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PRINCIPALITY OF ANDORRA

SELECTED ISSUES

April 2025

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SELECTED ISSUES

March 12, 2025

Approved By
European Department

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I. Comparison With Peers 23

FISCAL IMPLICATIONS OF AGING IN ANDORRA: PENSION AND HEALTHCARE SYSTEM REFORMS[1]

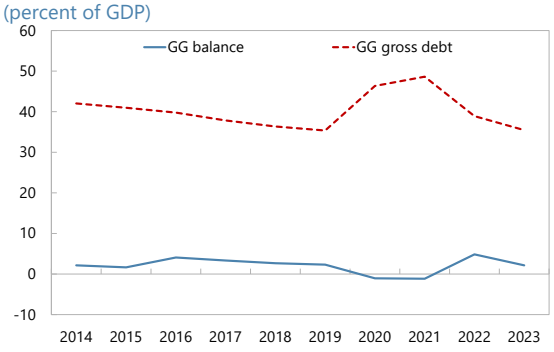
Andorra is undergoing a rapid demographic transformation as its population ages. Aging is expected to put significant pressure on the country's fiscal position, particularly through rising spending on pensions and healthcare. Comprehensive pension and healthcare reforms are needed to avoid straining public finances. In addition, a comprehensive analysis and preparation including a proactive immigration policy will be vital to prepare the economy for an aging population.

1. Andorra's fiscal position is currently solid. Over the past 10 years, the general government's overall balance has averaged a surplus of more than 2 percent of GDP. The country has strongly recovered from the pandemic and has accumulated foreign reserves. After an increase due to precautionary borrowing during the pandemic, public debt is projected to decline to 30 percent of GDP over the medium term (Figure 1).

2. Andorra's population is aging rapidly, a trend that is expected to continue. The country is undergoing a significant demographic shift, with increasing life expectancy and falling fertility. As a result, the population is aging quickly. According to UN projections, the share of the population aged 65 and older will increase from 14 percent in 2020 to 44 percent in 2070, while the total population is expected to shrink by 13 percent.

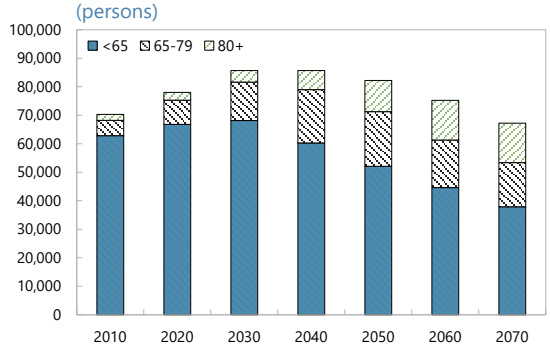
Figure 1. Fiscal Position and Population Projections

General Government Fiscal Balance and Debt, 2014-23
(percent of GDP)



Sources: Andorran authorities, IMF staff calculations

Population Structure
(persons)



Sources: Andorran authorities; UN Population Department; IMF staff calculations

3. Aging will have multifaceted impacts on the economy, particularly on the pension and healthcare systems. The impact can be felt in direct and indirect ways. This paper will focus on the direct effects of aging on pension and healthcare systems. As the population ages, spending on pensions and healthcare is expected to rise, placing pressure on public finances. Indirect impacts

[1] Prepared by Aidyn Bibolov.

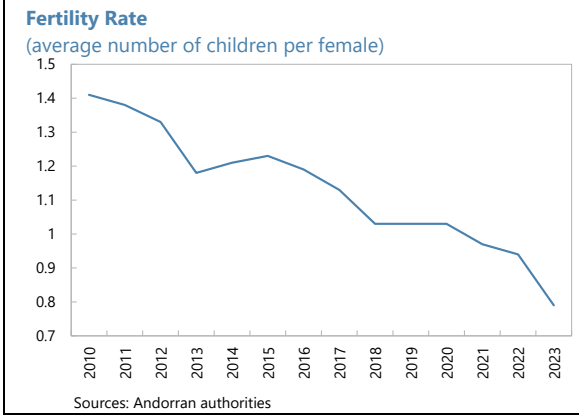
could include changes in productivity and shifts in demand patterns for goods and services, affecting companies' performance and tax revenues.

4. This paper is organized as follows. The first section will discuss recent population and demographic trends in Andorra. The second section will analyze the impact of these trends on the pension system in Andorra. The third section will estimate the impact of aging on healthcare expenditures. Conclusions and policy recommendations will be presented in the last section.

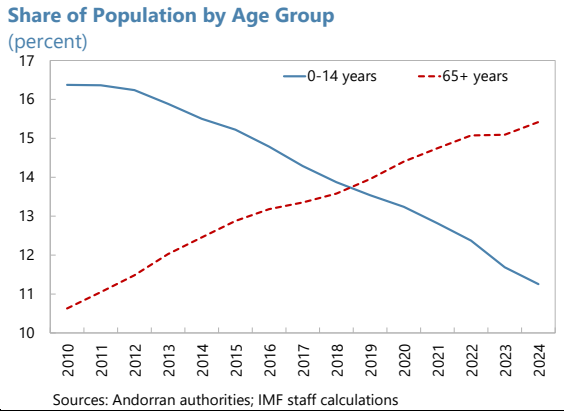
A. Population Trends in Andorra

5. The share of the older population in Andorra has been steadily increasing. Life expectancy in Andorra has been rising consistently, supported by stable socio-economic development and high living standards. In 2023, life expectancy reached 84.6 years. At the same time, the fertility rate has been declining, from 1.41 births per woman in 2010 to 0.79 in 2023, significantly below the replacement rate of 2.1 (Figure 2). As a result of these trends in longevity and fertility, Andorra's population has been aging rapidly. From 2010 to 2024, the share of the population aged 65 or older increased from 11 percent to 15 percent, while the proportion of children decreased from 16 percent to 11 percent.

Figure 2. Fertility Rate and Demographic Trends



Sources: Andorran authorities



Sources: Andorran authorities; IMF staff calculations

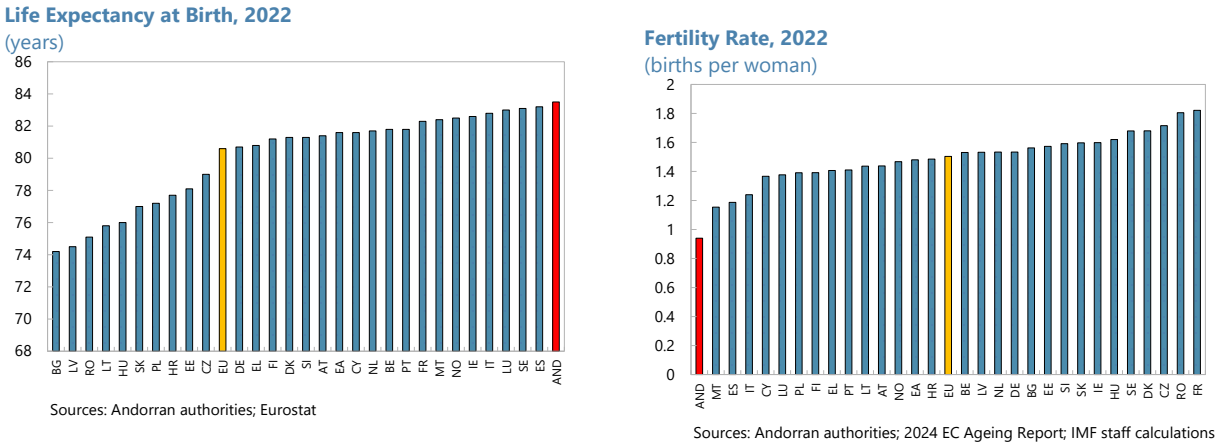
6. The aging phenomenon is not unique to Andorra. Many countries worldwide are experiencing similar demographic shifts, with populations living longer and fewer children being born. This trend is particularly evident in European countries. In response, the European Commission has been publishing the Ageing Report since 2006. This report provides key insights into demographic and socio-economic trends across EU member and associated states and is updated every three years. The most recent Ageing Report, published in 2024, includes data for 2022.[2] For this research, we will utilize the Ageing Report data along with Eurostat to compare Andorra with its European peers. A cross-country comparison, complemented by an in-depth analysis of Andorra,

[2] 2024 Ageing Report. Economic and Budgetary Projections for the EU Member States (2022-2070) - European Commission

will provide a comprehensive understanding of the country's aging trends and their impact on its fiscal position.

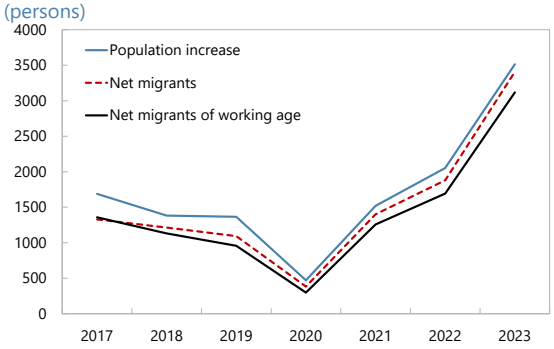
7. Andorra is at the extreme end of demographic trends in Europe. In 2022, life expectancy at birth in Andorra was 83.5 years—the highest life expectancy in our sample—nearly 3 years longer than the EU average (Figure 3). Conversely, Andorra also had the lowest fertility rate in the sample with just 0.94 births per woman compared to the EU average of 1.5 in 2022. These contrasting demographic trends reflect broader European patterns, but they are particularly pronounced in Andorra, where rising longevity and declining fertility are driving rapid population aging.

Figure 3. Life Expectancy and Fertility Rate

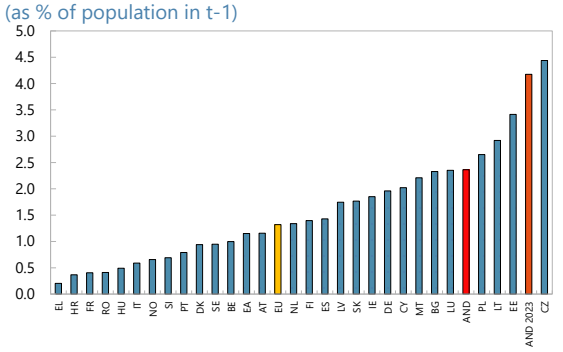


8. Inward migration has played a crucial role in maintaining the share of the working-age population in Andorra. Despite significant population aging, the proportion of the working-age population (ages 20 to 64) has remained remarkably stable, accounting for around 68 percent of the total population over the past decade. A key factor in this stability has been inward migration. Between 2016 and 2023 (the period for which immigration data is available), Andorra's population increased by 12,000 people. The majority of this increase—89 percent—was driven by net migration, which added 10,700 people to the country. Of those who arrived, 92 percent (or 9,800 people) were of working age (Figure 4). Compared with EU countries, Andorra had one of the highest net migration rates as a percentage of its population, with a rate of 2.4 percent in 2022. In 2023, this rate rose further to 4.2 percent. As such, inward migration has significantly helped offset the aging impact on Andorra's working-age population.

Figure 4. Population Change and Migration



Sources: Andorran authorities; IMF staff calculations



Sources: Andorran authorities; 2024 EC Ageing Report; IMF staff calculations

B. Impact on the Pension System

9. The general pension system in Andorra operates on a pay-as-you-go basis. The most recent pension reform, implemented in 2015, set the retirement age at 65 and requires a minimum of 15 years of contributions. Pension payments are based on a points system, with an implicit assumption of 9.6 years of payouts after retirement. Pillar 1 is mandatory for all employees. Pillar 2 consists of occupational pensions, which are mandatory for some government employees and voluntary for those in the private sector.[3]

10. Andorra's pension system setup relies on two institutions: the social security fund and the retirement reserve fund. The social security fund CASS (Caixa Andorrana de Seguretat Social) is responsible for the collection and distribution of pension payments. The retirement reserve fund FRJ (Fons de Reserva de Jubilacio) accumulates and manages the surpluses of the social security fund. The FRJ serves as a cushion to support the social security fund in case of deficits. As of the end of 2024 the FRJ has accumulated assets of €1.8 billion or about 50 percent of GDP. The funds are invested in a mix of equities and high-quality credit instruments.

11. Andorra's pension system is more generous compared to its peers. While the benefit payout ratio is around 44 percent, similar to the EU average, the pension contribution ratio of 12 percent of salary is lower than the typical 16 percent to 28 percent in comparator countries.[4] Additionally, the pension conversion ratio, which assumes payouts for 9.6 years after retirement, does not reflect current life expectancy trends.

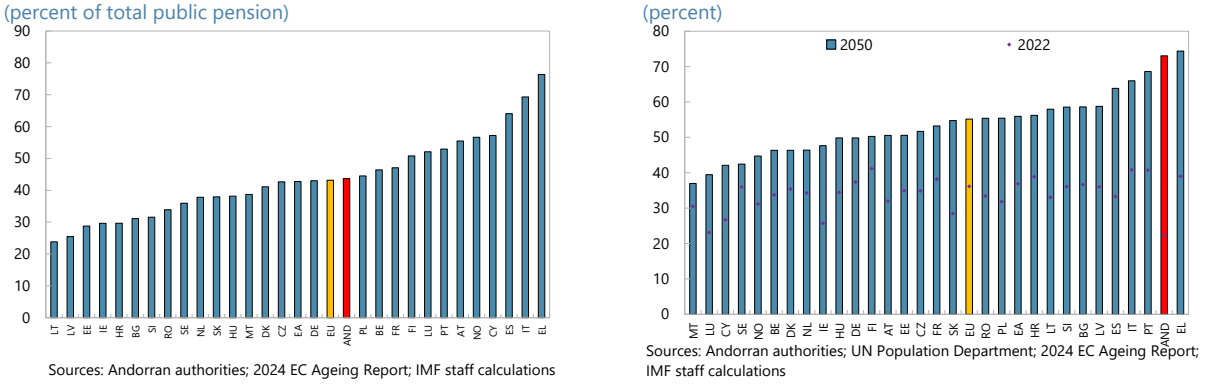
12. The dependency ratio is set to increase in Andorra more than in other European countries. Currently, Andorra has a relatively favorable dependency ratio of people aged 65 years and older to the working age population. At 22 percent, it was lower than in the EU countries in

[3] For more details on the pension system setup in Andorra see IMF Country Report No. 24/58.

[4] 2022 CASS Position Paper.

2022 (Figure 5). However, given the trends in fertility and life expectancy, the dependency ratio in Andorra is projected to increase significantly. According to UN projections, the dependency ratio is set to rise to 73 percent by 2050 which will be higher than the projected rates for most EU countries then. Increase in the dependency ratio will increase pension expenditures.

Figure 5. Benefit Ratio and Old Age Dependency Ratio

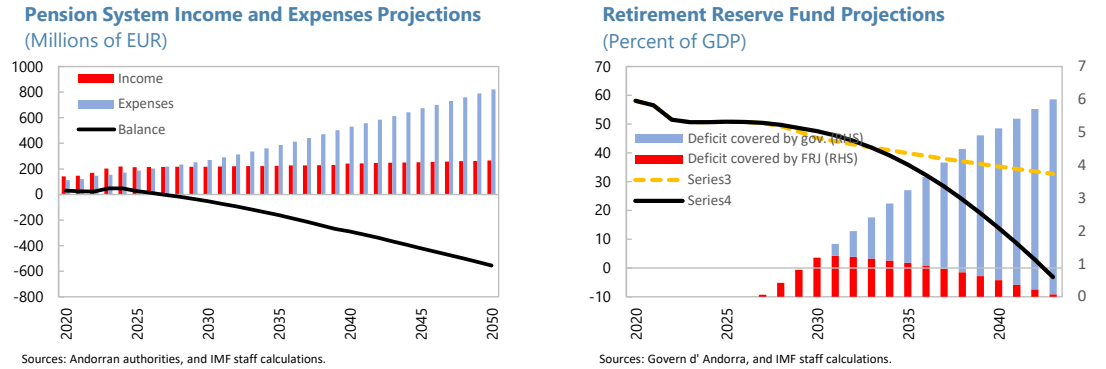


Sources: Andorran authorities; 2024 EC Ageing Report; IMF staff calculations

Sources: Andorran authorities; UN Population Department; 2024 EC Ageing Report; IMF staff calculations

13. Absent reforms, the pension fund is projected to run a deficit by 2027, and the reserve fund will be depleted by 2043. Using actuarial assumptions for pension projections and IMF macroeconomic forecasts for long-term growth (1.5 percent) and inflation (1.7 percent), we have estimated pension system dynamics through 2050. To date, the system has generated surpluses each year as contributions have exceeded payouts. However, under the no-policy-change scenario, as the population ages, the system is expected to face deficits starting in 2027 and the FRJ reserve fund to be depleted by 2043 (Figure 6). The shift in the estimated deficit and depletion year, compared to the previous estimates done in 2022, reflects the recent increase in the working-age population. Nevertheless, the conclusion remains unchanged: without urgent reforms, the pension system is unsustainable.

Figure 6. Pension System Balance and Reserves Projections

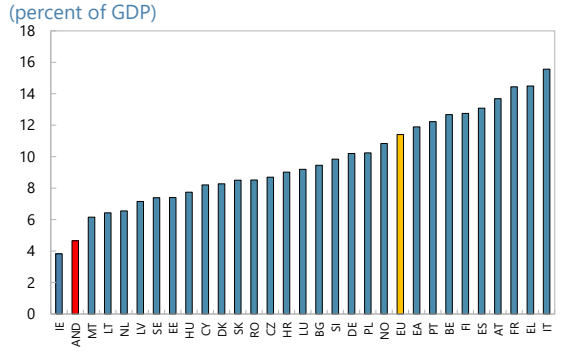


Sources: Andorran authorities, and IMF staff calculations.

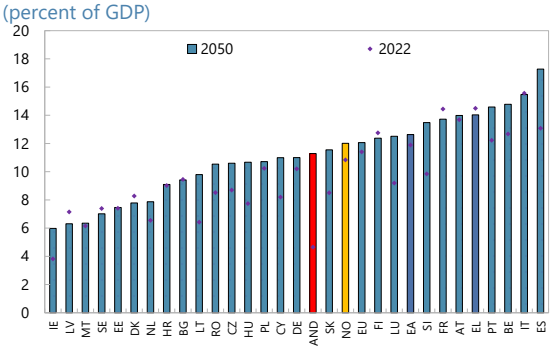
Sources: Govern d' Andorra, and IMF staff calculations.

14. Pension expenditures in Andorra are set to rise more than most European countries. In 2022, pension system expenditures in Andorra were lower than in most EU countries at 4.7 percent of GDP. While pension expenditures are expected to increase in most countries, the rise in Andorra is particularly pronounced. Under the no-policy-change scenario, pension expenditures in Andorra are projected to reach about 11.3 percent of GDP by 2050, bringing them close to the EU average by that time (Figure 7).

Figure 7. Pension Expenditures



Sources: Andorran authorities; 2024 EC Ageing Report; IMF staff



Sources: Andorran authorities; 2024 EC Ageing Report; IMF staff calculations

C. Impact on the Healthcare System

15. Andorra maintains a comprehensive healthcare system. The public healthcare system is administered by SAAS (Servei Andorrà d'Atenció Sanitària), a semi-public entity created in 1986. SAAS manages all public healthcare resources and provides a wide range of services through primary care centers, specialized clinics, and the country's sole hospital. Public healthcare is primarily funded by CASS, the national social security system, which is financed through mandatory contributions from employees, employers, and the government. In addition to the public system, Andorra also has a well-developed private healthcare sector.

16. The public healthcare system in Andorra operates under universal coverage. All legal residents and employees working in the country are eligible for healthcare under CASS. This includes both Andorran citizens and foreign nationals who have worked in Andorra and contributed to the social security system. Employees and employers contribute a portion of salary to the CASS. There is also a government contribution for those not working or those who are retired. The public system covers the majority of residents and employees, providing access to essential healthcare services.

17. Private healthcare is provided through medical centers that offer a wide range of services. Some residents opt for private health insurance to cover costs that are not fully covered by CASS or to access treatment in private facilities. Private healthcare is particularly prevalent in specialized areas such as dentistry, dermatology, cosmetic surgery, and other elective procedures.

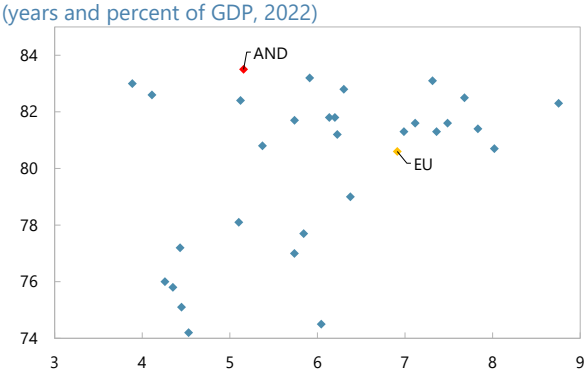
18. Andorra signed agreements with France and Spain that provide mutual medical coverage for their residents. These agreements allow residents to receive care while in another

country and enable Andorrans to seek specialized care treatments abroad. With only one hospital and a limited number of specialist doctors, Andorra relies on these arrangements for medical services not available locally. Patients in need of specialized treatments travel to France and Spain, where they can access the necessary care. This system helps the Andorran healthcare system to avoid the high costs of establishing specialized services that would be inefficient due to diseconomies of scale. Additionally, specialists from abroad periodically visit Andorra, providing another option for patients requiring care not readily available in the country.

19. Andorra has a well-developed system for preventive and geriatric care. SAAS runs public campaigns aimed at the population, which include vaccinations, screenings, health education, lifestyle promotion, and occupational health measures. The focus is on early detection and proactive care to reduce preventable diseases and enhance the quality of life. A specialized health program for seniors promotes an active lifestyle and healthy aging.

20. Andorra has an efficient healthcare system. The authorities are effectively using structural characteristics of the system to manage expenditures. Agreements with neighboring countries to provide specialized care help contain costs that would otherwise be expensive to maintain for a microstate. The country's small size and well-organized system also contribute to the efficiency: during the pandemic, Andorra successfully inoculated 100 percent of its residents and opened its borders and ski resorts earlier than other places. Active inward migration by seasonal workers who are generally younger and consume less healthcare services than the resident population helps keep expenditures low. The authorities use a cost-benefit analysis to determine which healthcare services should be offered domestically. While life expectancy in Andorra is the highest compared with the EU countries, public health expenditures at around 5.6 percent of GDP in 2022 were lower than the EU average.

Life Expectancy and Healthcare Expenditures in Europe
(years and percent of GDP, 2022)



Sources: Andorran authorities; Eurostat; 2024 EC Ageing Report

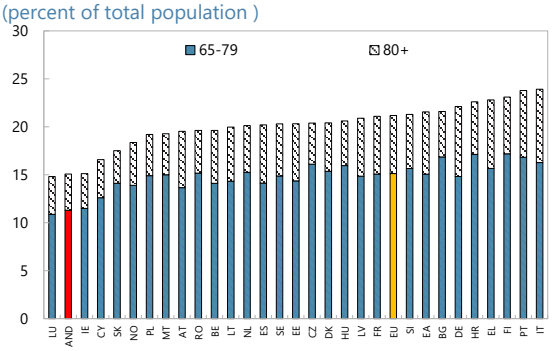
21. The increasing share of elderly people will lead to higher public healthcare expenditures in Andorra. In 2022, people aged 65 and older accounted for 15 percent of the total population, one of the lowest shares compared with EU countries. However, by 2050, this share is projected to rise to 37 percent, the highest among its peers, according to UN projections (Figure 8). Notably, the share of the population aged 80 and above is expected to increase to from 4 percent of the total population in 2022 to 13 percent, in 2050 also among the highest compared with the EU. The share of the 80+ population is important as they consume more healthcare services per capita than other age groups. According to CASS analysis,[5] healthcare expenditures per capita increase

[5] CASS Report/Financial Statements, financial year 2023.

with age, reaching the peak of above €5,000 for individuals older than 80. This age group accounts for three times their share of the population in healthcare spending. As the share of the 80+ population in Andorra is projected to continue increasing due to long life expectancy in the country, it will drive higher healthcare expenditures.

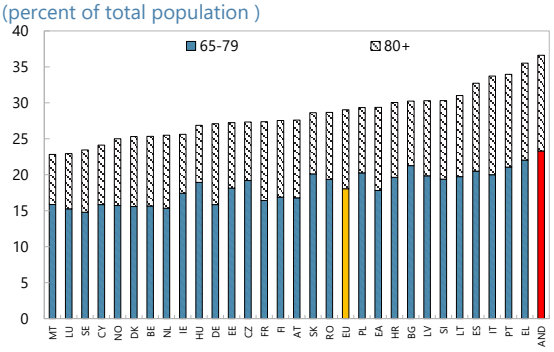
Figure 8. Share of Elderly Population and Healthcare Spending

Share of Elderly Population, 2022
(percent of total population)



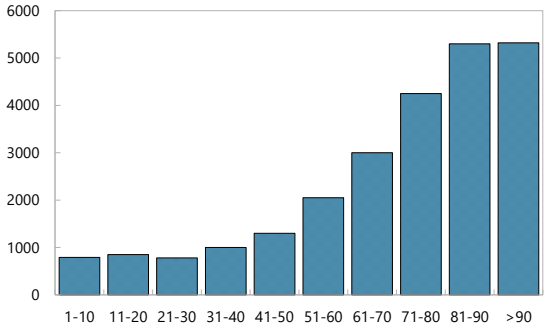
Sources: Andorran authorities; 2024 EC Ageing Report; IMF staff calculations

Share of Elderly Population, 2050
(percent of total population)



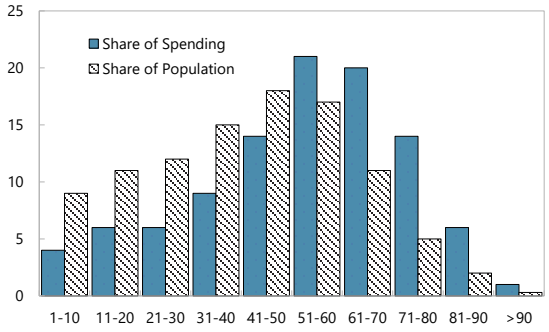
Sources: UN Population Department; 2024 EC Ageing Report; IMF staff calculations

Healthcare Spending per Capita, 2023
(euro)



Source: Andorran authorities

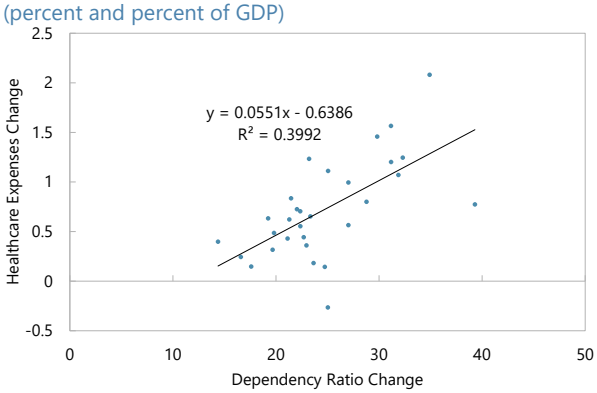
Share of Population and Spending by Age Group, 2023
(percent of total population)



Source: Andorran authorities

22. Without reforms, healthcare expenditures are projected to significantly increase. We use two methods to estimate the impact of aging on healthcare spending in Andorra. For the first method, we estimate the relationship between the changes in the old age dependency ratio and healthcare expenditures based on projections for the sample of countries from the 2024 EC Ageing Report. We find that healthcare expenditures increase with increase in the dependency ratio. Using the estimated relationship, we project that healthcare expenditures in Andorra will be 7.8 percent of GDP in 2050, 2.2 percentage points of GDP higher compared to 2022. For the second method, we apply per capita health expenditures for the 10-year age intervals in Andorra, calculated by CASS in 2023, to the population

Dependency Ratio vs Healthcare Expenses Change, 2022-70
(percent and percent of GDP)

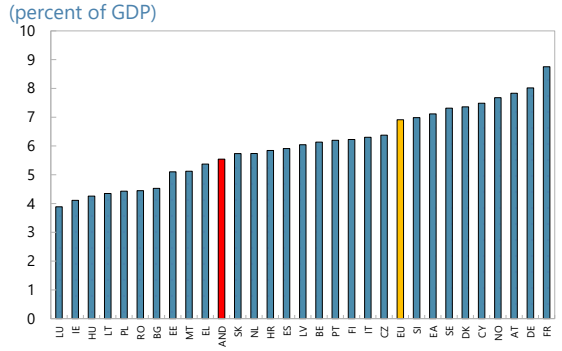


Sources: Andorran authorities; 2024 EC Ageing Report; IMF staff calculations

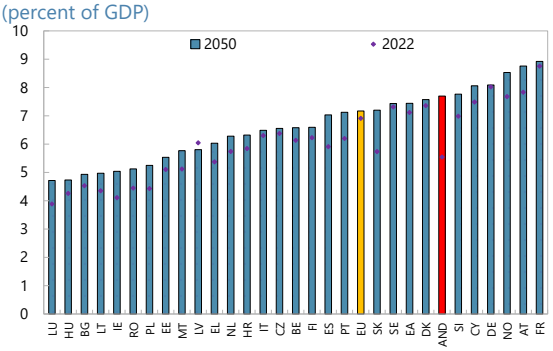
structure for 2050 based on UN projections. Using this method, we estimate that healthcare expenditures will be 7.6 percent of GDP in 2050, 2 percentage points of GDP higher compared to 2022. The estimates are subject to uncertainty of population projections, assumptions made, and data limitations. However, the fact that alternative methods provide a similar result points to an increase in healthcare expenditures under the no-policy-change scenario.

23. Andorra is projected to have the largest increase in healthcare expenditures in the sample. According to the 2024 Ageing Report, all but one EU countries are expected to see their healthcare expenditures rise between 2022 and 2050, Andorra is projected to experience the largest increase. As a result, Andorra's healthcare expenditures are expected to shift from being below the EU average in 2022 to above the EU average by 2050 (Figure 9).

Figure 9. Healthcare Expenditures



Sources: Andorran authorities; 2024 EC Ageing Report; IMF staff calculations



Sources: Andorran authorities; 2024 EC Ageing Report; IMF staff calculations

24. Some peer countries show examples how to digitalize healthcare or address the aging trend. One of the focuses of healthcare reforms in Luxembourg over the last 15 years has been to promote digital health initiatives. The reforms helped to improve delivery and efficiency of services to the population. Today Luxembourg is a thriving hub to many health technology companies.[6] Malta has been focusing on the holistic approach to the aging population with a high life expectancy, low fertility, and active inward migration trends. The increasing focus on aging has been reflected in development of a 2023-2030 National Strategic Policy for Active Ageing.[7] A comprehensive approach to aging based on social inclusion, healthy ageing, and equality, the policy aims to keep the older population healthy and active to reduce healthcare costs.

D. Conclusions and Policy Recommendations

25. Aging will have a significant fiscal impact in Andorra. The increase in life expectancy and declining fertility mean that Andorra is projected to age at the fastest pace in Europe. Without reforms, pension and healthcare expenditures in Andorra are projected to increase by 8.8

[6] OECD (2023), State of Health in the EU, Luxembourg; European Observatory on Health Systems and Policies (2024), Luxembourg: health system summary.

[7] Malta (2022) 2023-2030 National Strategic Policy for Active Ageing.

percentage points of GDP by 2050 compared to 2022. This increase will place considerable strain on public finances, requiring adjustments in other expenditures, raising revenues, or an increase in public debt. While such adjustments are challenging for any country, they will be particularly difficult for a microstate like Andorra, which is more vulnerable to shocks. Therefore, inaction is not a viable option for Andorra.

26. Pension system reform is long overdue and needs to be addressed promptly. Pension reform has been under discussion in Andorra for many years. CASS commissioned several actuarial studies and published a position paper in 2022 highlighting the unsustainability of the current pension system. Reforming the pension system could involve adjustments to contributions, retirement age, the conversion ratio, and the development of additional retirement saving options. While the final decision rests with policymakers there are some possible reform options to consider:

- Adjusting the pension system parameters. In its 2022 position paper, CASS proposed a pension reform to alter the parameters of the pension system: increase contribution rate from 12 to 16 percent of gross salary; increase conversion factor from 9.6 to 17 in 25 years; and increase retirement age from 65 to 67 in 8 years. Combining these changes makes the pension system more sustainable. The first system deficit appears in 2039, and reserves depletion starts only from 2040.

- Link retirement age to life expectancy. Increasing retirement age will help pension system sustainability, but a more comprehensive approach would be to link the retirement age to life expectancy as was done in some other countries.[8] This would make the pension system more responsive to demographic changes, reducing the need for future reforms.

- Developing additional pension pillars. Currently, Andorra's pension system mainly relies on Pillar 1, the social security system. Pillar 2, which includes employer-sponsored pension plans, remains underdeveloped, and Pillar 3, which would consist of voluntary private pension savings, does not exist. Developing the pension system to expand and add these additional pillars would offer retirees more options for saving for retirement and enhance the sustainability and sufficiency of the system.

27. Healthcare reform needs to be developed, discussed, and implemented soon. Healthcare reform is currently under discussion in Andorra. In 2024, the National Health Pact was agreed upon by all stakeholders, laying the foundation for future reforms. Key areas for healthcare reform include improving service delivery efficiency, controlling costs, strengthening population health, and increasing system revenues. Here are some key recommendations that could be relevant for Andorra:

- Improving cost efficiency of services. This can involve transitioning to value-based care, where payments are made based on patient outcomes rather than services rendered. Better expenditure control can be achieved by making pricing information for healthcare services easily

[8] For example, in Denmark, Italy, and Finland.

accessible to consumers. Promoting digitalization in the planning, delivery, and follow-up of care can further reduce costs and improve accountability. Given that Andorra has only one hospital, controlling costs in public facilities is crucial. Authorities' plans to adopt payment models based on processes (e.g., pregnancy care) rather than individual visits, as well as digital initiatives like

- consumer apps and healthcare dashboards, are steps in the right direction for improving cost efficiency. As the population ages, more services oriented toward elderly may become cost efficient in Andorra. This could involve attracting specialized medical professionals and investments in infrastructure for which resources would need to be planned in advance.

- Promoting preventive care and healthy aging. Early identification and prevention of diseases is a cost-effective strategy to reduce healthcare expenditures. These prevention efforts will become even more important as the elderly population grows, particularly those over 80, who tend to consume more healthcare resources. Increasing healthy life expectancy is important not only for containing healthcare expenditures, but also for strengthening the pension, as healthy people are more likely to be more productive and work longer. Andorra already has an extensive preventive care system with regular checkups for early disease identification and is developing programs for healthy aging. Expanding these programs and making them accessible to everyone can increase their impact.

- Increasing contributions and revenues. The healthcare system in Andorra is currently funded through employee and employer contributions (3 percent and 7 percent of salary, respectively). Going forward, these contributions may need to increase to reflect growing expenditures. Additionally, revenues could be boosted by offering a broader range of services to those who are able to pay, such as passive residents. As the population ages, the demand for healthcare services will shift, presenting opportunities to offer new services and generate additional revenue.

28. Active migration policies should be part of the strategy to address aging in Andorra. Inward migration has helped maintain the working-age population ratio in Andorra, despite the aging trend in recent years. Given the long-standing negative fertility trend, migration will continue to be a crucial factor in slowing population aging. Policies aimed at attracting and retaining talent will help mitigate the fiscal impact of an aging population. Attracting highly skilled labor, creating a business-friendly environment to support the establishment and growth of new businesses, particularly in higher value-added sectors, can drive economic diversification and increase tax revenues. Expanding the size of both the goods and labor markets—potentially through an EU association agreement—could also help achieve this.

29. Aging is a complex phenomenon that requires a comprehensive approach. This research has focused on the direct impact of aging on pension and healthcare systems. However, aging will affect other areas of the economy and people's lives. For instance, there will be a growing demand for long-term care and other services tailored to the elderly population. Additionally, aging will influence the economy through shifts in the demand for goods and services, for example increasing demand for elderly care professionals in the country. The authorities must plan for these

changes and adjust accordingly. Despite the challenges, Andorra is in a strong position to undertake necessary pension and healthcare reforms that will help maintain its macroeconomic stability in the face of population aging.

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ANDORRA: INCOME AND ITS DRIVERS IN A LONG-TERM PERSPECTIVE[1]

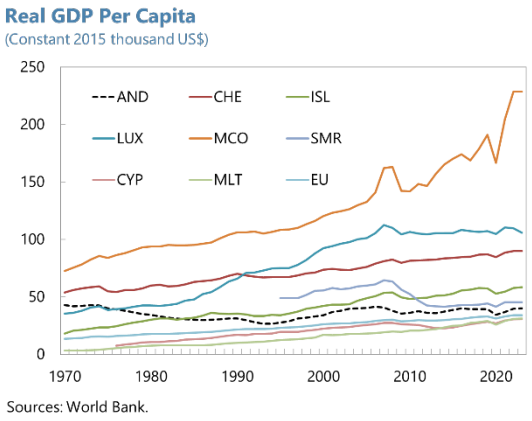
Income in Andorra has stagnated in the last 50 years. Starting from a very high level compared to peers, it has not grown as fast, as investment and productivity have lagged behind. In this study, we analyze the dynamics of income growth in Andorra from 1970 to today, comparing it to peer countries in Europe. We look at how peer countries successfully improved their income over time. Our findings suggest that investments in higher value-added sectors would be needed to keep the Andorran growth at potential and creating the right environment is key.

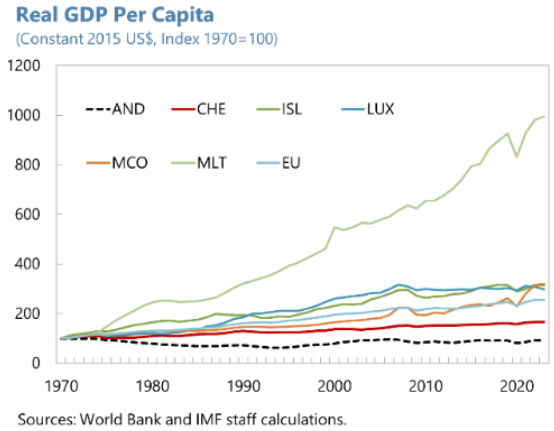
A. Income in Andorra has Stagnated in the Last 50 years

1. Andorra's income has stagnated since the 1970s. The country's income was one of the highest in Europe, but the current level remains slightly below the one 50 years ago. The ability of the country to absorb a large population increase over time while keeping high income levels is notable. However, looking at peers, this performance is an outlier.

2. Andorra is the only country among European comparators to have experienced a decline in GDP per capita in the last 50 years. We look at comparators with similar size and development. These are Malta and Cyprus, as they are also small countries relying on tourism; Switzerland, Luxembourg, and Iceland, countries with comparable income levels, as are Monaco and Liechtenstein, microstates with similar characteristics to Andorra, as well as San Marino.

Figure 1. Real GDP Per Capita: Comparison With Peers



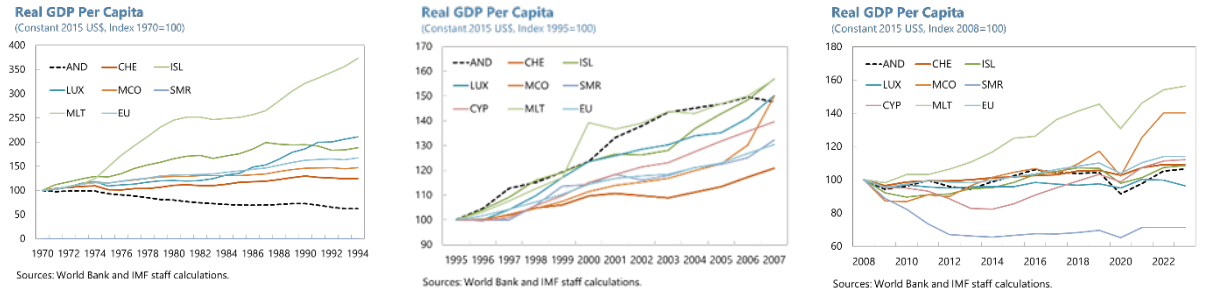


[1] Prepared by Mariarosaria Comunale (EUR). We acknowledge the help from the EUR Regional Economic Outlook team and Claire Li for their inputs based on the October 2024 Regional Economic Outlook for Europe. We thank Helge Berger, Aidyn Bibolov, and Jean-Jacques Hallaert (all EUR) for comments and suggestions, and Thomas Gade, Fuad Hasanov, and Alex Pitt (Malta team), Ezequiel Cabezon (Republic of San Marino team), Salvatore Dell'Erba (Switzerland team) and Valentina Semenova (Cyprus team) for the discussions.

- **The contrast is particularly marked with Malta and Cyprus**, which, starting from a lower base, grew the most. Malta's income was multiplied by 9 and Cyprus' by 3 since the 1970s, thanks to economic diversification, marked productivity gains, and a combination of reforms pre-EU accession and use of EU funding. These countries are now approaching the EU27 average income, completing their catching up, while Andorra has remained only slightly above this level in the recent years (see Appendix).

- **However, countries starting with high income levels also saw significant increases in their GDP per capita**. During the last 50 years, income in Monaco and Luxembourg doubled, while in Switzerland it increased by 70 percent.

Figure 2. Real GDP Per Capita Growth Over Time



3. In the last 50 years, growth in Andorra barely matched population growth, resulting in a stagnating GDP per capita. Investment and productivity lagged behind during that period. While cross-border workers, which contributed to the growth experienced in countries like Switzerland, Luxembourg, Liechtenstein, Monaco, and San Marino,[2] may explain in part to their better income performance, other countries (notably island States like Iceland, Cyprus and Malta) also experienced substantial income growth with limited cross-border workers like in Andorra.[3]

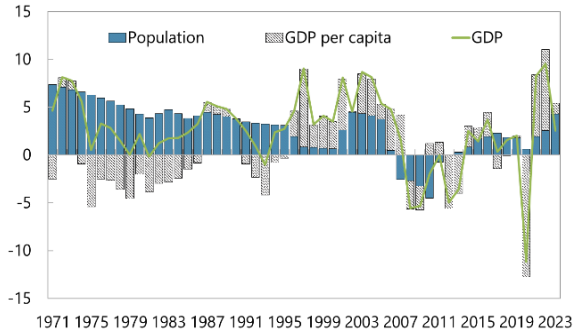
4. This trend was reversed between the mid-1990s and the great financial crisis (GFC), with higher investment and productivity. The Andorran economy experienced structural changes towards banking and financial services and expanded winter tourism. After the GFC, growth components were more volatile, while the economy adjusted to a real estate market crisis and a retrenchment of financial services as the international financial landscape became unfavorable to Andorran banks. The economy concentrated on sectors with lower value-added, and investment was more limited.

[2] The number of cross-border commuters has increased over time, for instance in Liechtenstein, where 57 percent of employment is now covered by cross-border commuters from 25 percent in the 1980s. For more details on Liechtenstein: Principality of Liechtenstein: Staff Concluding Statement for the 2025 Article IV Mission

[3] For Andorra, the number of cross-border commuters is of approximately 2,000 units (3.5 percent of the population). This small number is due to its geography and infrastructure barriers with neighboring regions.

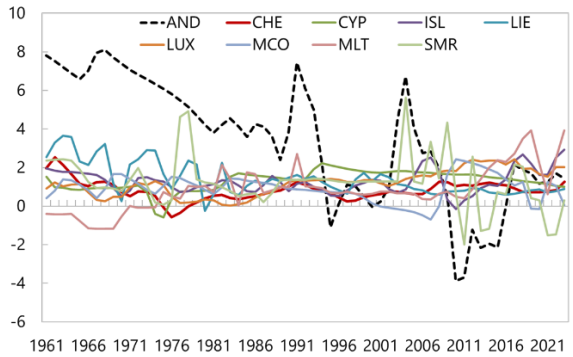
Figure 3. Real GDP Growth Decomposition and Population

Growth in Real GDP and Components
(Percentage change, y/y)



Sources: World Bank and IMF staff calculations.
Note: GDP data is in constant 2015 US$.

Population Growth
(Percentage y/y)

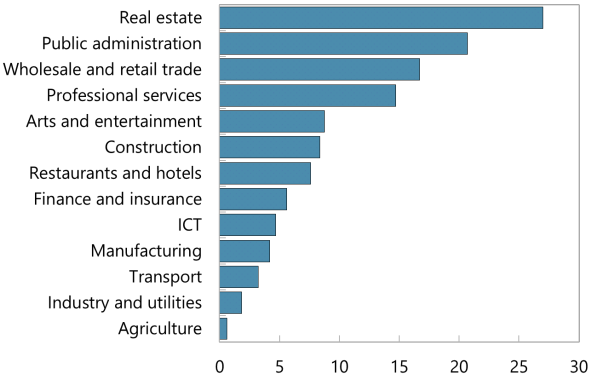


Sources: World Bank.

B. Economic Sectors, Productivity and GDP Per Capita

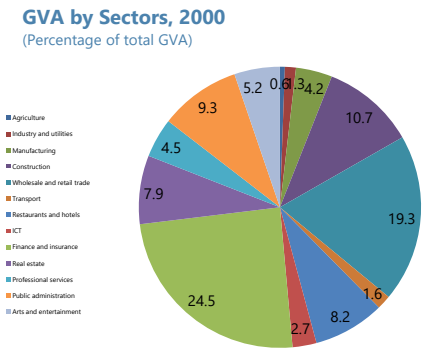
5. In the last 20 years, growth remained dominated by low value-added sectors in Andorra. Tourism-related sectors remained important while the real estate sector grew substantially. On the other hand, the contribution of the financial and insurance sector halved, following the 2015 banking crisis and structural changes in global banking and financial secrecy. Most of Andorra's GVA growth now comes from real estate, wholesale and trade, and public administration. The contribution of higher value-added sectors, such as Information and Communication Technology (ICT) services remained limited.

Contribution to GVA Growth, 2000-2023
(Percentage points)

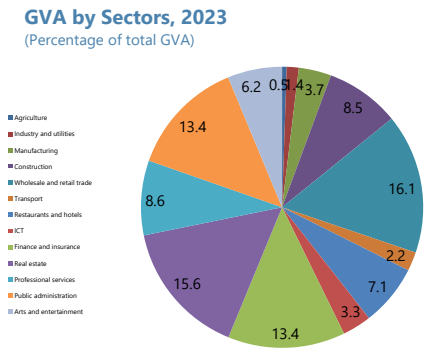


Sources: Andorran authorities and IMF staff calculations

Figure 4. Gross Value-Added Decomposition

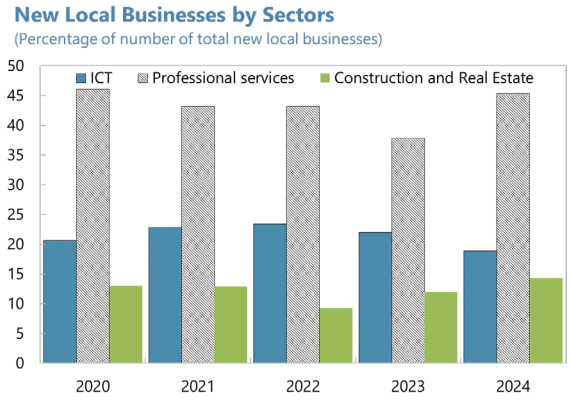


Sources: Andorran authorities and IMF staff calculations.



Sources: Andorran authorities and IMF staff calculations.

6. The expansion of new businesses remains limited and constrained by structural bottlenecks. New ICT businesses in particular account for only 20 percent of new firms in Andorra and firms working in higher value-added segments are mostly smaller firms and especially clustered in programming and technical assistance. Some success stories illustrate the potential for new investment, for example in the MedTech sector. However, a number of bottlenecks have been identified as constraints to private sector development and to attracting FDIs in Andorra. These include a limited domestic market, administrative rigidities, housing affordability issues, and difficulties to attract talent. A recent survey shows that firms have difficulties hiring specialists, resulting in a decline in overall ICT personnel since 2020,[4] while expenditure in ICT by firms grew by 13 percent between 2018 and 2022.



Sources: Andorran authorities and IMF staff calculations.

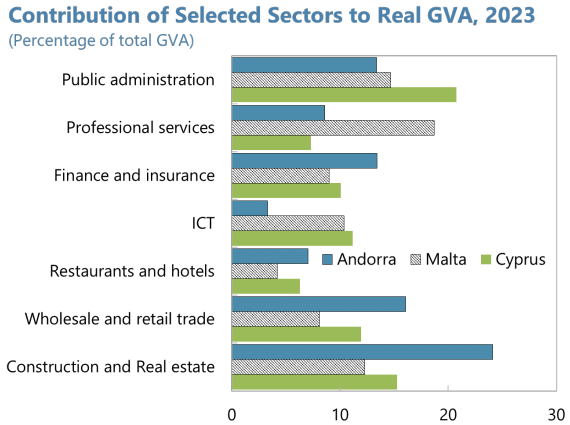
7. This contrasts with countries that experienced fast growth in GDP per capita over the same period. The examples of Malta and Cyprus are particularly striking, with a greater focus on high value-added sectors, including ICT. Other examples include Switzerland and Liechtenstein, which has developed a highly specialized manufacturing sector.[5] Among EU countries, Malta leads

[4] This is based on the ICT enterprise survey and the survey on the use of technologies in companies for 2022.

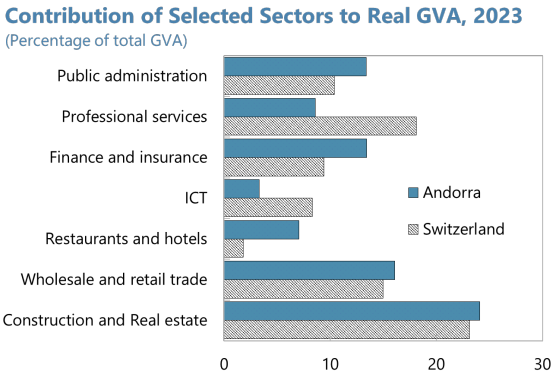
[5] For Liechtenstein, manufacturing contributes about 37 percent of GVA, hence it is a country with a different economic structure than Andorra. Compared with other small sovereigns with large financial centers, Liechtenstein's specialized and export-oriented manufacturing sector stands out for contributing materially to GVA. The second largest industry is the private banking and wealth management oriented financial services sector which represents 11 percent of GVA (S&P Global Ratings, Liechtenstein Report, 2023).

in terms of contribution of ICT to GVA, while among all the peers Switzerland leads in professional services.[6]

Figure 5. Contribution to Real GVA: Comparison With Peers



Sources: Andorran authorities, OECD, CYSTAT, and IMF staff calculations.



Sources: Andorran authorities, Switzerland Federal Statistical Office, IMF staff calculations. Note: For Switzerland, Professional services includes Real Estate, and ICT includes Transportation.

8. Comprehensive economic agendas drove income performance in peer countries. This was driven by policy credibility and an enabling business environment, that allowed for the development of specialized high value-added sectors with large contributions to economic growth, supported by investment and productivity gains. In the case of Malta, the top performer in our sample in terms of income growth, the economy pivoted towards a high-quality services-driven economy, while tourism-related sectors, still important, decreased their economic contribution (see Appendix). The large inflow of foreign workers has been also directed to support IT-based services and not limited to tourism. With limited room for manufacturing, specialization was key, with the fast expansion of the online gaming industry. Comprehensive structural reforms, e.g., Malta's Smart Specialization Strategy for the period 2021-2027, thrived with the active involvement of the private sector, on carefully selected priority areas including digital economy and climate change.[7] The Digital Decade Strategic Roadmap 2023 – 2030, the "Malta Vision 2050, and the Malta Tourism Strategy 2021– 2030 illustrate the prioritization of policies towards a productivity-driven growth strategy that focuses on digital innovation, infrastructure, education, healthcare, sustainability, and quality job creation.[8]

[6] See for ICT: ICT sector - value added, employment and R&D - Statistics Explained and for professional services: Businesses in the professional, scientific and technical activities sector - Statistics Explained

[7] Smart specialization is a key principle underpinning the European Commission Cohesion Policy for the period 2021-2027 in the Research, Technology, Development and Innovation (RTDI) priority. This approach brings together different actors to identify a country's national competitive strengths and research and innovation potential. See Policy & Strategy – Xjenza Malta

[8] See for instance: Malta Vision 2050 for a summary.

C. Conclusions: Diversification, Productivity and GDP Per Capita in Andorra Going Forward

9. Income in Andorra has stagnated in the last 50 years, with an economy dominated with lower value-added sectors. The construction and tourism sectors have brought a significant contribution to growth in Andorra and the financial sector remains important. The experience of peers, which experienced much higher GDP per capita growth, illustrates the importance of a comprehensive strategy to enable the development of higher value-added sectors, with often a high degree of specialization, in line with the country's size. Andorra has important advantages that can support income over the medium term, including large excess savings. As highlighted in the staff report, the policy framework lends credibility to the business environment. In addition, large savings, reflected in the very high current account surplus, can be unlocked to support growth going forward, reversing the limited contribution of investment to growth today.[9] Removing existing bottlenecks is paramount going forward. The experiences of peer countries show the importance of developing a comprehensive approach to diversification while favoring specialization. Furthermore, the examples of Malta and Cyprus illustrate the role that timely (in their case pre-EU accession) reforms can play in supporting growth going forward.

10. A range of actions could be instrumental in supporting GDP per capita going forward. First, removing bottlenecks would require multiple measures, from easing the business environment (incl. use of common digital platforms), addressing housing availability issues, upskilling the labor force and actions aimed at attracting talents especially in sectors such as ICT. Second, expanding opportunities through diversification and full access to the single market, that could be unlocked with the EU Association Agreement, if adopted, as a potential trigger for reforms, FDI inflows, and closer cross-country collaborations on research and innovation via EU programs. Not only innovative sectors but also traditional sectors can benefit from these reforms and expand towards a more high-end market (e.g., tourism) and specialize in new areas more organically (e.g., from health tourism to medical products), leveraging the advantages associated with being a microstate.[10] Andorra can also benefit of its consensus-driven, collegial decision-making practice when shaping strategies, involving different stakeholders. The "innovation area" is a welcomed plan on this regard connecting possible new innovative firms with the education system and public investments, albeit this project is still very much at an initial stage.[11]

[9] Total investments are estimated to be of around 8 percent of GDP, with private investments counting for 3 percent of GDP.

[10] See How small states can benefit from innovation | United Nations Development Programme. .[18] For instance, the success of Singapore and other "smart cities" have been built on a business-friendly and agile regulatory environment and strong investments in infrastructure, education, healthcare, and public services. See Singapore Overview: Development news, research, data | World Bank.

[11] For now, only limited resources have been directed from the 2025 budget to new grants for business in innovation and R&D (they count for approximately 0.5 million EUR).

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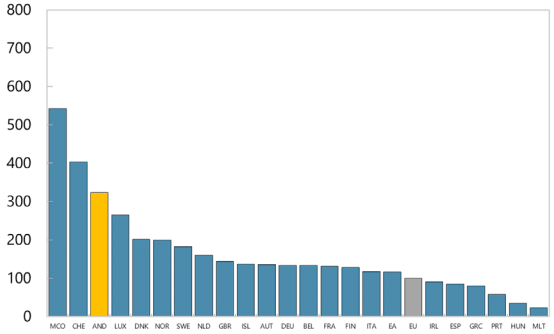
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Appendix I. Comparison With Peers

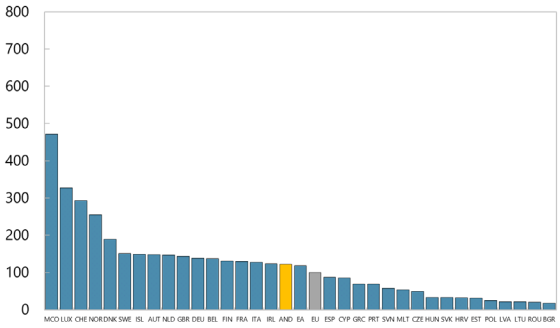
Figure A.I.1. Real GDP Per Capita Ranking Over Time

Real GDP Per Capita,1970
(Index EU = 100)



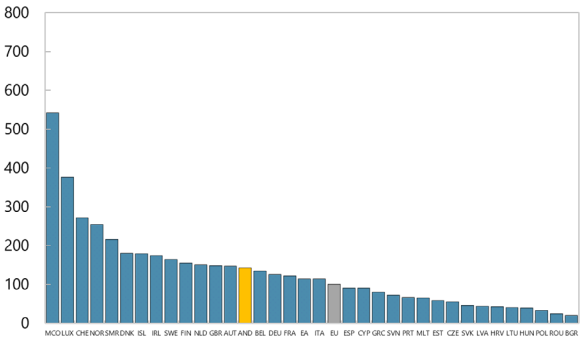
Sources: World Bank and IMF staff calculations.

Real GDP Per Capita,1995
(Index EU = 100)



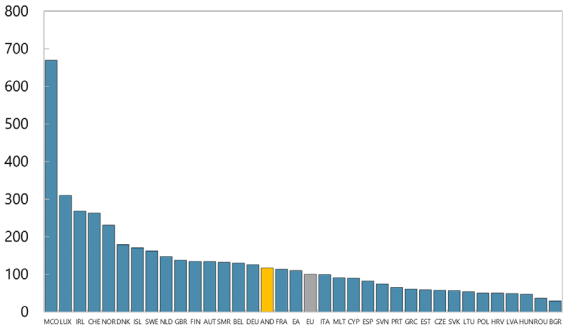
Sources: World Bank and IMF staff calculations.

Real GDP Per Capita, 2007
(Index EU = 100)



Sources: World Bank and IMF staff calculations.

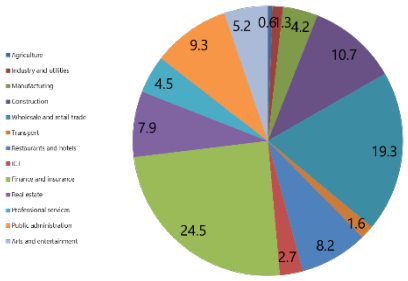
Real GDP Per Capita, 2023
(Index EU = 100)



Sources: World Bank and IMF staff calculations.

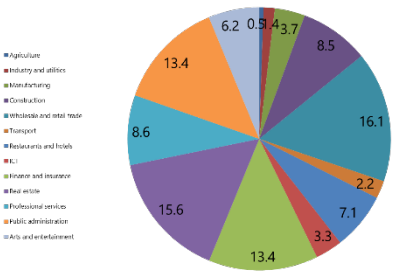
Figure A.I.2 The Evolution of the GVA in Andorra Compared to EU Peers

Andorra: GVA by Sectors, 2000
(Percentage of total GVA)



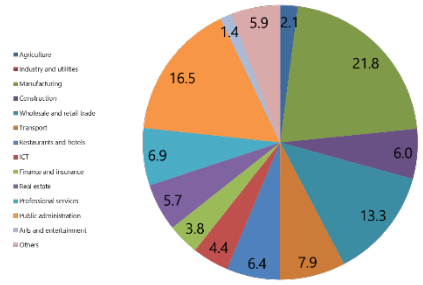
Sources: Andorran authorities and IMF staff calculations.

Andorra: GVA by Sectors, 2023
(Percentage of total GVA)



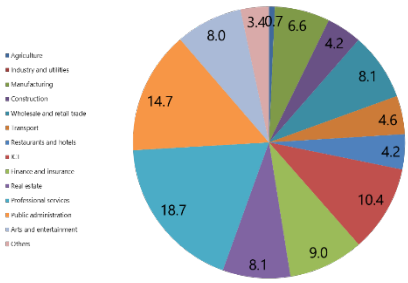
Sources: Andorran authorities and IMF staff calculations.

Malta: GVA by Sectors, 2000
(Percentage of total GVA)



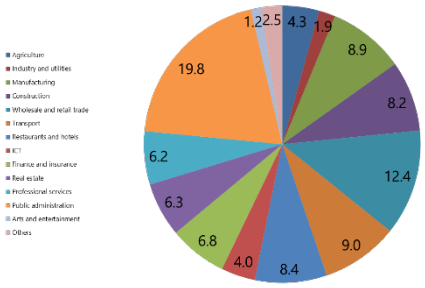
Sources: OECD and IMF staff calculations.

Malta: GVA by Sectors, 2023
(Percentage of total GVA)



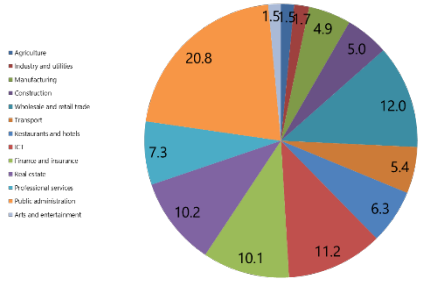
Sources: OECD and IMF staff calculations.

Cyprus: GVA by Sectors, 2000
(Percentage of total GVA)



Sources: CYSTAT and IMF staff calculations.

Cyprus: GVA by Sectors, 2023
(Percentage of total GVA)



Sources: CYSTAT and IMF staff calculations.