------------|--------------|--|
| (As of 1990) | | (As of 2021) | |
| Type | Units | Percent | |
| Properties for housing (individual house or apartment) | | | |
| Main residence | 14,085 | 65.1 | |
| Secondary residence | 3,451 | 16.0 | |
| Accommodation with absent occupant | 1,277 | 5.9 | |
| Collective accommodation (hotel, community, etc.) | 295 | 1.4 | |
| Vacant housing | 2,495 | 11.5 | |
| Other types | 24 | 0.1 | |
| Total | 21,627 | 100.0 | |
| Type of properties | | | |
| Properties for housing (individual house or apartment) | 3,641 | 54.7 | |
| Property for agricultural use | 979 | 14.7 | |
| Hotel/aparthotel/community | 279 | 4.2 | |
| Industrial, commercial, administrative | 1,637 | 24.6 | |
| Type not declared | 117 | 1.8 | |
| Total | 6,653 | 100.0 | |
| Type of units | | | |
| Housing | 41,215 | 50.0 | |
| Tourist apartment | 3,319 | 4.0 | |
| Local | 4,642 | 5.6 | |
| Parking | 14,561 | 17.7 | |
| Storage room | 7,792 | 9.5 | |
| Warehouse | 1,777 | 2.2 | |
| In works | 810 | 1.0 | |
| Others | 2,329 | 2.8 | |
| No information | 5,982 | 7.3 | |
| Total | 82,427 | 100.0 | |
| Type of properties | | | |
| Housing | 3,442 | | |
| Others | 7,026 | | |
| Total | 10,468 | | |

Sources: Andorran authorities and IMF staff calculations.

17. The recent construction boom may not bring much relief to the stock of available housing and affordability. Anecdotal evidence suggests that most housing construction in recent years have focused on luxury (or expensive) housing, which are unaffordable for most of the population. This trend towards more expensive units has been driven in part by the demand for more higher-end houses by a segment of the population (including foreigners), but also by increases in the costs of material and land, which push developers towards more profitable types of

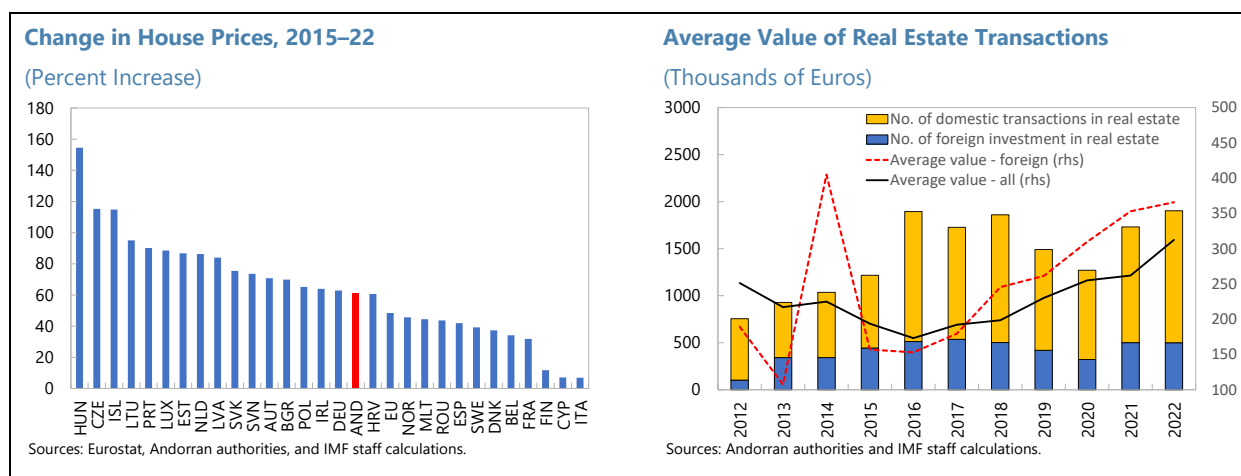
housing. As they face increases in the costs of material and land). Construction permits have on average a larger number of bedrooms per unit, thus costing more per unit than smaller housing. Furthermore, although residential permits increased in 2019 and 2020, the increase was still moderate and just in line with population growth, therefore not in line with the increasing demand pressures.



18. With housing prices increasing faster than the EU average and difficult access to credit, many Andorrans are crowded out of the housing market. Between 2015 and 2022 housing prices in the country have increased by 61 percent, compared with 48 percent on average in EU countries. The number of residential real estate transactions has increased in the last decade, with an average of 1,600–1,800 apartment units sold per year. Financial conditions and access to mortgage matter more for residents than non-residents who usually do not require a mortgage or can borrow from another financial market. About half of real estate transactions in Andorra are carried out with mortgage at an average of EUR375,000 in 2022, and a large proportion of them are carried out by Andorrans. Yet, even for residents, the high standards to qualify for mortgage in the domestic financial market and high interest rates means that most of the population cannot access bank financing to become homeowners—affecting directly first-time home buyers and creating a

disparity between wealthier residents able to borrow and the remaining of the population unable to buy housing and therefore stays as renter.

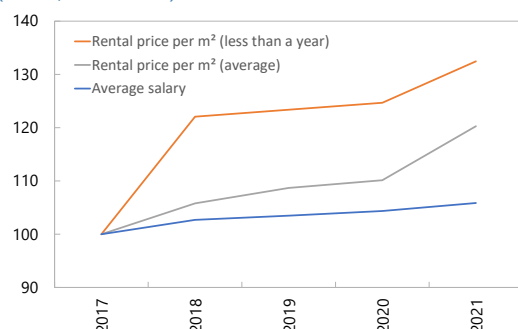
19. The use of housing as a wealth/investment vehicle is contributing the rise in real estate prices. Almost 30 percent of transactions in residential real estate in Andorra are done by foreigners. With a large share of foreigners buying property in Andorra for investment purposes, those units lose their shelter component and become financial assets. This intensifies pressure on real estate prices. If the buyer does not live in the unit or rent it, this increases the stock of vacant properties and reduces housing supply. The total value of foreign investment in real estate was around EUR70 million in 2015 and has grown to EUR183 million in 2022, indicating that foreigners are an increasing player in the domestic housing market. Moreover, the average value of transactions of foreign investment in real estate has almost double since 2012, while the average value of domestic transactions in real estate has increased by 25 percent only. Housing prices in general have accelerated since 2017, especially the prices of dwellings bought by foreigners. Monaco, another microstate favored by the wealthiest, has a similar trend but even more intensified, with the number of real estate sales growing by 130 percent since 2010 despite steep price increases, as the supply is unable to keep with the rising demand.



20. On the rental market, affordability has also worsened with rents increasing faster than wages, especially for those seeking to sign a new lease. Andorra's rental prices tend to be lower than those in the capital of other European countries, but so are average net salaries (EUR1,200 in Andorra compared to EUR1,420 in a sample of EU countries) and low-income earners are more severely affected. In addition, rental prices have increased much faster than wages, with average salary rising only by 6 percent between 2017 and 2021, while average rental price per m² rising by 20 percent in the same period. The increase is more acute for those that have lived in the place for a shorter period of time, with a 32 percent increase in rental prices between 2017 and 2021 for those that have stayed for less than a year. Although prices have increased across the board in Andorra, those increases tend to be lower with the years of residence partly because of rent increases caps and mandatory extension of contracts. As a result, those seeking to sign a lease face much higher prices than households renting a similar place for longer.

Average Rental Prices and Salaries

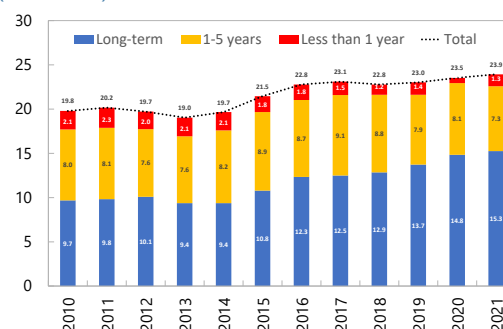
(Index, 2017=100)



Sources: Andorran authorities and IMF staff calculations.

Rented Housing Per Tenure

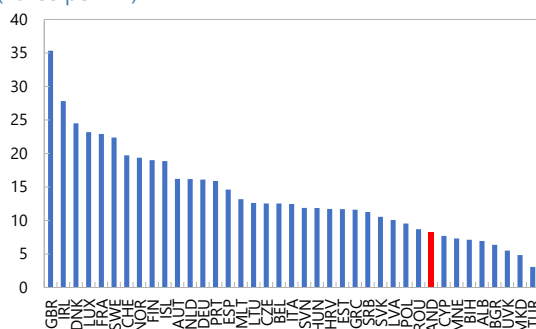
(Thousand)



Sources: Andorran authorities and IMF staff calculations.

Average Rent Per Month in European Capitals, 2021

(Euros per m²)



Sources: Eurostat, Andorran authorities, and IMF staff calculations.

Average Rental Price Per m² According to Years of Residence

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|------------------|------------|------------|------------|------------|------------|------------|------------|
| Less than a year | 7.5 | 7.0 | 7.7 | 9.4 | 9.5 | 9.6 | 10.2 |
| 1-2 years | 7.8 | 7.8 | 8.2 | 8.8 | 9.3 | 9.7 | 9.6 |
| 2-4 years | 7.3 | 7.1 | 7.2 | 7.6 | 8.0 | 8.4 | 9.1 |
| 5-9 years | 7.3 | 7.0 | 6.9 | 7.1 | 7.3 | 7.5 | 8.0 |
| 10-19 years | 6.6 | 6.7 | 7.0 | 7.3 | 7.4 | 7.4 | 7.8 |
| 20 years or more | 5.2 | 4.9 | 5.3 | 5.7 | 5.7 | 5.7 | 6.7 |
| Total | 7.0 | 6.7 | 6.9 | 7.3 | 7.5 | 7.6 | 8.3 |

Sources: Andorran authorities and IMF staff calculations.

21. In addition, rental tenure has lengthened reducing the fluidity of the housing market.

Between 2010 and 2021, the share of households occupying their home for more than 5 years has increased from 49 to 64 percent, of which about 13 percent of the total households have stayed for 20 years. Conversely, the share of households occupying their home for less than one year decreased from 11 to 6 percent during the same period, a decline from 2100 to 1350 households. This means that households are staying in the same home for longer, partly because of reluctance of current tenants to move given potentially significant price increases. This reduces the fluidity of the rental market, making it difficult for newcomers (including seasonal workers) to find available units and exacerbating price pressures.

D. A Review of Policies to Tackle Housing Affordability

22. Appropriate policies to tackle housing affordability should have two objectives: first, addressing a significant socio-economic concern; and second, removing a bottleneck to growth. Housing policies typically seek to balance multiple aims, of which affordability and access to housing are only two of the aspects, and typically not the priority ones. In Andorra, affordability is an important social issue, that compounds purchasing power concerns, and an economic issue, as the shortage of affordable housing is becoming a binding constraint on economic growth by lowering the attractiveness of the country to necessary foreign workers. A comprehensive

assessment of costs, benefits, and internal consistency of housing policies is needed. Doing so will also facilitate the development of complementary policies across other sectors that are conducive to a more sustainable urban planning, including ensuring transport, utilities, and other public services.

23. Experience in implementing housing policies other countries provide useful lessons for Andorra's policymakers³:

- **Income support programs:** subsidies in the form of housing allowances or housing vouchers can improve housing affordability for those most in need. In Europe, housing allowances tend to be means- and/or income-tested transfers to households, while in the United States these are usually attached to a specific unit of privately-owned housing or given directly to landlords. If well-designed, income support can help provide affordable housing regardless of owner or regulation status (including through the private market), can facilitate labor mobility, and be effective at providing targeted assistance. Moreover, housing allowances make rental income more secure, which is particularly important where eviction is difficult to enforce. However, despite the short-term benefits, housing income support create distortions, including the potential to raise rental prices with landlords settling with renters a higher price, alter the distributions of rents, and be ineffective if there is a lack of supply of affordable housing.
- **Rent control and landlord-tenant regulations:** rent control policies help to prevent sudden and steep increases in rents. They could come in the form of rent ceilings or freezes by governments, or prices could be free at contract setting but have an upper bound for subsequent adjustments. Rent controls are widely used across countries as they can be easily linked to explainable social objectives, prevent landlords from capturing housing subsidies, and increase the bargaining power of renters. However, these policies should be carefully considered as they distort the market and could discourage investment in rental properties. There is no clear evidence that rent controls have led to lower rents over time, but there is evidence that they are associated with lower housing supply. Additionally, rent regulations tend to benefit more longer-stay tenants as landlords seek to set a higher initial rent to compensate for the erosion over time and cause a divide between established households and new households. Gradually de-regularizing tight rent controls could improve landlords' profits which in turn increases the supply and access to private rental options by improving market forces.
- **Raising the low stock of rental housing from the existing housing stock:** improving the use of existing vacant space can increase the supply of rental housing in the medium-term. This requires taking a stock of vacant properties and identifying the incentives that are creating the vacancies, which are usually related to speculation in the housing market, demand for secondary residencies and/or tax policies. A high vacancy rate can exacerbate rent price increases, especially in scenarios with low housing supply elasticity. In those cases, tax and other regulatory measures could help to increase rental supply in the medium term from the existing housing stock. These include vacancy tax, limits on short-term rental services, capital controls, tax on

³ This section is mostly based on policies outlined in the paper "*Affordable Rental Housing: Making It Part of Europe's Recovery*" (IMF, 2021). Refer to the paper for specific examples of policies implemented in different countries.

foreign homebuyers, requisition/conversion, among others. However, the impact is not guaranteed to be felt by low-income renters as these measures tend to affect mostly high-priced properties. In addition, where renter-landlord regulations are not adequately balanced, and equalizing the rights could also increase rental housing supply as more owners would be willing to put their housing units in the rental market. Compulsory conversion of underused facilities into affordable housing should be a last resort for areas facing severe shortage of rental housing and high vacancies. Yet, in some cases, the incentives could be created to transform commercial properties into dwellings, including through “gentle requisitioning” or “solidarity leases”, among others.

- ***Boosting the housing stock and access to it:*** increasing the physical stock of housing is important to address the supply and demand mismatch of affordable housing.
 - The governments can provide incentives for new construction of affordable housing through regulatory measures, financing facilitation and subsidies—grants, loan guarantees or low-interest loans, or sale of land at below-market prices or as long-term leasing—and by disincentivizing holding of vacant land.
 - Social rental housing can also boost affordability for low-income households by providing residencies at below-market prices. These can be developed by the government or through public-private partnerships and, when implemented, should be part of a comprehensive affordable housing strategy, as these are typically costly and less flexible than housing allowances and could intensify poverty traps and other social issues.
 - Social issues. The impact of social housing on the rest of the rental market depends on its size and whether the total number of units in a market can be raised without crowding out the provision of other low-income housing supplied by the private sector. Moreover, if not well-targeted, the provision of social housing can create distortions, including in cases in which large segments of the population are eligible or where the eligibility criteria for social housing are applied only at entry and not revisited over time.
 - Other policies, such as changing zoning regulation, investment in public infrastructure, and urban planning policies have the potential to affect housing supply elasticities, boost new construction and the use of vacant housing, and make more efficient use of land. Regulatory reforms to streamline building permits and reduce bureaucratic hurdles can decrease the cost and time needed to build new housing and lower prices.

Table 4. Andorra: A Map of Rental Housing Policies

| Short term | | Medium term | |
|---------------------------|---|---|---|
| (+) Portable and targeted | <p>Income support programs</p> <ul style="list-style-type: none"> • Housing allowances • Housing vouchers | (-) Effects on investment incentives and prices | <p>Measures to boost rental availability from existing housing stock</p> <ul style="list-style-type: none"> • Vacancy tax • Limits on short-term rental services • Capital controls/tax on foreign homebuyers • Requisition/conversion |
| (+) Quick to implement | Rent controls and landlord-tenant regulation | | <p>Measures to boost the rental housing stock and access to it</p> <ul style="list-style-type: none"> • Social housing • Public infrastructure • Targeted subsidies for rental real estate development • Tax on vacant land • Spatial regulations • Administrative procedures |
| | | (+) Most durable effects | (-) Costly and/or slow-moving |

Source: International Monetary Fund (2021)

24. In the case of Andorra, policies should address the key features driving the affordability issue in the country. The problem of housing affordability in Andorra is associated with rental affordability, given the disproportionate number of tenants in Andorra and should be the priority. Therefore, policies to favor access to ownership are welcome but have limited impact. Andorra also faces a distribution issue in the supply of housing, and therefore measures should create incentives to boost the supply of affordable housing (i.e., quotas, mandated share of IZ units, land availability, tax incentives, etc.) and reduce profits from higher units (i.e., taxes). Policies should also balance the desired to provide income support to low-income renters (i.e., housing allowance, etc.). When designing policies, it is also important to be cognizant of distortions that hinder the market and that are difficult to remove in the medium-term.

E. Policy Considerations and Conclusions

25. Addressing housing affordability is key to the government's policy agenda. Since, 2021. The authorities have been introducing a series of measures aimed at improving affordability in the short-term and are setting up measures to improve the stock of housing in the medium term. Table 5 provides a detailed list of measures taken and planned by the authorities.

Table 5. Andorra: Authorities' Planned Measures to Address the Housing Affordability Crisis

| GOVERNANCE-RELATED POLICIES | |
|-----------------------------|---|
| | <ul style="list-style-type: none"> • Creation of the National Housing Institute and establishment of the Housing Fund. • Development of a strategic plan for the demographic growth model. • Law on the right to adequate housing. • Creation of a property registry. • Government access to housing data for policymaking • Creation of the system of housing indicators, including an inventory of dwellings, rental contracts, and prices by local governments. • Professionalization of the real estate appraiser. |

| SHORT-TERM POLICIES | |
|---|---|
| Income support programs | <ul style="list-style-type: none"> • Flexibilization of requirement and increase of rent aid (EUR3.5 million; 1,471 households in 2022) and other rental housing support measures. • Additional benefits, within the Renova Plan, for owners that introduce energy-efficient improvements to rental properties. • Guarantee program for the purchase of a first home, through which it will guarantee 20 percent of the value of a mortgage loan. • Exemption from real estate transfer tax for the first home purchase. |
| Rent control and landlord-tenant regulations | <ul style="list-style-type: none"> • Mandatory extension of rental contracts (2019–23), and new extension until 2027 of current contracts. • Temporary cap on rent increases (5 percent for extended contracts, 2 percent for contracts in place for at least one year) for rents above EUR8/m². • Creation of an inventory of dwellings, rental contracts, and prices by local governments. • Preparation of a reference price index and determination of the affordable price. • Creation of a guaranteed rental agency of public management. • Creation of a property management fund at a guaranteed price. • Establishing protocols to ensure timely evictions and adequate provision of support to vulnerable households. • Implementation of a tax on foreign real estate investment. |

Table 5. Andorra: Authorities' Planned Measures to Address the Housing Affordability Crisis (concluded)

| MEDIUM-TERM POLICIES | |
|--|--|
| Raising rental availability from existing stock | <ul style="list-style-type: none"> • Tax incentives for owners who offer affordable housing (5 percent IS, IRPF). • Limit tourist accommodation licenses (HUT) and increase standards. • Creation of a tax on vacant properties (EUR20 m² and proposed to increase to EUR50 m²) and to be supplemented by an annual Tax Inspection Plan with the aim of bringing 3,000 houses back to the market. • Aid for rehabilitation and exemptions to the compliance with certain rules of rehabilitation of houses intended for rent (accessibility, energy efficiency, parking). • Tax incentives for the acquisition of rental properties. • Promoting expedite resolution of conflicts related to rental contracts. |
| Boosting the housing stock and access to it | <ul style="list-style-type: none"> • Creation of a public housing park of up to 300 homes at an affordable price (EUR50 million). • Define preferential acquisition rights, program for the acquisition/rental of buildings of public housing. • Public-private partnership, in collaboration with local governments, for the construction of affordable housing through administrative concessions. • Reservation of 10 percent of housing developments intended for sale, in favor of residents of more than 10 years in the country. • Slowdown of construction permits for buildings to sell instead of renting. |

26. Our analysis has drawn out the specificities of the Andorra housing market, which calls for a multipronged approach. Given the complexities of the sector, it is important to map housing policies into an overarching national-level strategy to provide a more coherent picture of costs, benefits, and internal consistency of measures, including links to other related policy areas such as public transportation, labor, etc⁴. If well-designed, housing and complementary policies have the potential to enhance long-term income opportunities for low-income households and allow the young population to benefit from the structural transformation of the economy. Targeted rental

⁴ For example, Portugal developed a national policy for housing which included protective measures for young people, the disabled, the elderly, and families with young children.

housing assistance could avoid the emergence of economic disparities. In addition, measures to increase the affordable (social) rental housing stock could stimulate demand, create employment, and reduce the carbon intensity of housing if the investment leads to greater energy efficiency. Short-term measures should focus on containing demand pressure by increasing rental availability from existing stock and by providing temporary economic and social relief without intensifying market distortions, while in the medium-term it is imperative to increase the supply of housing.

27. The problem of housing affordability in Andorra is associated with rental affordability, given the disproportionate number of tenants in Andorra and this should be the policy priority. Focusing on improving affordability for tenants is crucial for Andorran policymakers. Promoting ownership is also important, but helps a small fraction of households and, therefore, may not provide a viable structural solution given the country's economic structure and reliance on a large number of seasonal and foreign workers. It is therefore important for efforts to focus on improving rental housing affordability and/or alleviate its consequences for tenants.

28. The use of administrative controls may provide temporary short-term relief but at the costly expense of market distortions and greater imbalances in the housing market. Mandatory extensions and caps on rent increases are providing a temporary relief for many. However, these policies are also contributing to the lengthening of rental tenure which decreases fluidity in the market and creates a gap in rental prices between new and old tenants, and severely limit the availability of housing for seasonal workers. Income support measures are welcome in the short-term, but their effectiveness is limited.

29. The planned medium-term policies, if implemented, could help increase the supply of affordable housings. The immediate priority should be to use the existing housing stock more efficiently by mobilizing vacant properties, increasing residential mobility, and reducing under-occupation of homes. Efforts to boost housing supply by expanding the stock of affordable and social housing and taxing of unused land and empty dwellings are welcome. In addition, the first steps to build a public social housing stock is also positive, but it will be important for their eligibility criteria to be transparent, targeted, and reviewed periodically. The government should also create the right incentives for the private sector to play a critical role in improving housing affordability through fiscal, regulatory, and zoning and land measures.

30. Given the complexity and length of solutions to rebalance the housing market towards affordable housing, a broad policy medium-term agenda needs to be laid out. Increasing the housing supply is a medium-to long-term effort, and structural policies are paramount. They go beyond traditional policies to include structural measures to reduce elevated construction, provide land access, etc. A housing strategy will be closely related to the economic model that will drive Andorra's policy decisions in the medium-term, touching on issues of greater regional integration, deepening of the services sector and diversification towards higher-value added tourism, immigration policies, infrastructure and public investment considerations—all of which are crucial but largely out of the scope of this paper.

Annex I. Details on the Microdata and Calculations

- The analysis of housing affordability in this study is based on the microdata of the Survey of Living Conditions, provided to IMF staff by the Andorran authorities on a confidential basis.
- The sample covers 2018–20, i.e., does not allow to analyze post-COVID developments.
- The dataset includes information on household and person characteristics, as well as on housing costs and income. The data on household/person characteristics and the housing costs correspond to the survey year, but the disposable income corresponds to the previous year.
- Regarding person characteristics, there are some variables—country of citizenship, educational attainment, and employment status—that were asked only to individuals older than 16 years old prior to 2020. Nevertheless, this does not affect the calculations in the study because, when a personal characteristic is used to filter data, it always refers to the reference person in the household, who is older than 16 years old.
- The housing costs are reported at monthly frequency so, to compute the rent-to-income ratio and the housing cost overburden rate, they were annualized by multiplying them by 12.
- The income quintiles are calculated in terms of income per consumption units, to account for the composition of the household.
- Calculating the housing costs overburden rate requires determining if a household is overburdened or not. This is done as follows:
 - Compute housing costs (sum of rent and other housing expenses, multiplied by 12), net of housing allowances.
 - Compute disposable income net of housing allowances.
 - Identify the households that are overburdened. A household is classified as overburdened if it meets the following criteria:
 - Housing costs net of housing allowances are greater or equal than 0.
 - One of these three conditions is true:
 - Disposable income net of housing allowances is less or equal than zero.
 - Housing costs net of housing allowances are greater or equal than the disposable income net of housing allowances.
 - Housing costs net of housing allowances are greater than 40 percent of the disposable income net of housing allowances.
- The housing costs overburden rate is computed as follows:
 - Calculate the numerator—number of persons in overburdened households—by using the household size and the cross-sectional weights of the overburdened households identified in the previous step.
 - Calculate the denominator—total number of persons in the sample—by using the household size and the cross-sectional weights of all households in the sample.
 - Calculate the housing costs overburden rate by dividing the numerator and denominator computed in the previous two steps.

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