ANDORRA'S BANKING MODEL AND ASSOCIATED VULNERABILITIES[1]

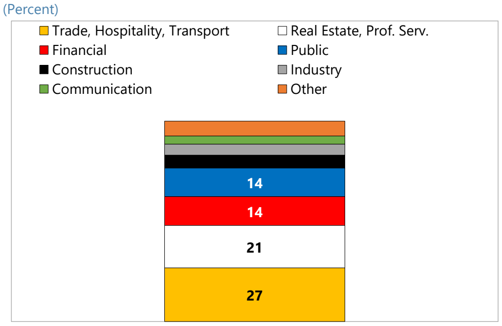
Andorra's large banking sector (with assets equal to 600 percent of GDP and assets under management—largely off-balance sheet—nearly 23 times the GDP), which is dominated by private banking, is a key feature of the economy. The aim of this paper is to systematically analyze its main features. Building on key stylized facts and cross-country comparisons, the paper discusses the implications of the business model of Andorran banks and the associated vulnerabilities, particularly those related to the reliance on foreign funding, the focus on private banking, and the use of internationalization to grow and remain competitive. These vulnerabilities and the exposure to risks calls for continued vigilance and strong supervision.

A. Introduction

1. The Andorran banking sector is sizeable and contributes significantly to the country's economy. The financial sector is a cornerstone of the Andorran economy due to its significant contribution to the country's GDP. Comprising both banks and insurance companies, the financial sector accounts for 14 percent of GDP and employs approximately 5 percent of the workforce. Consolidated bank assets amount to about 600 percent of GDP and assets under management (AUM)—largely off-balance sheet—are nearly 23 times the GDP, reflecting the primary focus on private banking services. A banking sector of this size, and comprising only three banking groups, implies that all banks are systemic in nature.

The financial sector is one of the largest sectors in the Andorran economy.

Sectoral Shares in GVA, 2015-19
(Percent)



Sources: Govern d'Andorra Statistics Department and IMF staff calculations.

2. While Andorran banks have performed well, their size and business model entail vulnerabilities. The Andorran banking entities have expanded internationally and have more than doubled their AUMs in the past 10 years. However, they feature structural vulnerabilities that make them more prone to shocks. A key vulnerability is the reliance on foreign funding, particularly nonresident deposits, which exposes the system to liquidity risks. In addition, private banking tends to be operationally more costly, entails additional risks such as those related to ML/TF, and coupled with an internationalization strategy, may have resulted in lower credit to the domestic economy.

[1] Prepared by Ana Lariau (EUR).

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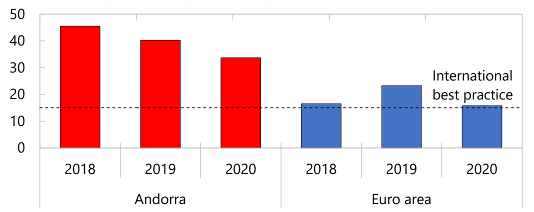
Furthermore, operating in a small and low-diversified economy makes the system more prone to large exposures and related-party lending, which lead to concentration of credit risks.[2,3]

Smaller economies are more prone to related party lending and large exposures.

Related Party Loans

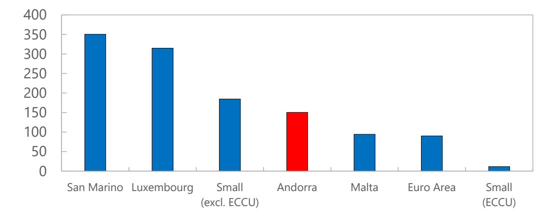
(Percent of equity, assets-weighted average)



Sources: FitchConnect bank-level data, and IMF staff estimates.
Note: A person or a close member of that person's family is related to a bank if that person has control, joint control, or significant influence over the entity or is a member of its key management personnel. Related party loans are referred to loans made by the bank to these persons. For the euro area, the indicator corresponds to the simple average across countries. For each country, the indicator corresponds to the assets-weigthed average. In the case of the Euro area, only significant supervised entities (directly supervised by the European Central Bank), with total assets of EUR100 billion, are considered.

Large Exposures

(Percent of Tier 1 Capital; 2021 or latest available)



Sources: IMF Financial Soundness Indicators Database, Andorran authorities and IMF staff calculations.
Note: Large exposures are all exposures exceeding 10 percent of Tier 1 capital. The values at regional level are computed as simple averages across countries.
Small States: Antigua and Barbuda, Bahamas, Barbados, Belize, Bhutan, Cape Verde, Comoros, Djibouti, Dominica, Fiji, Grenada, Guyana, Jamaica, Kiribati, Maldives, Marshall Islands, Mauritius, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Seychelles, Tonga, Trinidad and Tobago, Tuvalu, Vanuatu (based on McIntyre et al., 2018).
ECCU: Eastern Caribbean Currency Union (Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines).

3. **Continued vigilance and strong supervision are critical considering these vulnerabilities.** IMF staff recommend enhancing liquidity supervision, continue improving the understanding of AML/CFT risks, and reducing the concentration of credit risks by limiting related party lending and large exposures.

B. Key Features of the Andorran Banking Sector

4. **The three banking groups in the system are mainly owned by Andorran families.** The acquisition of two foreign-owned banks by their Andorran competitors left the system with three banking groups that are owned by Andorran families. Such ownership structure ensures stability over time. However, the fact of not being listed companies may limit their ability to raise capital and conduct corporate operations.

5. **While the Andorran banking groups offer a full range of services, they are specialized in private banking and wealth management.[4]** As a result, about 80 percent of the banks' income corresponds to non-interest income sources (largely commissions), a feature that is typical of the

[2] A large exposure is defined as any exposure that is taken on by an entity with a client or group of connected clients by an amount higher than 10 percent of the entity's eligible capital.

[3] A person or a close member of that person's family is related to a bank if that person has control, joint control, or significant influence over the entity or is a member of its key management personnel. Related party loans are referred to loans made by the bank to these persons.

[4] The three Andorran banking groups combine domestic commercial banking with private banking both in Andorra and internationally. However, the weighing of each business line to the overall business and the relevance of international businesses differs by bank. Andbank is the largest bank by business volumes and is largely focused on international private banking. Credit Andorra is the largest bank by business volumes in Andorra, thus it is more exposed to commercial banking and to the domestic economy, though it continues to seek growth through its international private banking business. MoraBanc is the second largest player in the domestic market and, while its international expansion has been more modest than its peers, it has accelerated in recent years (Fitch Ratings, 2021).

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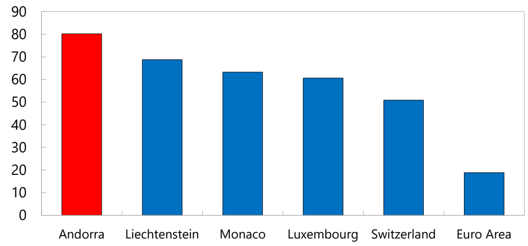
private banking model. Since the commissions that banks charge for managing and investing funds provide a stable and recurrent source of income, the profitability of Andorran banks has not suffered as much as their European peers from the low interest environment and other market disruptions.

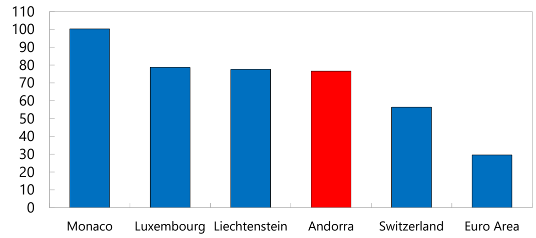
The share of non-interest income in total operating income and the cost-to-income ratio are higher in those countries where banks tend to be specialized in private banking.

Non-interest income
(Percent of total operating income, assets-weighted average, 2020)



Sources: FitchConnect bank-level data, and IMF staff estimates.
Note: For the euro area, the indicator corresponds to the simple average across countries. For each country, the indicator corresponds to the assets-weigthed average across banks. In the case of the Euro area, only significant supervised entities (directly supervised by the European Central Bank) are considered.

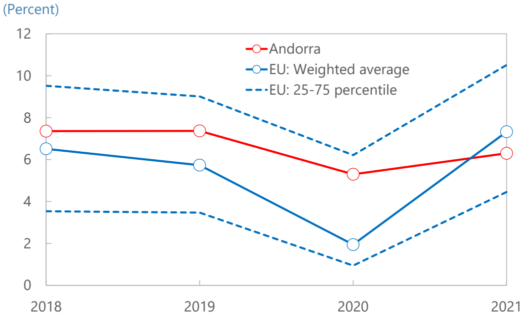
Cost-to-Income Ratio
(Percent, assets-weighted average, 2020)



Sources: FitchConnect bank-level data, and IMF staff estimates.
Note: For the euro area, the indicator corresponds to the simple average across countries. For each country, the indicator corresponds to the assets-weigthed average across banks. In the case of the Euro area, only significant supervised entities (directly supervised by the European Central Bank) are considered.

The profitability of Andorran banks remained relatively stable in recent years despite large (COVID-related) exogenous shocks.

Return on Equity
(Percent)



Sources: EBA Risk Dashboard 2021Q4Andorran authorities and IMF staff calculations.

6. **The private banking model is associated with higher cost-to-income ratios than those in commercial banking.** The potential for economies of scale in private banking is limited by the nature of wealth management services, which entail high-quality customer service and knowledgeable staff. Because of their focus on private banking, cost efficiency in Andorran banks has been weak. The ongoing consolidation process should help reduce the cost-to-income ratio, but the supervisor should ensure that it does not significantly hinder competition. In addition, continued AUM growth would also increase efficiency by covering fixed costs and bringing additional commissions.

7. **The internationalization strategy of the past 10 years has geographically diversified the business and led to a significant increase of AUMs.** The limited size of the domestic market has pushed Andorran banks to seek business abroad to gain market share and remain competitive. Andorran banking entities established a network of subsidiaries in international markets, including Europe, the United States, South America, and the Middle East. By end-2021, about 65 percent of

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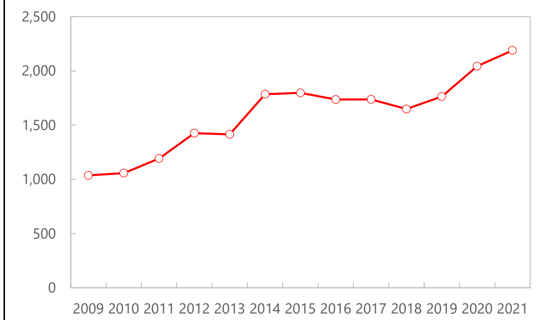
AUMs were managed in 10 countries outside Andorra. AUMs more than doubled since 2009, and by end-2021 they were nearly 23 times Andorra's GDP, of which nearly 80 percent are off-balance sheet.[5]

AUMs more than doubled in the past decade.

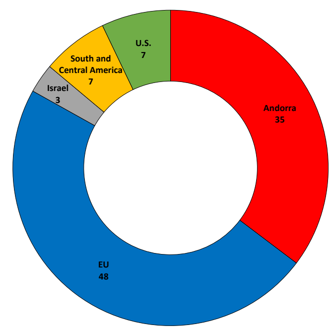
Consolidated Assets under Management
(Percent of GDP)



Sources: Andorran Banking Association and IMF staff calculations.

Andorran banks have operations in 11 countries, largely Andorra and the EU.

Geographical distribution of assets under management
(Percent, 2021)

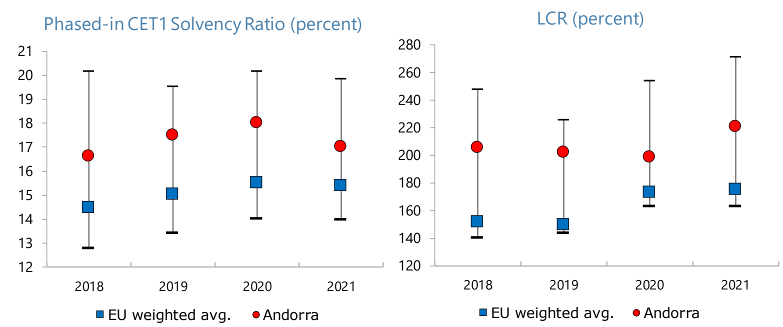


Sources: Andorran authorities and IMF staff calculations.

8. Despite their rapid expansion and several shocks, Andorran banks have been able to maintain solid solvency and liquidity ratios. Besides the impact of the low-interest rate environment of recent years, the Andorran banking system faced three shocks in the past 10 years: (i) the transparency process carried out by the country; (ii) the BPA crisis; (iii) the COVID-19 crisis. While these episodes put stress on the system, banks remained resilient and preserved their buffers. Capital and liquidity ratios have been stable and well-above the EU weighted average in recent years. These buffers should be able to cushion shocks and mitigate vulnerabilities.

Andorran banks have large capital and liquidity buffers.

Banking Sector: CET1 Solvency Ratio and LCR



Sources: Andorran authorities, EBA Risk Dashboard 2021Q4 and IMF staff calculations.
subject to revisions. The CET1 solvency ratio, which is reported on a consolidated basis, is defined as the ratio of the regulatory Tier 1 capital to risk-weighted assets (phased in definition). The LCR, which is reported on an individual basis, is defined as the ratio between high-quality liquid assets and net liquidity outflows over a 30-day stress period, which needs to be at least 100 percent since January 2021.

[5] AUMs declined slightly following the AML/CFT breach episode of *Banca Privada d'Andorra* (BPA), but have recovered since then and continued growing despite the COVID-19 shock.

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9. Even though the country is not an EU member, Andorran banks operate in the same regulatory environment as their European peers. Andorra has undergone a process of regulatory convergence with Europe in the past decade. This has entailed significant changes, including the implementation of regulations in matters of tax transparency, measures for international criminal cooperation and the fight against money laundering and the financing of terrorism, as well as banking regulation.

C. Risks and Vulnerabilities of the Andorran Banking Model

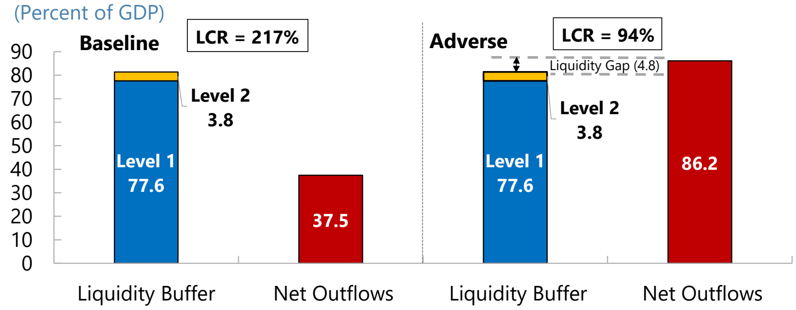
Reliance on Foreign Deposits and Liquidity Risks

10. The assessment of banks' liquidity, based on Basel III's LCR, is done using detailed bank-by-bank data. The LCR is defined as the ratio between high-quality liquid assets and net liquidity outflows over a 30-day stress period, which needs to be at least 100 percent since January 2021. Against this requirement, Andorran banks' LCR is above 200 percent, under baseline outflow assumptions that are consistent with the LCR regulation and with regional crisis scenarios. The calculations in the baseline and stress scenarios are based on detailed bank-level data for 2021, including information on the stock of liquid assets by asset type, cash outflows by funding source, and cash inflows by asset type. It also includes assumptions regarding the outflow rates for each funding source over a 30-day period as well as the asset-specific haircuts applied to liquidity inflows.

11. The large reliance on foreign deposit funding entails liquidity risks. Staff analysis shows that, in an extremely adverse scenario in which the outflow rates are assumed to be up to four times those in the baseline, the LCR of the entire system would fall below the 100 percent requirement and there would be a liquidity gap of 4.8 percent of GDP, though with bank-by-bank differences. Those banks that display sharp declines in the LCR tend to rely more on funding from retail deposits (particularly those less stable), on unsecured funding from nonfinancial corporates and sovereigns not covered by deposit insurance, or on undrawn but committed credit facilities to retail and other nonfinancial customers. While it is admissible for the banks' LCR to fall below 100 percent under stress, the existing regulation requires banks to build plans in coordination with AFA to quickly re-build their buffers. While recent

In an extremely adverse scenario, the LCR would fall below 100 percent and there would be a liquidity gap of 4.8 percent of GDP.

Banking System Liquidity Coverage, 2021
(Percent of GDP)



Source: Data from the Andorran authorities (non-audited, preliminary) and IMF staff estimates.
Note: The banks' liquidity gap is the difference between the banks' liquidity buffer and the net liquidity outflows in a 30-day stress period. The latter are calculated by subtracting haircut-adjusted liquidity inflows from liquidity outflows. The outflows correspond to the available stock of funding sources multiplied by their corresponding outflow rates in a 30-day stress period. The baseline scenario assumes that the eligibility of liquid assets for the buffer, the haircuts on 30-day inflows and the 30-day outflow rates are consistent with the LCR regulation. In such scenario, the liquidity buffer exceeds the net outflows and there is no liquidity gap; the resulting LCR is 217 percent. In a more adverse scenario, the assumed outflow rates are more pessimistic, up to four times those in the baseline. Under such circumstances, the net outflows exceed the liquidity buffer, resulting in a liquidity gap of 4.8 percent of GDP and an LCR of 94 percent.

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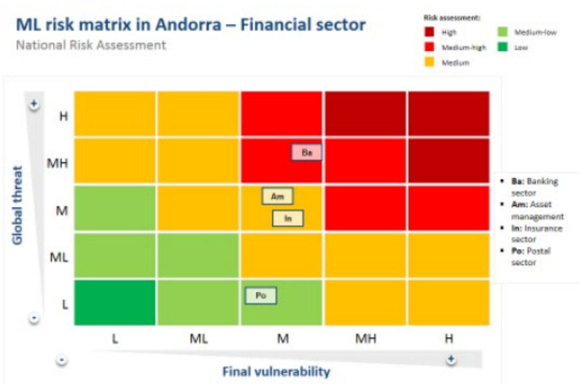
stress episodes (transparency process, BPA crisis and COVID-19 shock) did not lead to significant outflows, the supervisor should remain vigilant.

Focus on Private Banking and Internationalization Strategy

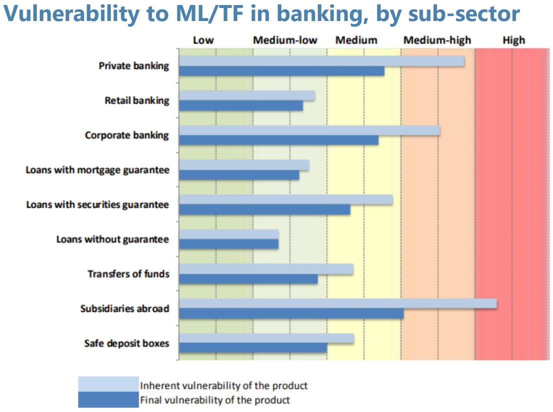
12. Private banking activities and operations through subsidiaries abroad are vulnerable to money laundering and terrorism financing (ML/TF) risks. The most recent National Risk Assessment, produced by the Financial Intelligence Unit of Andorra (UIFAND), qualifies the vulnerability to ML/TF of private banking and of subsidiaries abroad to be medium-high. The complexity associated with the provision of services in different jurisdictions by each of the banking groups adds significant risks to the activity. This is partially mitigated by the banking entities' relatively good control systems, which bring down the vulnerability score to medium.

Private banking and subsidies abroad are the sectors most vulnerable to ML.

Vulnerability to ML/TF by sector



Vulnerability to ML/TF in banking, by sub-sector



Source: 2020 National Risk Assessment (UIFAND).

13. The internationalization strategy exposes the system to external risks which may limit the benefits from diversification. With the domestic market limited by the size of the economy, Andorran banks have expanded their international presence to support profitability and geographical diversification, which also limits their exposure to the volatility of the local economy. However, this exposes banks to other sources of risks and vulnerabilities associated with the foreign market (e.g., foreign exchange fluctuations, local competition, local culture, regulatory environment, economic and political instability, market imperfections and asymmetric information, operational diseconomies associated with monitoring from a distance). Berger et al (2016) find a positive relationship between the degree of internationalization and bank risk for U.S. banks.

Large Banking Sector in a Small and Low-diversified Economy

14. The size of the Andorran banking sector warns attention, especially in the absence of lender of last resort (LOLR) facilities. Total consolidated assets of the Andorran banking entities are 600 percent of GDP, and AUMs—largely off-balance sheet—amount to nearly 23 percent of

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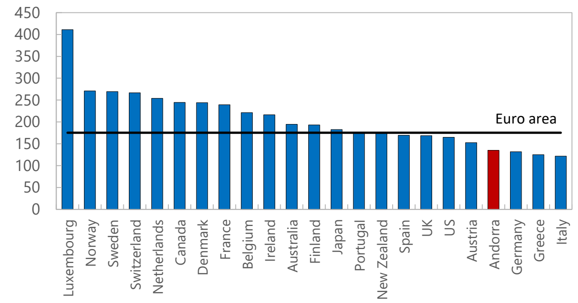
GDP. Any exogenous shocks to Andorran banks would directly affect Andorra's economy given their systemic nature. Public finances would also be impacted via the materialization of contingent liabilities in the event of an extremely adverse scenario.

15. Loan concentration risks, coupled with the focus on private banking, may lower banks' incentives to expand domestic credit. Operating in a low-diversified economy (LDE) such as Andorra entails an inherent risk of loan concentration for banks, including large exposures to a few clients or sectors, which could lead to a higher sensitivity of loan losses to economic downturns. To compensate for this, banks require a higher return and may only select the best lending opportunities. As a result, in equilibrium, they generate less lending. Narain et al (2003) show that domestic credit tends to be lower in LDEs. However, they find that higher income LDEs may have alternative ways of mitigating the risks and be less constrained by the lack of diversification.

Credit to the private non-financial sector tends to be lower than in other advanced economies.

Total credit to the private non-financial sector in advanced economies
(Percent of GDP, 2020)



Sources: Bank of International Settlements, Andorran authorities and IMF staff calculations.

D. Policy Implications

16. Liquidity risks. The AFA could further reinforce the supervision of liquidity risk including by enhancing the monitoring and stress testing of net liquidity outflows, undertaking analysis of liquidity risks for longer horizons (the LCR considers only a 30-day horizon), including onsite liquidity inspections in supervisory planning, and accelerating the development and review of liquidity contingency plans by banks. A strengthening of the AFA more broadly, including by more solid funding and staffing, would also be welcome.

17. AML/CFT risks. Further improving the effectiveness of the AML/CFT framework is necessary to ensure financial stability. Building on significant progress made in recent years, Andorra should persevere in its efforts to align the AML/CFT framework to FATF standards, including in the area of virtual assets. It would also be important to continue refining the national risk assessment, building on the improvements introduced in 2020, and to act upon the findings of the 2020 assessment to mitigate risks and make supervision more effective. The supervisor should continue to carefully analyze data on cross-border transactions and exchange information with counterparts in relevant originating countries to further improve its understanding of ML/TF risks. Resources for AML/CFT supervision should be increasingly focused on higher risk areas, and sanctions for breach of regulatory requirements should be effectively imposed.

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18. Absence of LOLR. While a LOLR is not in place, the recent buildup of international reserves—up to the reference level estimated by IMF staff of 8.7 percent of GDP—may help the government to cope with the materialization of financial-sector-related contingent liabilities.

19. Loan concentration risks. Andorra has already transposed into its legal framework the EU regulation limiting large exposures to a given client to be less than 25 percent of the bank's capital. The AFA also reinforced reporting requirements on large exposures. Implementation of this regulation will be critical to keep risks at bay, especially as banks increase their financing of the economy The planned diversification of the economy should also help to mitigate risks from concentration and create the incentives to expand domestic credit, which would support medium-term growth.

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