



# PRINCIPALITY OF ANDORRA

## SELECTED ISSUES

May 2026

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**International Monetary Fund**  
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## SELECTED ISSUES

April 9, 2026

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European Department

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## Acronyms

CASS	Caixa Andorrana de Seguretat Social
COFOG	The Classification of the Functions of Government (COFOG) from the Government Finance Statistics
ECG	Excess Cost Growth
GFS	Government Finance Statistics
GHED	Global Health Expenditure Database
LTC	Long-Term Care
OECD	Organization for Economic Cooperation and Development
PPP	Purchasing Power Parity
SAAS	Servei Andorra D'Atencio Sanitaria
UNPP	United Nations World Population Prospects
WEO	IMF World Economic Outlook
WHO	World Health Organization

# HIGH-FREQUENCY INDICATORS AND GDP NOWCASTING IN ANDORRA<sup>1</sup>

*High-frequency signals for Andorra were combined into a timely real-time estimate of quarterly GDP growth using a mixed-frequency nowcasting model. The resulting framework delivers a transparent, nowcast of quarterly GDP growth together with uncertainty bands. It can also be used for near-term scenario analysis.*

## A. Introduction

**1. Timely information on economic activity is essential for monitoring the business cycle and informing policy and risk assessments.** However, national accounts are released with a delay implying that the most recent, or current, quarter of GDP is typically observed only after a substantial lag. By contrast, there is a wide range of higher-frequency indicators (e.g., tourism flows, mobility and energy usage, external demand proxies, and sectoral activity measures, etc.) that are available at higher frequency and often with shorter publication lags.

**2. A survey of available high-frequency indicators suggests they can be effective in understanding short-term trends.** Main drivers of the economy on a gross value-added (GVA) basis include tourism, construction, real estate, and retail. An illustrative example of few key indicators is shown in Figure 1. For tourism and retail, the number of overnight tourists has increased in 2025 and retail sales in 2025 to date are broadly in line with past data. Imports related to retail trade and hospitality point to continued strength in GVA through the end of 2025. Imports of construction goods are not highly correlated with GVA growth in the second half of 2025 but energy consumption in the sector suggests activity remained robust.<sup>2</sup> In addition, as Andorra is a microstate and dependent on external factors, we look at key macroeconomic indicators of neighbors France and Spain and the euro area. Figure 2 shows that Andorran GDP growth is highly correlated with growth in Spain and France (correlation coefficients of around 0.9).

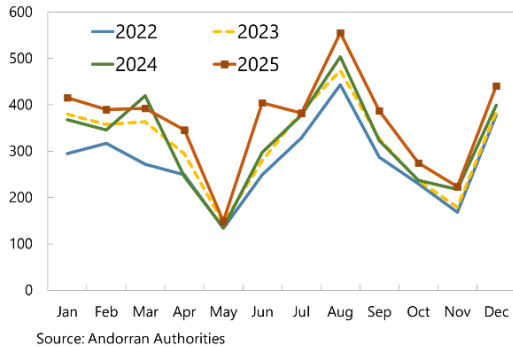
**3. Selected high frequency indicators are combined with historical national accounts data to develop a nowcasting model of quarterly GDP growth.** The focus of the nowcasting exercise is on estimating GDP growth in the current quarter, which is partially observed through high-frequency indicators. While the model can also generate forecasts for the subsequent quarter(s), these should be viewed as a natural byproduct of the framework rather than its primary objective.

<sup>1</sup> We acknowledge Carlos de Resende for his helpful guidance and comments, and Ashwini Arulrajhan (both EUR) for great assistance. We thank Andinet Woldemichael (STA) and the NowHub team for sharing their results and for the collaboration, the participants of seminar during the Article IV mission for helpful discussions and suggestions, and the Andorran authorities for data sharing. Any remaining errors are my own.

<sup>2</sup> As explained in the Staff Report of the 2026 Article IV consultation, goods imports can provide insights into GVA of construction, retail, and hospitality sectors, given that nearly all goods consumed or used as inputs of production in Andorra are imported. Hence, we have constructed the import of inputs aggregated for the key sectors.

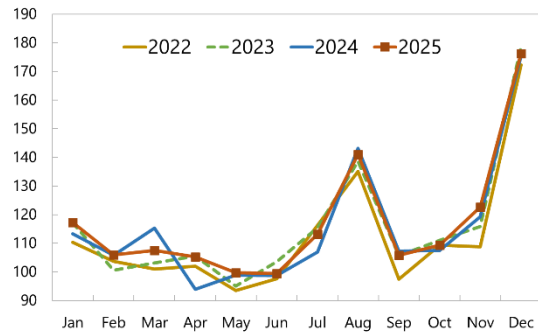
**Figure 1. Selected High-Frequency Indicators**

**Number of Overnight Tourists**  
(Thousands)



Source: Andorran Authorities

**Retail Sales**  
(Index, Nominal)



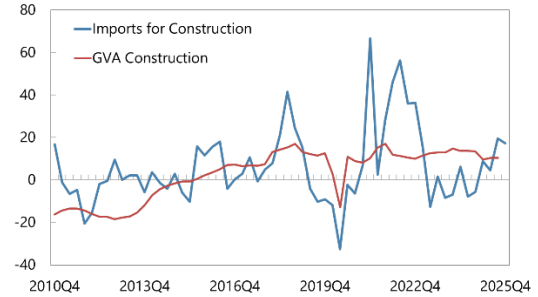
Source: Andorran Authorities

**Trade and Hospitality: Imports and GVA**  
(y/y growth rates)



Note: 2025Q4 refers to the period October-November.  
Sources: Andorran authorities and IMF Staff calculations.

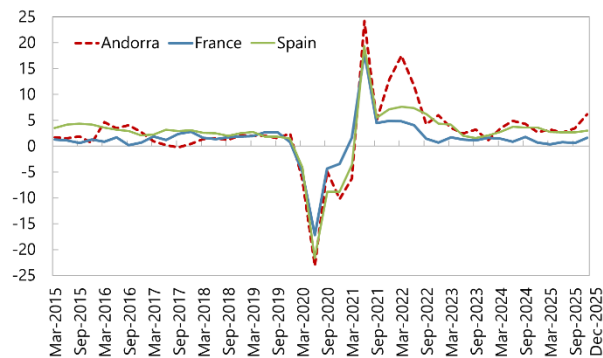
**Construction: Imports and GVA**  
(y/y growth rates)



Note: 2025Q4 refers to the period October-November.  
Sources: Andorran authorities and IMF Staff calculations.

**Figure 2. Real GDP Growth in Andorra, Spain, and France**

**Real GDP Growth Rate**  
(y/y percentage change, NSA)



Source: Haver Analytics

## B. Methodology

**4. We combine these heterogeneous signals into a timely real-time measure of quarterly GDP growth through a mixed-frequency nowcasting framework.** We adopt a mixed-frequency dynamic factor model (DFM) estimated in state-space form (See Appendix and de Resende, 2024 and Linzenich and Meunier, 2024). The key idea is that a small number of latent common factors can summarize co-movements across a large panel of indicators, while idiosyncratic components capture series-specific variation. To avoid overfitting and improve interpretability, the initial indicator set is screened using Bayesian Model Averaging (BMA) (see Steel, 2020), retaining only variables with posterior inclusion probability (PIP) above a chosen threshold.<sup>3</sup> This method weighs each candidate model by its PIP, rather than conditioning on a single specification and helps with smaller time samples with a high number of indicators (see Steel, 2020 and Comunale and Mongelli, 2021 for the euro area).

**5. We correct the model for large volatilities in the data.** The COVID-19 episode represents a particularly important challenge for nowcasting models because it introduced large, transitory disruptions and sharp changes in volatility that can dominate parameter estimates and inflate forecast uncertainty if not properly treated. We therefore consider a COVID-aware strategy that augments the measurement equations with pandemic dummies and restricts estimation to pre-COVID-19 periods when calibrating “normal-times” uncertainty.

**6. The nowcasting dataset combines monthly and quarterly indicators.** The estimation sample spans 2015m01 to 2025m11, and the data are retrieved from Haver Analytics or directly from the Andorran Department of Statistics. This window is chosen to ensure both the largest time dimension possible and a fully populated estimation panel, i.e. all series used in the baseline specification are available without internal missing observations over the estimation period (no “blanks”), thereby avoiding changes in the information set that could otherwise affect parameter estimation and model stability. The set includes a total of 20 quarterly series and 90 monthly series covering different sectors of the economy, i.e., tourists flows, employment, prices, vehicle registrations, electricity consumption, and external factors (more details in Appendix). Quarterly series are incorporated via a monthly representation consistent with the mixed-frequency framework (explained in the Appendix).

## C. Selection of Leading Indicators

**7. The results from the BMA selection are broadly consistent with prior expectations regarding the key drivers of short-term activity.** The indicator selection step prioritizes variables capturing external demand and tourism-related dynamics, notably Spain GDP growth and measures of tourist and visitor flows. Domestic price and activity conditions are also informative: notably CPI

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<sup>3</sup> To allow for a slightly more inclusive set of predictors, the PIP threshold is set at around 0.4 rather than 0.5, as usually in the literature (See Steel, 2020). Imposing a PIP of 0.5 would remove one-day visitors flows growth from the baseline, but we believe this is an important indicator in the case of Andorra. The results with the removal of this variable are robust compared to the baseline (available upon request).

for health services and electricity consumption of hotel and restaurants enter among the selected series, suggesting that consumption- and tourism-intensive components are central to the current nowcast signal. Variables directly related to construction activity are not selected in the baseline screening stage. As an additional accuracy check, we therefore augment the information set with imports relevant for construction inputs (e.g., construction-related materials and employment in the sector) to assess whether construction-linked external demand improves nowcast performance or alters the factor's composition.

**8. It is important to note that indicator selection in a BMA-based nowcasting framework is inherently data- and vintage-dependent.** As new information becomes available, or when the exercise is conducted for different quarters (either in real time or retrospectively), the set of selected indicators may vary slightly. For this reason, BMA screening is best viewed as a diagnostic tool rather than a fixed model choice and repeating the exercise as the information set evolves provides a useful robustness check on the stability of the nowcasting signals. However, Spain's GDP growth is selected in all specifications, confirming its role as a robust external anchor for Andorra's short-term outlook, while France GDP growth is not picked by the BMA. In some vintages, alternative energy-consumption indicators, such as electricity use in the financial sector, enter the model, while electricity consumption in hotels and restaurants remains the most consistently selected tourism-related energy proxy besides simple flows.

**Table 1. Andorra: Selection of Leading Indicators**

Variables	Posterior Inclusion Probability
Spain GDP growth	1.00000
CPI Health services	0.75125
Tourists	0.68273
Hotel and restaurants electricity consumption	0.52927
One-Day Visitors	0.39211

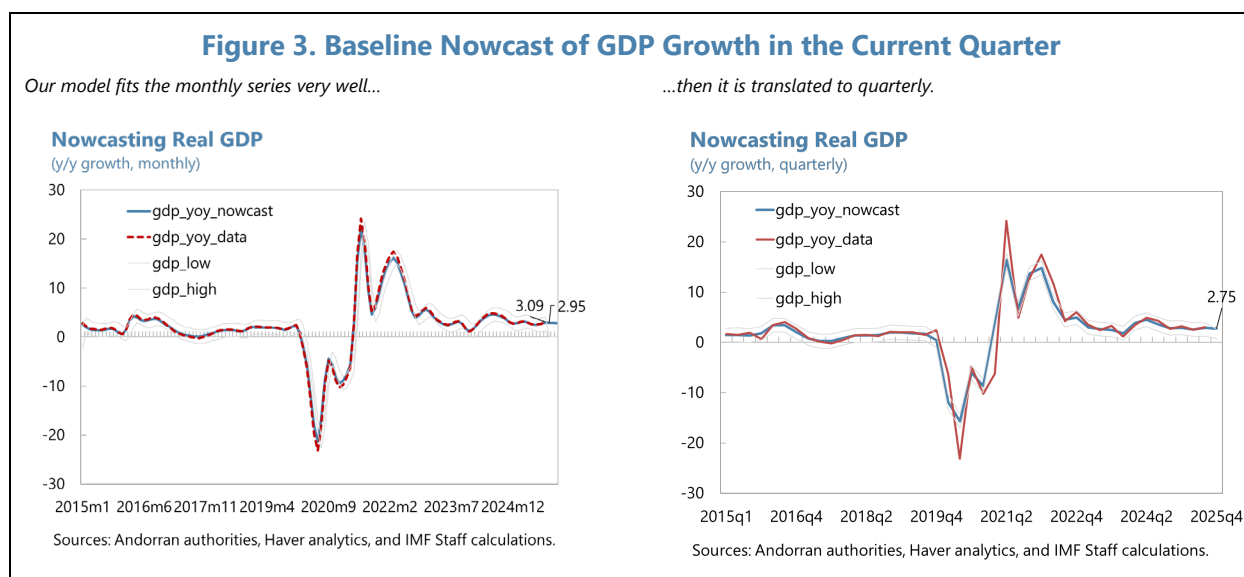
## D. Nowcasting GDP Growth

**9. The model nowcasts real GDP growth in 2025Q4 at 2.75 percent, year-on-year (yoy).**<sup>4,5</sup> This is based on the baseline specification from the BMA exercise and a data vintage ending in November 2025. As nowcasting models are primarily designed to estimate activity in the quarter to

<sup>4</sup> This is a point estimate (mean). The 68 percent confidence bands are between 1.5 and 3.7 and 95 percent bands are between 0 and 5 percent.

<sup>5</sup> We also compare our results with those obtained using the machine learning-based nowcast framework widely used at the IMF NowHub. It is a framework that "horse races" several machine learning models, and select the best one based on RMSEs. The model leverages full set of available indicators *simultaneously* rather than a pre-selected subset. This delivers strong predictive performance, but it may place less emphasis on the economic interpretability of the selected leading indicators. Despite these methodological differences, the results are broadly consistent: the real GDP growth nowcast in 2025Q4 is around 3 percent yoy, with confidence bands that are very similar to those obtained in our baseline specification. The RMSE of the selected model is 1.40.

which the latest high-frequency data pertain, the 2025Q4 estimate is the most accurate. At the same time, the framework also delivers informative short-horizon forecasts: the model projects real GDP growth in 2026Q1 at around 2.6 percent yoy.



## E. Validation and Model Comparison

**10. To assess the quality of our model, we also conduct a validation exercise based on “horse race” between alternative specifications.** The preferred specification is selected based on the lowest root mean squared error (RMSE) of the target variable, i.e., they deviate less from the actual numbers (in-sample valuation).<sup>6</sup> This exercise can also give a better sense of the range of mean nowcasts. Based on the previous considerations, we repeat the nowcasting exercise with 5 alternative models:

- Check #1: including **financial services**, adding their energy consumption.
- Check #2: including the **construction sector**. We first add in Check #2a: imports of materials for construction (see Section A)<sup>7</sup> then in Check #2b: we also include employment in the construction sector and lastly Check #2c: has only employment.
- Check #3: including **retail trade** more explicitly via employment in retail sector (“trade”).<sup>8</sup>

<sup>6</sup> We evaluate the model in monthly frequency as this is how is estimated in the DFM.

<sup>7</sup> The import baskets have been constructed so a different mix of imports could theoretically lead to better results.

<sup>8</sup> We could not add the retail trade Index because it starts in 2018m1 and we made the sample balanced with all variables available starting 2015m1. This is for both comparability and decreasing biases with larger T.

- Check #4: including **France GDP growth**, which is never captured by BMA, but given the strong linkages with the country, it is worth to see if improves our estimates. In Check #4a France GDP growth is included with Spain, while in Check #4b it is added alone.
- Check #5: removing **Spain GDP growth**, to analyze its contribution.

**11. The model with the best fit remains the one based on the BMA selected indicator set.**

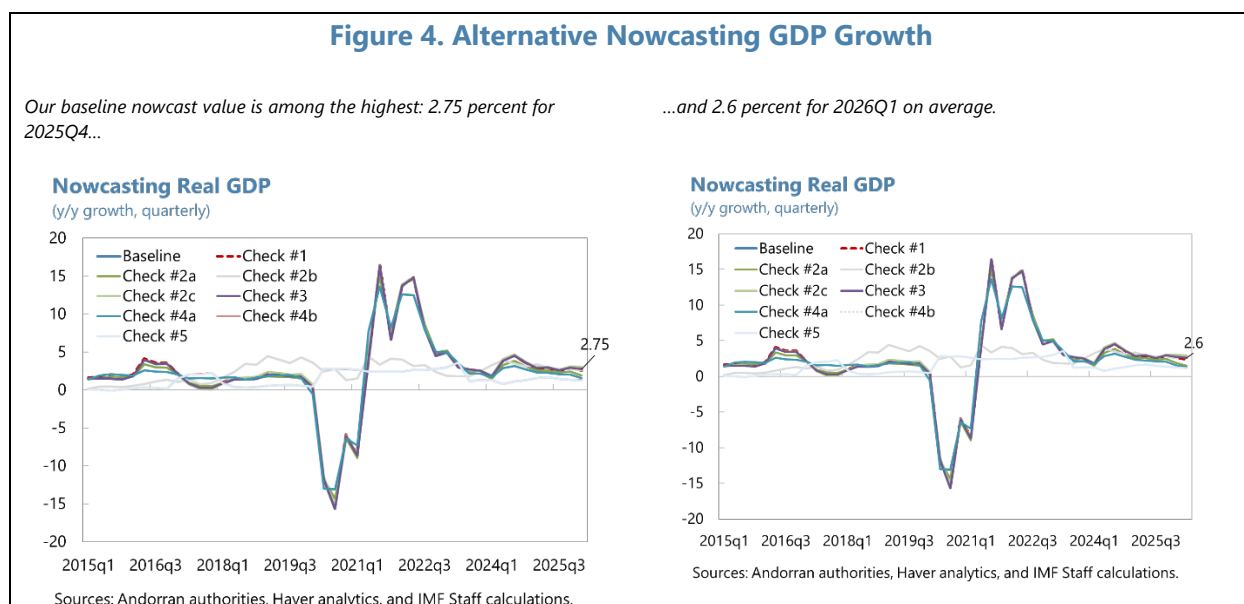
The highest value for 2025Q4 is estimated to be with the inclusion of construction or retail employment at around 3 percent. The baseline model has among the highest values with 2.75 percent growth yoy. The lowest value estimated for 2025Q4 is around 1.4 percent in the models excluding Spain GDP growth (Check #5) or with the inclusion of France GDP growth *only* (Check #4b).<sup>9</sup> These setups perform poorly in in-sample valuation. However, removing Spain, illustrates the contribution of Spanish GDP in the model, i.e., GDP growth in 2025Q4 only considering domestic leading indicators is estimated at 1.4 percent.

**Table 2. Andorra: RMSEs Horse Race**

Model	RMSE monthly	Valuation: horse race
<b>Baseline (from BMA selection)</b>	<b>0.71</b>	<b>(1)</b>
Check #1 (+energy consumption of financial services)	0.74	(3)
Check #2a (+only construction imports of inputs)	0.78	(4)
Check #2b (+construction imports of inputs and employment)	1.99	(6)
Check #2c (+only employment in construction)	0.74	(3)
Check #3 (+employment in retail)	0.73	(2)
Check #4a (+France GDP growth)	0.98	(5)
Check #4b (+France GDP growth – Spain GDP growth)	2.06	(7)
Check #5 (-Spain GDP growth)	2.06	(7)

<sup>9</sup> Once Spain's GDP growth is included, which is picked by the BMA, France adds little independent information and worsens model fit due to multicollinearity, leading BMA to assign it negligible weight. If we include *only* France GDP growth the fit is comparable to the one without any external variables, meaning that in this setup Spain GDP is the best external leading indicator. France does not provide additional information beyond Andorra's own past movements, essentially moving with the cycle rather than helping explain changes in Andorra's GDP.

**12. Adding high-frequency indicators for retail, financial services, and construction does not materially improve model fit relative to the baseline.** Estimates of GDP growth obtained by including a single indicator per sector, however, remain broadly comparable to the baseline model, with GDP growth ranging between 2.4 and 3.0 percent for 2025Q4. In the case of construction, this likely reflects measurement limitations rather than a lack of economic relevance, as available proxies, such as employment in the sector, which may be constrained by labor shortages, or imports of construction materials, which are based on a constructed measure of inputs (See Figure 1) and do not capture labor inputs, only partially reflect sectoral activity. Including multiple construction proxies simultaneously leads to multicollinearity and a worsened fit. Current high-frequency indicators may underestimate the construction sector’s contribution to short-term GDP dynamics.



**13. We also re-run the model using the updated tourism data released in February 2026, and the results remain robust.**<sup>10</sup> Under this specification, real GDP growth in 2025Q4 is estimated at 2.8 percent yoy. It is important to note that these revised tourism series were not available in the November 2025 data vintage and therefore do not constitute real-time information for 2025Q4. As such, this exercise should be interpreted as a robustness check rather than a real-time nowcast.

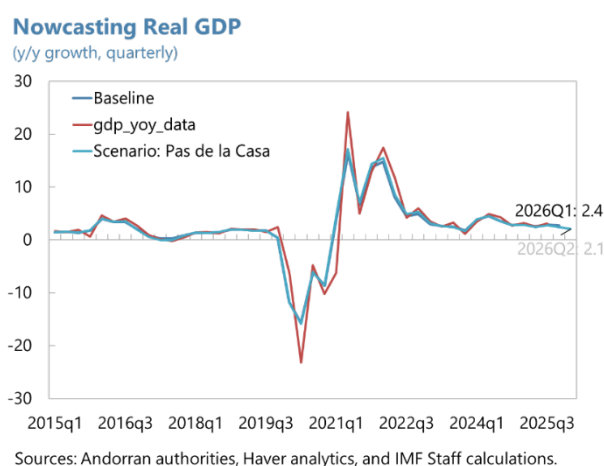
**14. Nowcasts for a given quarter improve as monthly high-frequency data are progressively released.** The most accurate estimates are obtained once the full set of monthly observations of the quarter becomes available. In practice, this allows reasonably precise estimates already 2–3 months ahead of the official GDP release.

<sup>10</sup> Tourist flows data have been recently improved in collaboration with Andorra Telecom and Andorran Banking Association and revised backwards starting in 2022.

## F. Scenario Analysis: Road Closure at Pas de la Casa

**15. Beyond nowcasts, the framework can also be used to explore the potential impact of shocks through a scenario analysis.** We consider a temporary disruption affecting tourist flows, such as the closure of the road at Pas de la Casa between January 31 and March 9, 2026. In the absence of observed data, projected changes can be imposed on key leading indicators to gauge the implied response of GDP. Assuming a cumulative decline of 10 percent in visitors in January and February 2026, the model-based estimate of real GDP growth in 2026Q1 declines from 2.6 percent to 2.4 percent yoy. This result should be interpreted as indicative, given that it is based on a short-horizon forecast rather than a nowcast.

**Figure 5. Scenario: Impact Road Closure at Pas de la Casa**



## G. Conclusions and Recommendations

**16. This paper develops a mixed-frequency nowcasting framework to provide a timely estimate of quarterly GDP growth in Andorra using high-frequency indicators.** The results confirm the central role of tourism-related variables and external conditions—particularly Spain’s GDP growth—in explaining short-term fluctuations in activity. Overall, the framework delivers a transparent real-time estimate of GDP ahead of its release.

**17. The analysis highlights important data limitations, most notably in capturing construction activity at high frequency.** The available proxies only partially reflect sectoral dynamics: either because they do not fully capture labor and imported inputs or because combining them leads to multicollinearity, suggesting that the contribution to growth may be underestimated. Improving the availability and coverage of high-frequency indicators for the construction sector would help better reflect its contribution to short-term GDP dynamics and strengthen real-time monitoring.

**18. A replication package is available upon request and will be made available to the authorities.** The package includes an annotated Stata code covering data preparation, the BMA

indicators selection, and the estimation of the mixed-frequency dynamic factor model. This allows the framework to be easily updated as new data becomes available and adapted by the authorities for ongoing monitoring.

## References

- Bañbura, Marta and Modugno, Michele (2014). [Maximum likelihood estimation of factor models on datasets with arbitrary pattern of missing data](#). *Journal of Applied Econometrics*, 29(1), 133-160.
- Comunale, Mariarosaria and Mongelli, Francesco Paolo (2021). [Tracking growth in the euro area subject to a dimensionality problem](#), *Applied Economics*, Volume 53, Issue 57, 6611-6625.
- de Resende, Carlos (2024). [A Nowcasting Tool for Estimating San Marino's Quarterly and Annual GDP](#). Republic of San Marino, Selected Issues, IMF Country Report No. 24/331. International Monetary Fund, Washington, DC, December 2024.
- Linzenich, Jan and Meunier, Baptiste (2024). [Nowcasting made easier: a toolbox for economists](#). ECB Working Paper Series No. 3004, European Central Bank.
- Steel, Mark F J. (2020). [Model Averaging and Its Use in Economics](#). *Journal of Economic Literature* 58 (3): 644–719.

## Appendix I. Econometric Methodology

This nowcasting framework is implemented in four main steps. These include data preparation, indicator selection based on Bayesian Model Averaging (BMA), model estimation and nowcasting, and a correction to account for distortions related to the COVID-19 period.

### 1) Data preparation

All series are aligned to a monthly calendar  $t = 1, \dots, T$  and cleaned prior to model estimation. The objective is to (i) ensure stationarity, (ii) harmonize units across indicators, and (iii) accommodate mixed-frequency information in a single monthly state-space representation.

*Transformations.* For indicators available in levels (e.g., volumes, activity indices), we work with yoy log differences:

$$\Delta^{12} \ln(z_t) = \ln(z_t) - \ln(z_{t-12})$$

which removes low-frequency trends and mitigates seasonality. For indicators expressed in rates or already in percentage units (e.g., shares, balances, survey net percentages), we apply yoy simple differences when more appropriate:

$$\Delta^{12}(z_t) = z_t - z_{t-12}$$

All transformations are chosen to yield approximately stationary series suitable for a linear Gaussian DFM.

*Quarterly-to-monthly mapping for GDP.* Quarterly GDP yoy growth (for Andorra and main partners) is mapped to the monthly grid to serve as the target equation in the DFM. Specifically, we construct a monthly GDP proxy using shape-preserving piecewise cubic interpolation (PCHIP). This produces a smooth monthly series that preserves the quarter-to-quarter profile implied by observed quarterly values while avoiding spurious oscillations. The DFM is then estimated on the monthly panel including these transformed series and the selected monthly indicators.

### 2) Bayesian Model Averaging (BMA)

Bayesian Model Averaging (BMA) is used to address model uncertainty arising from a large set of potential predictors. Rather than selecting a single specification ex ante, BMA considers a collection of alternative regression models formed by different combinations of candidate indicators and averages over them using posterior model probabilities (PIP).

Let  $y_t$  denote GDP growth and  $X_t = (x_{1t}, \dots, x_{Kt})$  the set of  $K$  candidate indicators. Each model  $M_j$  corresponds to a subset of these indicators where  $X_{j,t}$  contains only the regressors included in model  $M_j$  and is written as:

$$y_t = \alpha_j + X'_{j,t} \beta_j + \varepsilon_{j,t}, \varepsilon_{j,t} \sim \mathcal{N}(0, \sigma_j^2)$$

Given the data  $D$ , BMA assigns each model a posterior probability:

$$P(M_j | D) = p(D | M_j) P(M_j) / \sum_l p(D | M_l) P(M_l)'$$

where  $p(D | M_j)$  is the marginal likelihood of model  $M_j$  and  $P(M_j)$  is its prior probability. The key object of interest for variable selection is the PIP of indicator  $x_i$ , defined as:

$$\text{PIP}_i = \sum P(M_j | D)$$

which measures the probability that variable  $x_i$  belongs to the true predictive model, conditional on the data. Indicators with higher PIPs are those that consistently contribute to explaining short-term GDP dynamics across alternative specifications. In this application, variables with PIPs exceeding a pre-specified threshold are retained and used as inputs to the mixed-frequency dynamic factor model. This BMA-based screening promotes parsimony, mitigates overfitting, and improves the stability of the nowcasting framework by averaging over model uncertainty and selecting indicators with strong in-sample explanatory power, particularly in settings with a large cross-section of indicators and a limited time dimension.

### 3) Nowcasting

Let  $I_t$  denote the information set available at month  $t$ . The  $h$ -step-ahead nowcast/forecast for GDP growth yoy is:  $\hat{y}_{t+h|t} = \mathbb{E}(y_{t+h} | I_t)$  computed via the Kalman filter and smoother implied by the state-space system.<sup>1</sup> Let  $Y_t$  denote the  $n \times 1$  vector of observed monthly indicators (the monthly GDP proxy) and let  $F_t = (f_{1t}, f_{2t})'$  be a  $2 \times 1$  vector of latent common factors. We impose a two-factor specification, as it delivers the best nowcasting performance in our case compared to a single factor setup while maintaining a parsimonious structure, which is appropriate given the limited time dimension of the data. Allowing for additional factors does not materially improve nowcasting performance and would substantially increase parameter uncertainty (See Banbura and Modugno, 2014).

The model is written in state-space form as:

$$\begin{aligned} Y_t &= \Lambda F_t + \varepsilon_t, & \varepsilon_t &\sim (0, \Sigma_\varepsilon) \\ F_t &= A F_{t-1} + \eta_t, & \eta_t &\sim (0, Q) \end{aligned}$$

where  $\Lambda$  is the  $n \times 2$  matrix of factor loadings and  $A$  captures factor persistence. In the baseline specification, each factor follows an AR(1) process, so  $A = \text{diag}(\phi_1, \phi_2)$ .

### 4) COVID-19 correction and uncertainty

To account for the COVID-19 period, we include a dummy  $D_t$  entering the measurement equation,  $Y_t = \Lambda F_t + \Gamma D_t + \varepsilon_t$ . For uncertainty quantification, confidence bands are calibrated from pre-Covid volatility to avoid pandemic-driven inflation of forecast-error dispersion. Pandemic months can inflate estimated disturbance variances ( $Q, R$ ), which in turn widens forecast RMSE bands. To obtain “normal-times” uncertainty, we (re-)estimate the model excluding a COVID-19 window.

<sup>1</sup> The Kalman filter provides a natural mechanism to (i) accommodate missing observations typical of real-time datasets, and (ii) update the GDP nowcast as new monthly releases arrive.

## Appendix II. Data Description

Quarterly (20 series): EA, Spain, France GDP and harmonized index of consumer prices (HICP); business confidence by sectors, value of completed real estate transactions and transfers.

Monthly (90 series): merchandise imports by main sectors, retail trade, employment by sectors, CPI by sectors, salary by sectors, vehicle registrations, electricity consumption by sectors, number of overnight tourists and visitors, number of nights spent by overnight tourists.

**Appendix II. Table 1. Andorra: Dataset**

<b>Variable Description</b>	<b>Frequency</b>
Andorra: Real GDP growth	Quarterly
Andorra: Harmonized business confidence index by sectors of activity. agriculture, forestry and fishing	Quarterly
Andorra: Harmonized business confidence index by sectors of activity. industry	Quarterly
Andorra: Harmonized business confidence index by sectors of activity. construction	Quarterly
Andorra: Harmonized business confidence index by sectors of activity. services	Quarterly
Andorra: Harmonized business confidence index by sectors of activity. wholesale and retail trade; repair of motor vehicles and motorcycles	Quarterly
Andorra: Harmonized business confidence index by sectors of activity. transportation and storage	Quarterly
Andorra: Harmonized business confidence index by sectors of activity. accommodation and food service activities	Quarterly
Andorra: Harmonized business confidence index by sectors of activity. information and communication	Quarterly
Andorra: Harmonized business confidence index by sectors of activity. financial and insurance activities	Quarterly
Andorra: Harmonized business confidence index by sectors of activity. real estate activities	Quarterly
Andorra: Harmonized business confidence index by sectors of activity. professional, scientific and technical activities; administrative and support service activities	Quarterly
Andorra: Harmonized business confidence index by sectors of activity. education; human health and social work activities	Quarterly
Andorra: Harmonized business confidence index by sectors of activity. arts, entertainment and recreation; other service activities	Quarterly
Andorra: Value of completed transactions (quarterly). total	Quarterly
Andorra Hotel Occupancy	Monthly
Andorra: Merchandise imports, aggregate construction	Monthly
Andorra: Merchandise imports, aggregate food and alcohol	Monthly
Andorra: Merchandise imports, aggregate non-food retail	Monthly
Andorra: Retail trade Index general (nominal)	Monthly
Andorra: Retail trade: food	Monthly
Andorra: Retail trade: others	Monthly
Andorra: Retail trade Index general (real)	Monthly

Appendix II. Table 1. Andorra: Dataset (continued)

Variable Description	Frequency
Andorra: Retail trade: food (real)	Monthly
Andorra: Retail trade: others (real)	Monthly
Andorra: Mortgages granted	Monthly-semiannual
Andorra: Employees (NSA, Persons)	Monthly
Andorra: Employees: Agriculture, Herding, Hunting & Forestry (NSA, Persons)	Monthly
Andorra: Employees: Fishing (NSA, Persons)	Monthly
Andorra: Employees: Extraction (NSA, Persons)	Monthly
Andorra: Employees: Manufacturing (NSA, Persons)	Monthly
Andorra: Employees: Electric, Gas & Water Prod & Distribution (NSA, Persons)	Monthly
Andorra: Employees: Construction (NSA, Persons)	Monthly
Andorra: Employees: Trade & Repairs of Motor Vehicles (NSA, Persons)	Monthly
Andorra: Employees: Hotel Business (NSA, Persons)	Monthly
Andorra: Employees: Transport & Communication (NSA, Persons)	Monthly
Andorra: Employees: Financial System (NSA, Persons)	Monthly
Andorra: Employees: Real Estate & Business Service Activ (NSA, Persons)	Monthly
Andorra: Employees: Public & Social Security Administration (NSA, Persons)	Monthly
Andorra: Employees: Education (NSA, Persons)	Monthly
Andorra: Employees: Health & Veterinary Activ, Social Serv (NSA, Persons)	Monthly
Andorra: Employees: Other Social & Personal Service Activ (NSA, Persons)	Monthly
Andorra: Employees: Homes Occupied By Domestic Personal (NSA, Persons)	Monthly
Andorra: Employees: Extraterritorial Organisms (NSA, Persons)	Monthly
Andorra: Employees: Home & Community Work (NSA, Persons)	Monthly
Andorra: Consumer Price Index (NSA, 2021=100)	Monthly
Andorra: CPI: Food & Nonalcoholic Beverages (NSA, 2021=100)	Monthly
Andorra: CPI: Alcoholic Beverages & Tobacco (NSA, 2021=100)	Monthly
Andorra: CPI: Clothing & Footwear (NSA, 2021=100)	Monthly
Andorra: CPI: Housing, Water, Electricity, Gas & Other Fuels (NSA, 2021=100)	Monthly
Andorra: CPI: Furnishing, HH Equipment & Routine Household Maint (NSA, 2021=100)	Monthly
Andorra: CPI: Health (NSA, 2021=100)	Monthly
Andorra: CPI: Transport (NSA, 2021=100)	Monthly
Andorra: CPI: Communications (NSA, 2021=100)	Monthly
Andorra: CPI: Recreation & Culture Services (NSA, 2021=100)	Monthly
Andorra: CPI: Education (NSA, 2021=100)	Monthly
Andorra: CPI: Restaurants & Hotels (NSA, 2021=100)	Monthly
Andorra: CPI: Miscellaneous Goods & Services (NSA, 2021=100)	Monthly
Andorra: Core CPI (NSA, 2021=100)	Monthly
Andorra: CPI: Energy (NSA, 2021=100)	Monthly
Andorra: CPI: Processed Food (NSA, 2021=100)	Monthly
Andorra: CPI: Petroleum Products and Unprocessed Food (NSA, 2021=100)	Monthly
Andorra: CPI: Unprocessed Food (NSA, 2021=100)	Monthly
Andorra: CPI: Petroleum Products (NSA, 2021=100)	Monthly

<b>Appendix II. Table 1. Andorra: Dataset (continued)</b>	
<b>Variable Description</b>	<b>Frequency</b>
Andorra: CPI: Services (NSA, 2021=100)	Monthly
Andorra: Vehicle Registrations (NSA, Units)	Monthly
Andorra: Vehicle Registrations: Tourism Vehicles (NSA, Units)	Monthly
Andorra: Average Salary (NSA, EUR)	Monthly
Andorra: Average Salary: Agriculture, Herding, Hunting & Forestry (NSA, EUR)	Monthly
Andorra: Average Salary: Fishing (NSA, EUR)	Monthly
Andorra: Average Salary: Extraction (NSA, EUR)	Monthly
Andorra: Average Salary: Manufacturing (NSA, EUR)	Monthly
Andorra: Average Salary: Electricity, Gas & Water Prod/Distribution (NSA, EUR)	Monthly
Andorra: Average Salary: Construction (NSA, EUR)	Monthly
Andorra: Average Salary: Trade & Repairs of Motor Vehicles (NSA, EUR)	Monthly
Andorra: Average Salary: Hotel Business (NSA, EUR)	Monthly
Andorra: Average Salary: Transport & Communication (NSA, EUR)	Monthly
Andorra: Average Salary: Financial System (NSA, EUR)	Monthly
Andorra: Average Salary: Real Estate & Business Service Activities (NSA, EUR)	Monthly
Andorra: Average Salary: Public & Social Security Administration (NSA, EUR)	Monthly
Andorra: Average Salary: Education (NSA, EUR)	Monthly
Andorra: Average Salary: Health & Veterinary Activ, Social Services (NSA, EUR)	Monthly
Andorra: Average Salary: Other Social & Personal Service Activities (NSA, EUR)	Monthly
Andorra: Average Salary: Homes Occupied by Domestic Personal (NSA, EUR)	Monthly
Andorra: Average Salary: Extraterritorial Organisms (NSA, EUR)	Monthly
Andorra: Average Salary: Home & Community Work (NSA, EUR)	Monthly
Andorra: Electricity Consumption: Domestic Uses (Mwh)	Monthly
Andorra: Electricity Consumption: Construction & Annexes (Mwh)	Monthly
Andorra: Electricity Consumption: Industrial (Mwh)	Monthly
Andorra: Electricity Consumption: Distribution (Mwh)	Monthly
Andorra: Electricity Consumption: Hotel & Restaurants (Mwh)	Monthly
Andorra: Electricity Consumption: Financial Services (Mwh)	Monthly
Andorra: Electricity Consumption: Other Services (Mwh)	Monthly
Andorra: Electricity Consumption: Street Lighting (Mwh)	Monthly
Andorra: Electricity Consumption: Ski Resorts (Mwh)	Monthly
Andorra: Electricity Consumption: Administration (Mwh)	Monthly
Andorra: Electricity Consumption: Other Distributors (Mwh)	Monthly
Andorra: Electricity Consumption (Mwh)	Monthly
Andorra: Average Tourist Nights Spent (Nights)	Monthly
Andorra: Tourism: Number of Visitors (NSA, Persons)	Monthly
Andorra: Tourism: Number of Tourists (NSA, Persons)	Monthly
Andorra: Vehicle Entrances (Number)	Monthly
Andorra: Real Estate Trans: Flats, Detached Houses & Buildings (NSA, Number)	Quarterly
Andorra: Real Estate Transfers: Land & Parking Space (NSA, Number)	Quarterly
Andorra: Real Estate Transfers: Commercial Premises & Warehouses (NSA, Number)	Quarterly
Andorra: Real Estate Transfers: Other Constructions (NSA, Number)	Quarterly

<b>Appendix II. Table 1. Andorra: Dataset (concluded)</b>	
<b>Variable Description</b>	<b>Frequency</b>
Andorra: Real Estate Transactions (NSA, Number)	Quarterly
<b>External data</b>	
EA20: HICP: Monetary Union Index: Consumer Prices (NSA, 2015=100)	Monthly
EA20: HICP: Total excl Energy & Unprocessed Food (NSA, 2015=100)	Monthly
Spain: Consumer Prices (NSA, 2021=100)	Monthly
Spain: CPI excluding Non-processed Foods & Energy Products (NSA, 2021=100)	Monthly
France: Harmonized Consumer Price Index (NSA, 2015=100)	Monthly
France: HICP: Total excl Energy & Unprocessed Food (NSA, 2015=100)	Monthly
Spain: Gross Domestic Product (NSAWDA, Mil.Chn.2020.EUR)	Quarterly
France: Gross Domestic Product (NSWDA, Mil.Ch.20.EUR)	Quarterly
EA20: Gross Domestic Product (NSWDA, Mil.Ch.2020.EUR)	Quarterly

# THE ANALYSIS OF THE HEALTHCARE SYSTEM IN ANDORRA FROM A FISCAL PERSPECTIVE<sup>1</sup>

*Andorra has a solid health system, delivering strong outcomes with lower public spending than average EU countries. However, health spending increased significantly between 2014 and 2025 and will remain a key source of pressure over the medium and long-term as the population continues to age. Reforms that strengthen health financing and more tightly manage high-cost areas could help reduce pressure on government expenditures, preventing crowding out of other spending and/or increasing contributions.*

## A. Introduction

**1. Andorra has a healthcare system that delivers strong outcomes.** The health system delivers strong health outcomes with lower public spending than the average in EU countries. Life expectancy is among the highest globally, and the system responded effectively to the pandemic, enabling a rapid reopening and recovery. However, public healthcare expenditure has risen significantly. Some of these increases reflect policy design and implementation, while others are structural, such as aging. This paper analyzes the patterns and drivers of *government* health spending and focuses primarily on policy aspects.<sup>2</sup>

**2. Government health spending has been growing strongly in Andorra in recent years.** Government health spending increased from 3.5 percent of GDP in 2003 to 6.0 percent in 2025. Without reform, spending is projected to continue to increase as a share of GDP over the medium-term, placing increasing strain on public finances.

**3. Balancing the accommodation of health spending growth with tighter management of high-cost areas should be a central policy priority.** Additional financing for health spending over and above population growth and inflation is likely to be needed over the long term, as the population ages. To limit increases in social contributions and household financing and preserve fiscal space for other spending priorities (such as housing and infrastructure), the government should aim to slow health spending growth to around the rate of population growth and inflation. There is scope to strengthen administrative controls including setting clearer medium-term targets, identifying concrete savings measures, implementing payment reforms to improve efficiency, and tightening eligibility and oversight of sickness benefits.

<sup>1</sup> Prepared by Nick Carroll (FAD) and Aidyn Bibolov (EUR). The authors would like to thank all our Andorran counterparts for their helpful inputs and comments.

<sup>2</sup> For an analysis of aging impact on healthcare sector, see Bibolov A., [Fiscal Implications of Aging in Andorra: Pension and Healthcare System Reforms](#), IMF Selected Issues Paper No. 2025/052.

## B. Overview of the Andorran Health System

**4. The Andorran public healthcare system provides broad coverage.** The system delivers high-quality care to the population with extensive access, low household out-of-pocket spending, and low maternal and infant mortality.<sup>3</sup> Andorra has several health institutions that finance, manage and deliver healthcare - the National Health service (Servei Andorrà d'Atenció Sanitària or SAAS thereafter), the Social Security Agency (Caixa Andorrana de Seguretat Social or CASS thereafter) and the Ministry of Health – which requires strong coordination across budgeting and financing, management, and policy functions.

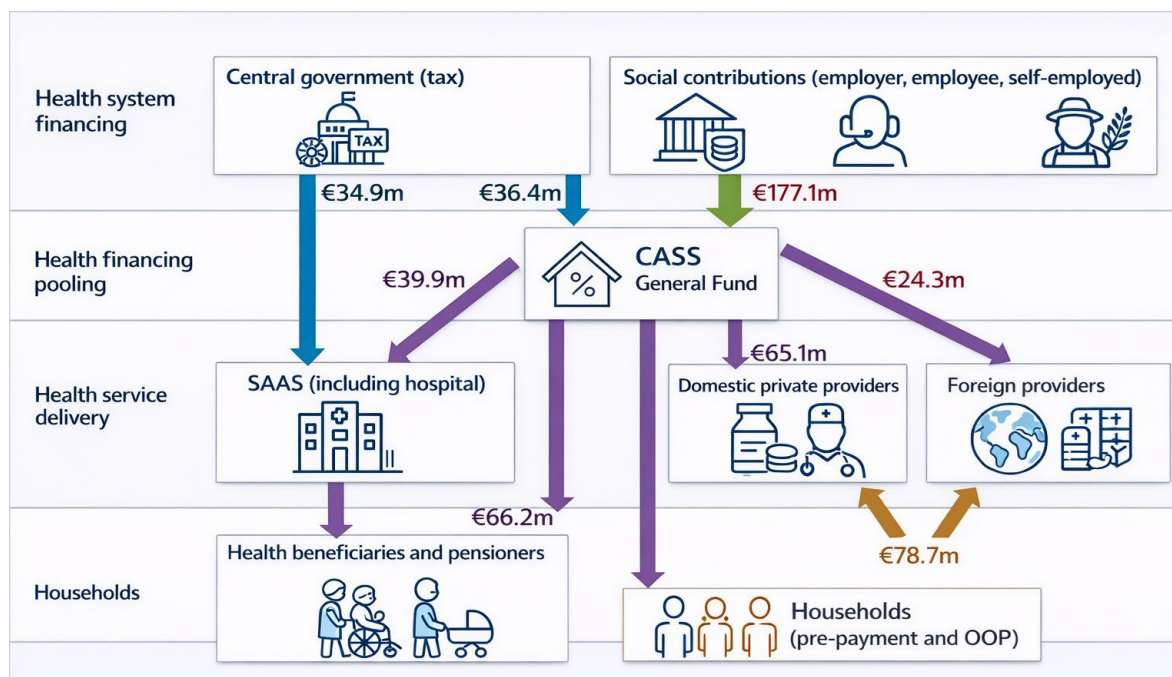
**5. Total current health spending is 8.3 percent of GDP financed from taxation, social contributions and private financing.** One quarter of health financing is from the central government budget, 18 percent from employee and self-employed contributions, 29 percent from employer contributions and 29 percent from voluntary health insurance and household out-of-pocket payments. Household out-of-pocket costs are low compared to European peers (Litvinova and Rechel, 2026)

**6. There are four main health spending components in the central government budget (Figure 1).** The main components of health spending in the central government budget are the: (1) transfer to the SAAS, particularly for the national hospital, (2) transfers to the CASS, including transfers to cover the health fund deficit, (3) transfers to the University of Andorra, (4) health spending directly by the Ministry of Health, including public health programs on primary and community care.

**7. CASS finances a range of health-related services and payments.** The General Fund of the CASS covers a wide scope of health services and goods. These include: (1) direct transfers to the national hospital for services, (2) payments to domestic providers for services, (3) payments to foreign providers, (4) health related benefits and pensions, (5) reimbursements for health-related goods. In general, covered treatments are subsidized at rates from 65 to 100 percent of total costs. Low-income households can receive government support to cover additional costs, while most of other residents opt for voluntary health insurance for this purpose.

**8. The largest pool of health financing is managed by the CASS.** It has two parts: the Pension Fund and the General Fund, (the latter includes health spending), which operate financially independently. Health spending from the CASS General Fund is financed by a 3 percent payroll contribution from employees and a 7 percent payroll contribution by employers (as well as self-employed and government contributions). CASS General Fund deficits are covered by the central government budget. In practice, tax financing to cover the deficit made up around one fifth of CASS health expenditure financing in 2024.

<sup>3</sup> See Bibolov (2025) and Litvinova and Rechel (2026).

**Figure 1. Financing Flows in the Andorra Health System, 2023**

Sources and notes: Drawn from Central Government Budget, CASS Annual Financial Statements and the Global Health Expenditure Database. The figures are calculated by staff. The figures do not include the payments to the Ministry of Health (€4.2m) and the Andorra University (€1.5m), for simplicity, nor the financing flow from households to the SAAS.

**9. Health services are delivered through the SAAS, which includes only hospital, private providers, and foreign providers.** Health services are delivered through the Ministry of Health and the National Health Service, including spending relating to the national hospital, health system stewardship and capacity building. Financing is also provided to the Andorra University for training for nurses. Physicians, pharmacists and other health providers are a combination of public and private provision. Most providers are registered with CASS and so subject to a higher subsidy rate, while subsidies for non-registered CASS providers are subsidized at 20 percent of costs.<sup>4</sup> Andorra benefits from agreements with its neighbors to provide specialized care that would otherwise be expensive to maintain in a microstate.<sup>5</sup> Thus, a significant amount of health spending goes to the neighboring Spanish and French health systems including on high complexity and high-cost care (€24.3m directly from CASS in 2023).

**10. Government health spending in Andorra is comparable to or below than in peer countries.** Government health spending in Andorra, according to staff calculations based on budget

<sup>4</sup> The government is exploring through the draft Health Sustainability Action Plan the degree to which this subsidy to unregistered private providers should continue.

<sup>5</sup> See Bibolov (2025).

estimates, WEO data sources and WHO data, is comparable to the 6.1 percent average in advanced economies and 6.9 percent average in the EU in 2023 (Figure 2a). According to the Government Finance Statistics this spending is somewhat higher, potentially because it includes some privately financed but publicly managed health spending (for example, household out of pocket payments to SAAS).<sup>6</sup>

**11. Efficiency of health spending in Andorra is high compared to peers in terms of life expectancy.**

Andorra has one of the highest life expectancies in the world at 84 years and favorably compares to peer countries (Figure 2b). However, the OECD highlighted that across all health systems there are opportunities to further improve efficiency, even in the most efficient countries (OECD, 2017). Looking beyond life expectancy measures, Andorra's health system also performs well generally, although there are some issues in direct measures of amenable mortality and lifestyle factors associated with poor health. Andorra's ranking is slightly lower on the Healthcare Access and Quality (HAQ) Index generally, which assesses access to and quality of health care based on 32 causes of amenable mortality (GBD 2019 Healthcare Access and Quality Collaborators, 2022). The HAQ Index placed Andorra at 89.1 out of 100 in 2019, ranking ninth in Europe, lower than in the life expectancy ranking. In common with the trend of other countries, the older age group (65–74 years) scored substantially lower at 79.3. Litvinova and Rechel (2026) find that there is also a rising burden of disease associated with alcohol consumption, smoking and increasing levels of obesity.

**12. The Andorran health system relies more on social insurance and private pre-paid financing than its peers.**

One characteristic of the Andorran health system is that social contributions managed by the social insurance fund are more significant than in many other countries' systems (see Figure 2c). The advantage of this approach is that social contributions for health are managed at arm's length from the political process. However, it also means that it may be difficult to contain costs through political processes (and costs may therefore be higher) and may make population-level health initiatives more challenging (Wagstaff, 2009).

**13. The number of doctors per capita is close to peers, but the number of nurses is lower.<sup>7</sup>**

The composition of the health workforce should be based on clinical need. However, the relatively low number of nurses per capita in Andorra (Figure 2d) suggests that there may be scope to enhance resourcing of community and primary healthcare and/or consider task shifting towards nurses and community workers (see policy discussion below). This is consistent with the relatively high level of spending on hospitals through SAAS and CASS. The Andorran Government introduced a preferred route for accessing health services in 2020. Under this model, primary care doctors and nurses are the main entry point to the health system, offering patients lower co-payments compared to accessing specialist care directly (Litvinova and Rechel, 2026). This model, alongside Andorra's e-

<sup>6</sup> Andorran administrative measures of government health spending also include some disability and sickness benefits spending administered by the CASS (which are defined as social protection spending under the Government Finance Statistics Manual), as they drive the General Fund deficit that is tax financed.

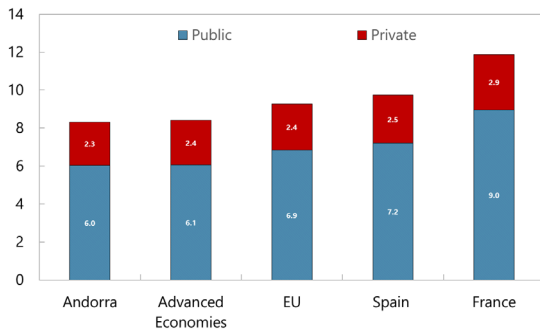
<sup>7</sup> As many healthcare services are provided outside the country, per capita ratios of doctors and nurses likely understate effective access to medical professionals in Andorra.

health project supports better quality and more coordinated care, and improved efficiency over time.

**Figure 2. Cross-Country Benchmarking of Andorra’s Health Spending**

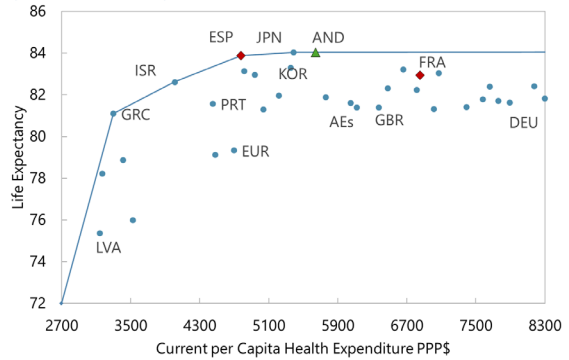
**A. Government and Private Health Spending**

(Share of GDP, 2023 or Latest Value Available)



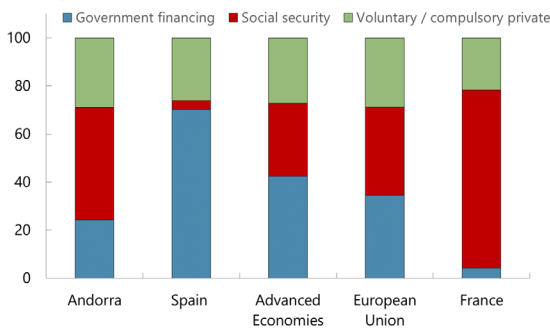
**B. Current Health Spending per Capita and Life Expectancy**

(Latest Value Available)



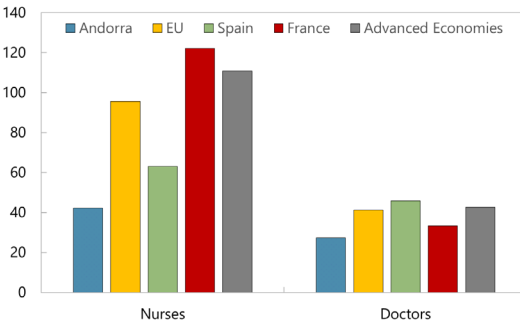
**C. Health Financing Schemes**

(Percentage of Current Health Expenditure)



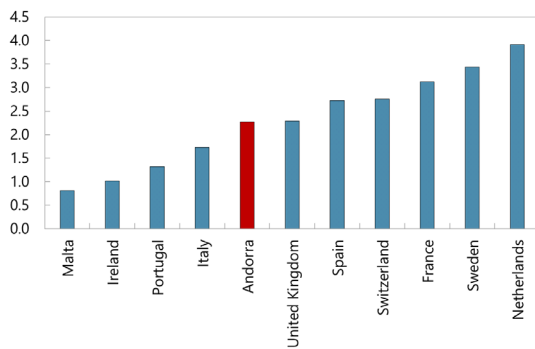
**D. Number of Medical Professionals**

(Per 10,000 residents)

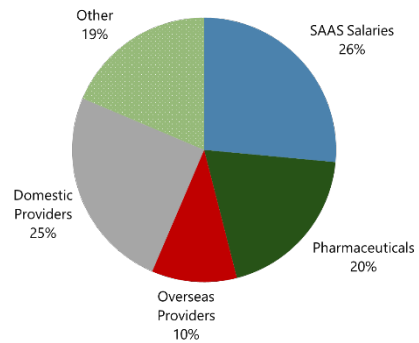


**E. Government Spending on Social Protection Benefits**

(Percentage of GDP, 2022; includes sickness/disability related benefits)



**F. Annual Government Health Spending, 2025**



Source: IMF staff estimates based on WHO, Authorities’ data, IMF Government Financial Statistics (COFOG).

Notes: Panels A & F: data for Andorran Annual government health spending is for 2025 using budget numbers, otherwise WHO (GHED). Panel D provided by the authorities and the estimate of Andorran nurses and doctors does not include professionals not contracted to CASS. Panel E source IMF GFS (COFOG).

**14. Pharmaceuticals and medical devices make up around one fifth of health spending.**

CASS Financial Statements and SAAS data indicate that public spending on pharmaceuticals and medical products including hospital pharmacy and medical device reimbursement was around €46 million in 2023 (Figure 2f). However, this is likely to be a partial measure, depending on whether pharmaceuticals are also provided directly by other providers. Notably, Andorra sources pharmaceuticals and medical goods from France and Spain benefiting from their stronger bargaining power, as well as basing pharmaceutical selection on effectiveness assessments from these systems. OECD (2017) highlights generally that pharmaceuticals can be a source of savings, (through use of generics and biosimilars, and improved tendering, procurement and selection practices).

**15. Spending on sickness and disability payments also contributes to administrative measures of health spending through the CASS General Fund.** While not strictly health spending according to international definitions, spending by CASS on sickness and disability benefits is a key driver of the General Fund deficit, which in turn is tax-financed. Spending was €77 million in 2024 or nearly one quarter of total spending by the General Branch of CASS. Spending on sickness and disability benefits in Andorra is higher than in Portugal and Italy, but lower than in Spain and France (Figure 2e).

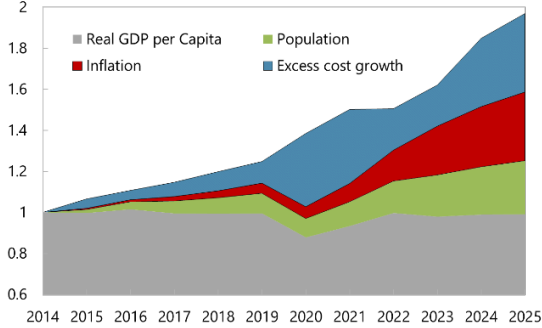
### C. Government Health Spending: Trends and Outlook

**16. Government health spending has been growing rapidly.** Health spending grew faster than nominal GDP and population growth – a typical benchmark for expenditures – over the period 2014-25 (Figure 3a). Government health spending doubled in nominal terms from €119.8 million in 2014 to €236.0 million in 2025. This compares to no change in real GDP per capita and a 26 percent increase in population over the same period. Approximately half of the remaining increase in health spending can be attributed to inflation (34 percent of total increase) and another half to excess cost growth (38 percent). This growth has been driven by all major categories of spending, including a €37 million increase in payments to domestic providers, a €28 million increase in the wages and salaries of SAAS employees and a €23 million increase in spending on pharmaceuticals and medical devices, including through SAAS (Figure 3b).

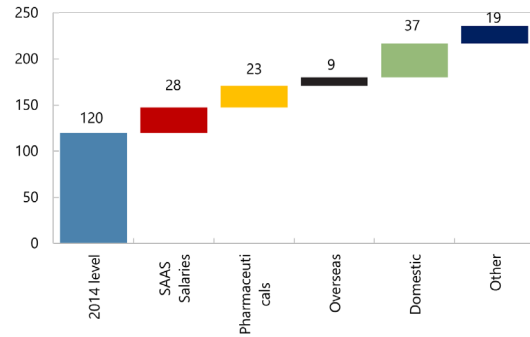
**17. Rising spending on the SAAS wage bill reflects population growth, inflation, recruitment of health professionals as well as some real wage growth.** SAAS salaries grew from €34.8 million in 2016 to €62.5 million in 2025 (Figure 3b). Population growth contributed €8.2 million to the increase in spending (i.e. increased employment to meet higher demand), inflation contributed €12.2 million, increase in the health sector employment to population ratio contributed €5.3 million, and a €2.0 million reflects an increase in real average wages. A collective bargaining agreement for 2026-30 will raise SAAS wages by €11.5 million over 2026-30 (discussed further below). To put it another way, if the SAAS wage bill grew at the population growth plus inflation then it would be spending €7 million less per year in 2025.

**Figure 3. Explaining the Growth in Government Health Expenditure, 2014-25**

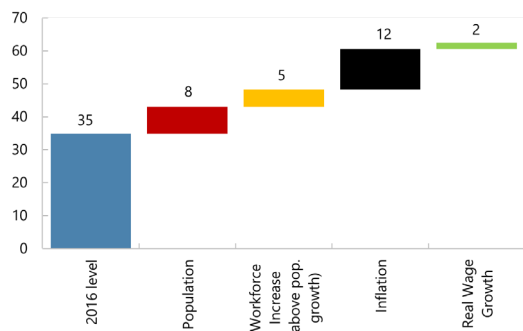
**A. Government Health Spending Relative to GDP**  
(Index 2014=1)



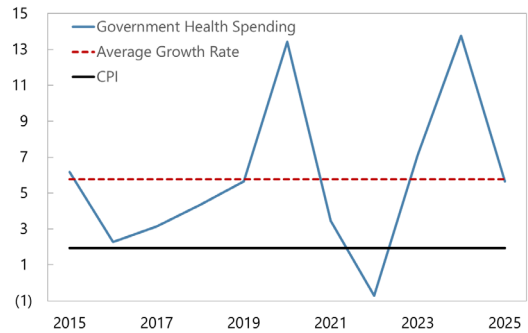
**B. Contributions to Government Health Spending Change**  
(In Million Euros, 2014-2025)



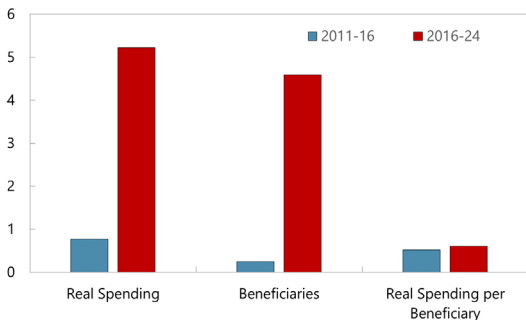
**C. Contributions to SAAS Salary Increase**  
(In Million Euros, 2016-2025)



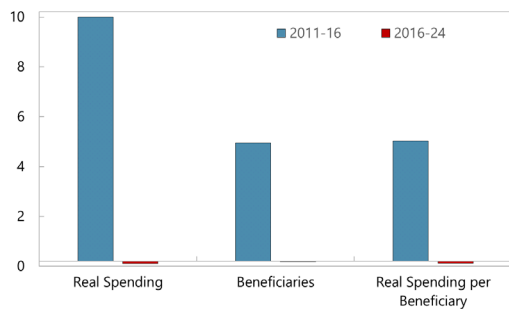
**D. Government Health Spending Growth**  
(Annual Percentage Growth)



**E. Growth in CASS Sickness Benefits**  
(Annual Percentage Growth)



**F. Growth in CASS Pensions (General Branch)**  
(Annual Percentage Growth)



Source: IMF staff calculations based on health spending data provided by the authorities.

**18. Government health spending significantly increased in 2020 and 2024** (figure 3d). There was particularly strong growth in health spending in 2020 due to the COVID-19 pandemic (13.4 percent annual growth). Andorra successfully vaccinated its population and reopened the economy to visitors, supporting the economic rebound. In 2024, spending grew by 13.8 percent due in part to higher payments to domestic health providers from CASS. It is not clear what drove this increase, suggesting that this spending category warrants closer monitoring.

**19. Spending on CASS sickness benefits has been growing at five percent per year and could become a significant source of pressure on the CASS deficit without reform.** CASS provides benefits to people who are temporarily incapacitated (sickness benefits) or permanently disabled (disability-related pensions). A non-contributory solidarity benefit is paid where income falls below a minimum threshold. Strong recent growth in the number of sickness benefit recipients is a concern, as international experience shows that spending on sickness benefits can increase rapidly and persistently in the absence of reforms (Hemmings and Prinz, 2021). The number of sickness benefits recipients increased by more than 5 percent a year since 2016, leading to overall sickness benefit spending growing by a similar amount as spending per beneficiary grew close to inflation (Figure 3e). Between 2011-16 while there was strong growth in *real* disability pension spending driven by growth in both numbers as well as growth in the real benefits per beneficiary in 2011-16 (Figure 3f), a 2015 reform to the disability pension changed the pension point calculation which lowered the level of disability benefits and reduced incentives for take-up.

**20. The increase in government health spending was financed both through increased central government spending as well as in social contributions to the CASS.** Pressures on central government financing come through a larger transfer to the SAAS, while strong health spending growth was financed through an increase in CASS social contributions.

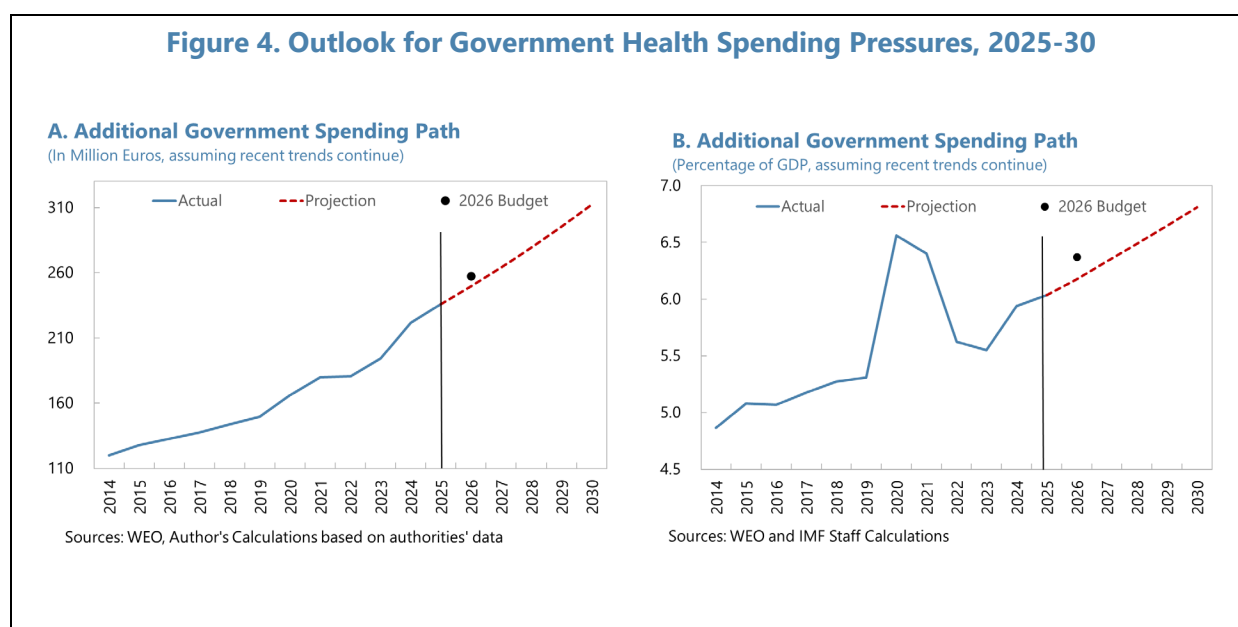
- Central government budget financing for health rose from €51.8 million in 2014 (2.1 percent of GDP) to €101.1 million in 2025 (2.6 percent of GDP), driven by a 28.5 million increase in the transfer to SAAS and a €17.5 million transfer to cover the CASS deficit.
- CASS General Fund spending increased from €137.1 million in 2014 to €244.7 million in 2025. This was mostly financed from an increase in social security contributions for the General Fund rising from 4.2 percent to 5.3 percent of GDP (an increase of €102.3 million over the 11 years).

**21. If recent trends continue then government health spending could rise from 6.0 percent of GDP in 2025 to 6.8 percent in 2030.** To assess the spending pressures over the next five years, this paper uses a “what-if” scenario, assuming that average annual growth over 2014-25 continues through 2025-30.<sup>8</sup> Under this assumption, health spending would rise from €236 million in 2025 to €312 million in 2030 (Figure 4a). Using the IMF WEO projections for nominal GDP, this results in

<sup>8</sup> This scenario assumes that the trends that drove spending between 2014-25 will continue including: (1) the payroll will grow faster than GDP, (2) there is increasing access to high-cost treatments, (3) migration continues, (3) there is a similar rate of inflation and population growth, (4) aging continues. Figure 5 provide a more detailed assessment of the impact of increasing aging over the period 2025-50.

government health spending rising from 6.0 percent to 6.8 percent of GDP in 2030 (Figure 4b). These are illustrative spending pressures rather than forecasts, as policy choices can affect outcomes over the medium term.

**22. The most immediate pressures on government health spending in the projection period will come from the expansion of the SAAS hospital and rising SAAS wages.** In addition to regular inflation adjustments, the 2026-30 collective agreement will raise average remuneration for doctors by 25 percent and for nurses by 15 percent, increasing the annual SAAS salary bill by €11.5 million by 2030. These increases aim to restore competitiveness and retain and attract providers. The government is also considering a significant hospital expansion, reflecting strong population growth since the facility was built in 1993. This would reduce overcrowding and improve capacity at the hospital but will require significant capital expenditure and may also increase recurrent spending.

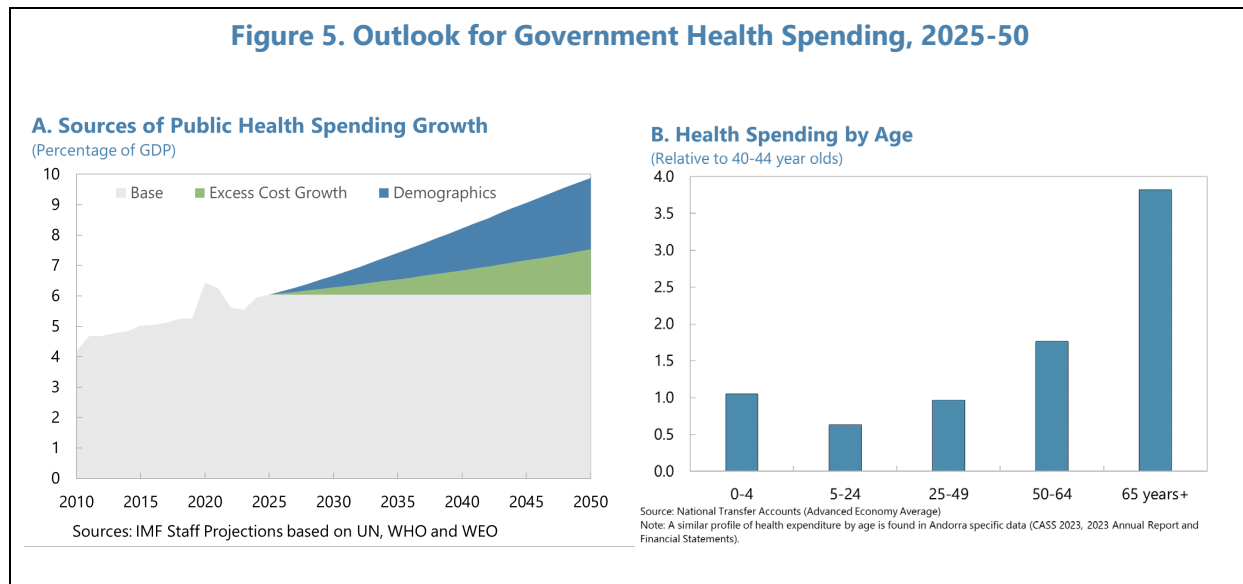


**23. Population aging will add to health spending pressures beyond 2030.** The share of the population aged over 65 years is expected to rise from 15 percent of the population in 2025 to 25 percent by 2035. This metric is particularly relevant, as health spending increases significantly for this group. On average, population over 65 years have health costs around 3.8 times the population average (Figure 5b).

**24. Longer-term spending projections suggest that health spending could rise to 7.4 percent of GDP by 2035.** The methodology used for the projections of government health spending is the same as that used in the IMF Fiscal Monitor. This approach uses age-health spending profiles and UN projections of population composition to estimate a demographic

component with the residual being excess cost growth. This is a different methodology from the medium-term spending pressures above as it uses a longer-term series on government health spending and estimates a separate demographic effect.<sup>9</sup> Using this method, government health spending is projected to rise from 6.0 percent in 2025 to 7.4 percent in 2035 (Figure 5a). This is driven by:

- *Aging* – a 0.9 percentage point increase between 2025 and 2035, and a further 1 percentage point by 2045.<sup>10</sup>
- *Excess cost growth* – a 0.5 percentage point increase over 2025-35 and an additional 0.6 percentage points over 2035-45.



**25. The health system will need to adapt to an increasing elderly population.** An aging population will put increasing pressure on services that the elderly tend to use more, such as geriatric care, dementia and support for daily tasks. However, it is important that alongside these trends that respond to increasing demand, that health systems take a proactive approach to promoting healthy aging. IMF (2025) shows that there has been a trend towards healthy aging over time and this can support improved economic outcomes. With its focus on aging well and preventative, primary and community care in its recent reforms, Andorra has started the process of transforming its health system to respond to the needs of an aging population (see Bibolov, 2025).

<sup>9</sup> As health spending growth was lower in 2000-14, this lowers the excess cost growth estimate, while the effect of faster aging increases health spending projections.

<sup>10</sup> This is very similar to the estimated impact of aging on government health spending of 2.0 – 2.2 percentage points of GDP in Bibolov, 2025.

## D. Policy implications

**26. Government health spending will face continued pressure from aging and other cost drivers.** Using a “what-if” scenario, this paper estimates that government health spending could rise from 6.0 percent of GDP in 2025 to 6.8 percent in 2030. Some of these changes will be driven by structural increases in demand for health care. While spending increases from population aging will need to be accommodated, the government retains policy options to address other spending increases.

**27. Rising health spending will require the government to decide how to accommodate these pressures through higher revenue, lower spending elsewhere, or higher deficits.** There is a strategic choice regarding how much of the 0.8 percent of GDP health spending growth to accommodate, given that it is partly driven by aging, and therefore how much social contributions and tax financing should increase. If the additional government health spending were to be entirely financed by social contributions, this would imply contributions rising from 10 percent of payroll in 2025 to 11.5 percent in 2030. There may be scope to carefully increase private household financing in some areas (for example, by reducing the subsidy to health providers not registered with CASS). If government health spending were prioritized over other government spending, this would imply €32 million less in spending in other areas (in 2025 GDP-equivalent terms).

**28. Setting clear medium-term expectations for health spending can support fiscal sustainability.** Government health spending in Andorra is budgeted using a bottom-up assessment of the health sector’s needs. However, this spending must be aligned with underlying cost drivers and available sustainable financing. There are a range of general public financial management practices that can support the management of health spending (see Box 1). A top-down anchor—such as aligning spending growth with GDP—could help discipline expenditure, with additional needs met through efficiency gains.

**29. There is room to find efficiency savings in hospitals, sickness and disability benefits, and pharmaceutical products.** There is a need to monitor high-cost treatments closely and consider ways to rationalize and improve efficiency over time (e.g. cancer treatment and dialysis):

- *Integrate and implement the draft Health Sustainability Action Plan into the budget* – the government has developed a draft Health Sustainability Action Plan that includes reviewing provider payments and moving away from fee-for-service payment models, updating health nomenclature and tariff and treatment codes, revising referral codes for overseas treatments and other actions. These actions should be prioritized and integrated with the budget process.
- *Addressing hospitalization expenditures (€110 million+)* – there are a range of opportunities to enhance hospital spending efficiency, these include (1) promoting treatment outside hospitals, (2) improving the management of chronic conditions, (3) optimizing workforce roles, (4) managing wage and employment growth expectations, and (5) reducing waste (OECD, 2017).

- *Pharmaceuticals and medical products (€46 million)* – generally, pharmaceuticals and medical devices spending in Andorra is well managed with reliance on analysis and procurement from the large French and Spanish health systems. There is an opportunity to improve the quality of information around cost and effectiveness of high-cost treatments (including considering affordability) when making decisions to add treatments to the publicly covered treatments schedule. Current initiatives to reduce waste and improve the use of generics are important as well as a greater monitoring of hospital pharmaceuticals and medical devices use may be beneficial.
- *Sickness and disability payments (€66.2 million) - Stricter and earlier work capacity assessments and encouragement to return to work have been associated with savings in other cases (Box 2).* For instance, in Sweden changes in the sickness benefit level and focus on work participation impacted sickness benefits numbers.

### Box 1. Budgetary Practices for Health in OECD Countries

**Robust budget formulation mechanisms set a clear total budget allocation for public spending on health, which provides predictability of funds as well as cost control.** A total budget or target for public health expenditures is set in most OECD countries to help control expenditure growth. Total budgets for health are typically derived from baseline estimates of the cost of maintaining existing services and coverage, with the cost of funding new health initiatives estimated separately.

- Efficiency dividends can be based on top down-constraints or bottom-up policy changes within this framework. Spending reviews may support the identification of savings and efficiencies.
- Multi-year budgeting can improve certainty for sectoral planning but may reduce flexibility for the Ministry of Finance to manage spending to a fiscally sustainable level.

**Many OECD countries use corrective mechanisms to enforce spending objectives and improve budget compliance.** Despite budget control measures, overspending occurs in most countries' health systems, creating deficits which are often covered by governments. In most cases, corrective mechanisms include systems to detect overspending and identify actions. An Alert Committee can steer compliance with the budget. This can be done throughout the year and alerting the government, Parliament, and the health insurance funds in the event the evolution of health expenditures risks exceeding the ceiling (by more than 0.5 percent in France)

**Countries also use complementary spending controls and incentive mechanisms at different stages of budget implementation to help keep health expenditure within overall spending limits.**

Complementary spending controls and incentives include Health Technology Assessments, price regulation, volume controls and incentive mechanisms.

Source: OECD, 2024, *Fiscal Sustainability of health systems*, OECD.

**30. Implementation of reforms will determine their durability and success.** The approach to addressing rising health spending will rely on increasing financing, reducing spending elsewhere and finding productivity improvements in the health sector. There is a need to engage with key stakeholders and design reforms that support system sustainability over time. Large swings in health spending between years (“feast and famine” cycles) make it difficult for the sector to plan and make it challenging to maintain health spending discipline over time. Likewise, numerous uncoordinated or poorly sequenced health reforms can lead to reform fatigue and loss of trust in the health system. Andorra has experience in implementing successful reforms. Timely action to address rising public health costs can enhance sustainability while preserving quality.

### Box 2. Reforming Sickness and Disability Benefits

**Sickness and disability benefit rates administered through CASS are as high as many other countries.**

While disability and sickness benefit spending is comparable in Andorra to that in OECD peer countries, like in many other countries it is a significant spending item. While there are significant political and implementation challenges, there are lessons from other countries on how to better manage this spending area.

**Swedish reforms highlight that the levels of benefits and the focus on workforce participation influence spending.** Sweden’s and Switzerland’s mandatory payout is initially set at 80 percent of previous salary, and in the Netherlands, it is 70 percent of previous salary for two years. Sweden’s reform experience is that the level and structure of sickness benefits influences benefit take-up with even small reductions (or increases) in the payment rate having an impact on outcomes. It also appears that Sweden’s stronger focus on work participation is effective.

**The Dutch reform experience demonstrates that employer incentives (matched by corresponding worker incentives) matter.** In the Netherlands, when premiums to sickness and disability insurance became experience rated, i.e. dependent on the employer’s sickness and disability record, new benefit claims fell drastically.

**The Swiss reform experience underlines that early identification of problems and early intervention is critical to reducing disability benefit claims.** The Swiss experience demonstrates that shifting the assessment decision from general practitioners to a public medical authority is feasible and effective. The Netherlands and Switzerland also feature third-party medical assessments.

Sources: Hemmings, P and C Prinz, 2020, *Sickness and disability systems: comparing outcomes and policies in Norway with those in Sweden, the Netherlands and Switzerland*, OECD Economics Department Working Paper no.1601.

## References

- Bibolov A. , Fiscal Implications of Aging in Andorra: Pension and Healthcare System Reforms, IMF Selected Issues Paper No. 2025/052.
- GBD 2019 Healthcare Access and Quality Collaborators, 2022, "Assessing performance of the Healthcare Access and Quality Index, overall and by select age groups, for 204 countries and territories, 1990–2019: a systematic analysis from the Global Burden of Disease Study 2019", *Lancet Glob Health*. 2022 Oct 6;10(12):e1715–e1743
- Hemmings, P and C Prinz, 2020, *Sickness and disability systems: comparing outcomes and policies in Norway with those in Sweden, the Netherlands and Switzerland*, OECD Economics Department Working Paper no.1601.
- IMF, 2025, "World Economic Outlook: April 2025", chapter 2: The Rise of the Silver Economy: Global Implications of an Aging Population.
- Litvinova Y and Rechel B, 2026, *Health Systems in Action (HSiA) Insights – Andorra, 2025*. Copenhagen: European Observatory on Health Systems and Policies, WHO Regional Office for Europe.
- OECD, 2017, *Tackling Wasteful Spending on Health*, OECD.
- OECD, 2024, *Fiscal Sustainability of health systems*, OECD.
- Wagstaff, A, 2009, *Social Health Insurance vs. Tax-Financed Health Systems—Evidence from the OECD*, Policy Research Working Paper 4821