



FMA

Financial Market Authority

25

**FINANCIAL
STABILITY
REPORT 2025**

4 PREFACE

6 EXECUTIVE SUMMARY

- 7 Main findings and risks
- 10 Recommendations

12 MACROFINANCIAL ENVIRONMENT

- 13 International developments
- 20 Domestic economy
- 29 Financial market developments
- 32 Real estate market developments

**38 RECENT DEVELOPMENTS AND
SYSTEMIC RISKS IN THE FINANCIAL
SECTOR**

- 39 Cross-sectoral developments and
systemic risks
- 50 Banking sector
- 53 Non-bank financial sector

64 POLICY DEVELOPMENTS

- 65 Recent macroprudential policy developments
- 73 International cooperation
- 75 Recent developments in microprudential
supervision and policy
- 76 Recent regulatory developments
- 77 Recent developments in crisis management
and bank resolution

80 ANNEX: STRUCTURAL BACKGROUND

- 81 Structural characteristics of the economy
- 82 Structural characteristics of the financial sector
- 86 Macroprudential policy framework

90 LIST OF ABBREVIATIONS

PREFACE

In this publication, the Liechtenstein Financial Market Authority (FMA) presents its eighth annual Financial Stability Report, providing a comprehensive analysis of the country's financial sector. As Liechtenstein does not have a national central bank, the FMA is legally tasked with ensuring financial stability under the Financial Market Authority Act (FMA Act, Article 4).

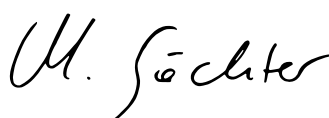
Over the past year, the broader macro-financial risk environment has become increasingly fragile. Global uncertainty remains elevated, driven by a combination of persistent geopolitical tensions, rising protectionism, and the erosion of multilateral cooperation. The economic and financial consequences of these developments are difficult to quantify but are likely to weigh on investment sentiment, disrupt global supply chains, and dampen cross-border capital flows. These macroeconomic trends are also affecting the financial sector, with interest margins having declined further in recent months. While Liechtenstein's financial sector continues to demonstrate resilience, the

external environment has turned more challenging, underscoring the need for close monitoring and proactive risk management. This year's report identifies and assesses the systemic risks Liechtenstein's financial system is facing, highlights emerging imbalances, and outlines how these risks are being addressed. It also provides targeted recommendations for both authorities and private sector participants to strengthen financial stability in the face of growing global uncertainties.

In conclusion, the analysis confirms the continued stability of Liechtenstein's financial sector, with systemic risks remaining contained. However, elevated global uncertainty, fiscal and geopolitical pressures, and stretched financial market valuations call for sustained vigilance. Maintaining strong capital buffers and institutional resilience remains essential. The authorities have a broad set of macroprudential tools at their disposal, which they will continue to apply as needed to safeguard long-term financial stability.



Mario Gassner
Chief Executive Officer



Martin Gächter
Head of the Financial Stability Division

EXECUTIVE SUMMARY

MAIN FINDINGS AND RISKS

The global economy continues to experience subdued growth, shaped by persistent uncertainty, trade tensions, and the delayed effects of earlier shocks. Although overall activity has weakened, labour markets remain resilient, with unemployment staying low. Trade remains weak and volatile, influenced by shifting policies and short-term adjustments. Inflation trends differ across major economies, reflecting varying business cycle conditions and structural factors. These developments highlight the need for close monitoring, as global risks may affect financial stability unevenly across countries and regions.

Sluggish external demand continues to weigh on Liechtenstein's economy, which faces persistent headwinds from global uncertainty and geopolitical fragmentation. After a strong rebound in 2023, growth momentum has weakened sharply as external shocks – such as weak external demand, rising trade barriers and the appreciation of the Swiss franc – dampened exports and constrained industrial activity. Employment growth has slowed markedly and turned negative, even as unemployment remains low, signalling rising labour market pressures. The Liechtenstein economy's high sensitivity to global developments underscores its vulnerability to external shocks. Strengthening resilience will require continued diversification, targeted supply-side measures, and improved data availability to enable timely and effective policy responses.

Risks in financial markets remain elevated despite the recent easing of monetary policy across major economies. In Switzerland, the combination of persistently low inflation, a strong Swiss franc, and policy rates at the zero lower bound raises the possibility of renewed deflationary pressures. Globally, elevated long-term bond yields – despite easing cycles – reflect lingering inflation concerns and fiscal vulnerabilities, which could increase refinancing costs. In the US, policy uncertainty and data revisions have complicated the

monetary outlook. Equity markets appear disconnected from macroeconomic fundamentals, with high valuations vulnerable to corrections.

Mortgage lending in Liechtenstein continued to grow over the past year, although new lending has recently declined, particularly in the commercial real estate and buy-to-let segments. Household indebtedness has eased relative to GDP but remains the highest among EEA countries, reflecting structural features of the domestic mortgage market. Recent monetary easing has supported debt-servicing capacity, as shown by lower loan-service-to-income ratios and a shift toward longer fixation periods. Exception-to-policy loans have remained broadly stable, with a significant share related to affordability. For these loans, minimum amortisation requirements are consistently applied, helping to reduce risk while maintaining access to credit. Although household debt is not an immediate concern, its elevated level and rising loan-to-income ratios warrant close monitoring amid potential economic or interest rate shocks.

Addressing reputational risks in Liechtenstein's financial sector remains essential, particularly in areas related to financial integrity such as AML / CFT and sanctions compliance. While international assessments have recognised Liechtenstein's strong regulatory framework and supervisory efforts, highlighted by favourable MONEYVAL and OECD reviews and confirmed by the first IMF Article IV consultation, ongoing vigilance is essential. The FMA has notably expanded its inspection coverage, especially in the fiduciary sector, where recent OFAC sanctions-related cases underscore the importance of robust governance and risk management. The upcoming implementation of the EU AML package, including the Single Rulebook and AMLA oversight, marks a key step toward greater regulatory harmonisation and supervisory convergence. Despite improvements, elevated reputational risks, particularly in high-risk sectors, require continued attention to safeguard financial stability.

The cybersecurity framework in Liechtenstein has been significantly strengthened with the entry into force of the Digital Operational Resilience Act (DORA). The regulation introduces harmonised requirements for information and communication technology (ICT) risk management, incident reporting, and third-party oversight, expanding on previous national guidelines. Implementation efforts vary across institutions, depending on size and complexity, but all are required to enhance ICT governance and reporting. The rise in reported ICT-related incidents – particularly DDoS attacks – reflects both expanded reporting obligations and growing digital interconnectedness. Around half of incidents were cyberattacks, mainly affecting banks, while the rest stemmed from third-party disruptions. The increasing complexity of threats underscores the importance of robust ICT resilience and supervisory engagement.

Liechtenstein's banking sector remains well-capitalised, but challenges persist. Capital ratios have gradually declined, bringing CET1 and leverage ratios closer to EEA medians amid rising capitalisation at the European level. Strong liquidity and a deposit-based funding structure support resilience, although reliance on deposits also represents a potential vulnerability. Profitability has improved moderately, with higher earnings and returns, yet structural inefficiencies persist. The implementation of CRR III in April 2025 introduced stricter capital requirements, but the impact has remained limited so far. Given the sector's size relative to GDP and heightened global uncertainty, maintaining robust capital and liquidity buffers remains essential to safeguard financial stability.

Liechtenstein's insurance sector remains highly international and concentrated, with the vast majority of premiums generated abroad. Its strong cross-border orientation is supported by EEA membership and bilateral agreements, granting access to the EU single market and Switzerland. The sector is well-capitalised and maintains robust solvency positions, though ratios are somewhat below European medians due to group-level capital allocation and limited use of transitional measures. Profitability improved slightly, driven by non-life and reinsurance segments, while life insurance performance slightly declined. Despite solid underwriting discipline, profitability remains modest compared to peers. Rising regulatory complexity and market consolidation pose challenges to maintaining Liechtenstein's competitive advantage as a cross-border insurance hub.

Liechtenstein's pension system remains stable, supported by strong financial reserves and positive investment performance in both the first and second pillars. The public pension scheme (AHV) recorded another surplus in 2024, driven by robust returns and steady contribution growth, while reserves remain well above the statutory minimum. Occupational pension funds also strengthened their funding positions, supported by favourable market conditions, though persistently low interest rates may pose long-term challenges for meeting return targets. Structural reforms to the public sector pension scheme were implemented to ensure sustainability and fairness, while broader demographic trends underscore the need for further adjustments. The government's elderly strategy outlines measures to safeguard long-term viability, including potential changes to contribution rates, state support, and retirement age, alongside efforts to raise awareness of pension issues.

The investment fund sector has grown strongly in recent years, driven mainly by alternative investment funds (AIF), while traditional UCITS (undertakings for collective investments in transferable securities) and national fund regimes have remained largely stagnant. The investment fund sector's risk profile remains contained given conservative liquidity and low leverage, despite vulnerabilities identified in alternative funds in other European jurisdictions. In contrast, the asset management sector has expanded more slowly and become increasingly concentrated. Larger firms have gained market share, while smaller players have exited, reflecting cost pressures and rising regulatory requirements. These dynamics point to continued consolidation and a growing dominance of scale-driven business models in the years ahead.

The fiduciary sector remains an important pillar of Liechtenstein's financial industry, though its role is gradually declining amid stricter regulation and a shrinking number of service providers. Proposed revisions to the Professional Trustees Act aim to strengthen supervisory powers, enhance fit-and-proper requirements, and align oversight with international standards, further addressing MONEYVAL recommendations and mitigating reputational risks. Recent OFAC sanctions-related incidents underscore the sector's exposure to reputational and compliance challenges, particularly in a volatile geopolitical environment.

The Fintech landscape is undergoing a major regulatory shift. The implementation of the Markets in Crypto-Assets Regulation (MiCAR) introduces harmonised EEA-wide rules and higher entry thresholds compared to the national TVTG framework. While this is expected to drive consolidation and raise compliance costs, it also positions Liechtenstein as an attractive hub for international players, leveraging its early regulatory experience and EEA market access. The domestic market is likely to become smaller but more robust and internationally oriented, with transitional periods offering firms time to adapt.

Liechtenstein's macroprudential authorities have strengthened the policy framework in recent years to enhance financial stability and mitigate systemic risks. A combination of capital-based, lender-based, and borrower-based measures has been implemented to bolster banks' resilience and address vulnerabilities in the real estate market. Capital buffers, including the systemic risk buffer and O-SII buffer, aim to reduce systemic risk and ensure adequate loss-absorbing capacity, while borrower-based measures and recalibrated risk weights help contain risk accumulation in mortgage lending.

To address identified vulnerabilities in Liechtenstein's residential real estate market, authorities revised the borrower-based measures in 2023. In particular, the new rules include stricter affordability standards and shorter amortisation periods for second mortgages. These measures aim to gradually reduce risks while preserving access to mortgage financing. Early implementation feedback indicates improved risk management and borrower awareness, supported by enhanced data collection. On the capital side, national risk-weight measures for mortgages expired in April 2025 with the adoption of CRR III, which introduced more granular, risk-sensitive requirements for real estate exposures. These changes are expected to strengthen resilience but may increase capital needs for higher-risk portfolios.

Liechtenstein has further strengthened its financial stability framework by joining the IMF. The country's IMF accession in 2024 marked a major step in bolstering crisis resilience, complementing existing liquidity arrangements with the Swiss National Bank and improving transparency and investor confidence. The first IMF Article IV consultation praised strong fundamentals and called for continued vigilance on household debt, fiduciary sector risks, and AML / CFT compliance, alongside structural reforms and better data. To address data gaps, authorities launched a coordination group to improve macroeconomic

statistics, including real estate indices, national accounts, and balance of payments, ensuring alignment with international standards.

Liechtenstein's resolution framework has been further strengthened, though additional progress is needed. The FMA's revised MREL policy incentivises a balanced mix of subordinated and bail-inable instruments to enhance recapitalisation capacity. Beyond compliance, operational readiness is being tested through a multi-year resolvability program, including bail-in simulations and capability reviews, to ensure resolution strategies are practical and effective. External audits and ongoing monitoring aim to close identified gaps and reinforce the credibility of resolution plans. However, the operationalisation of current resolution strategies remains underdeveloped and requires further work by both the resolution authority and the resolution entities.

RECOMMENDATIONS

In light of heightened uncertainty and geopolitical tensions, the FMA recommends the following actions for the financial sector in general:

- Financial intermediaries are encouraged to strengthen their resilience and shock-absorbing capacity to ensure long-term stability and safeguard the financial system in times of stress.
- Financial institutions should continue to regularly assess their governance and internal control frameworks to ensure consistent compliance with European and international standards.

- In light of the increasing frequency and complexity of cyber-attacks, the financial sector should continue to actively manage ICT incidents (including anomaly detection) to mitigate cyber risks.

The FMA recommends that the banking sector prioritises the following actions in light of its decreasing capitalisation and dampened profitability outlook:

- Banks are advised to take proactive measures to ensure robust capitalisation levels and prevent further declines in order to maintain banking system's resilience.
- Banks are expected to consistently apply the adjusted borrower-based measures in mortgage lending, to mitigate risks and ensure financial stability.
- Banks should continue addressing cost inefficiencies and enhance structural efficiency to ensure sustainable long-term profitability.
- Banks are advised to improve crisis management preparations, particularly to ensure sustainable funding in a crisis situation.

In light of the heightened vulnerability of financial markets to potential corrections, the FMA recommends the following measures for the non-banking sector:

- The insurance sector should maintain balanced combined ratios and adequate solvency to manage long-term risks effectively, while further strengthening internal governance and controls, with particular focus on cross-border activities and product oversight and governance.

- Pension schemes should ensure their long-term viability by ensuring sustainable conversion rates and robust investment returns.
 - Investment funds should continue to maintain adequate liquidity buffers to meet investor redemptions during periods of market stress.
 - In the crypto-asset service providers sector, TVTG-licensed firms are encouraged to use the transitional period to prepare for MiCAR authorisation.
- Given the systemic risks identified in the Liechtenstein financial sector, the FMA recommends that the relevant national authorities take the following actions:
- Continue to ensure adherence to international and European standards in ongoing regulatory efforts.
 - Authorities should continue their close collaboration with relevant international counterparts to address existing structural weaknesses, particularly with respect to the availability of macroeconomic statistics, and further developing Liechtenstein's financial safety net.
 - Continuously assess vulnerabilities in the real estate sector and evaluate the effectiveness and efficiency of adapted borrower-based measures.
 - Further refine and improve capital and liquidity stress tests.
 - Liechtenstein authorities should continue their strong efforts to effectively address reputational risks.

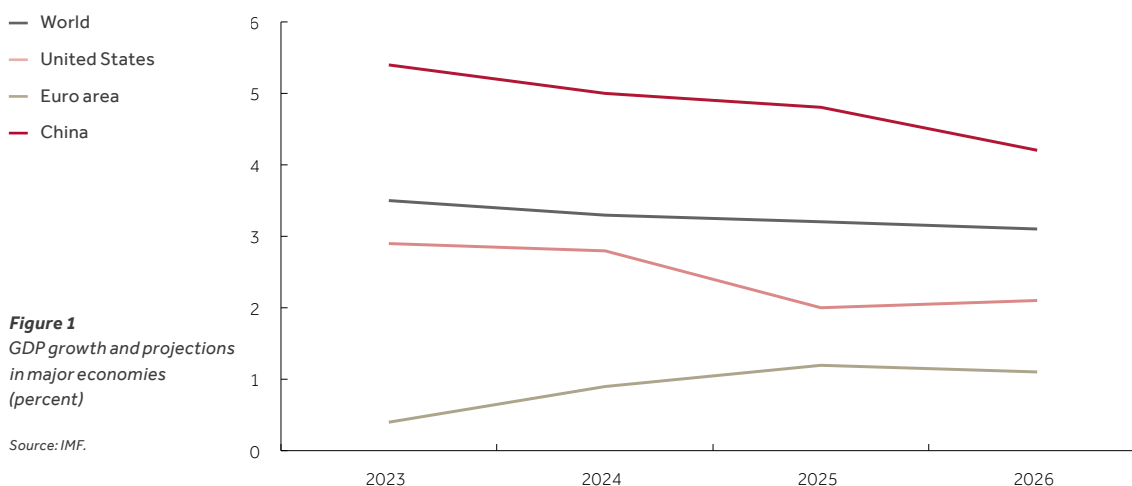
MACRO- FINANCIAL ENVIRONMENT

INTERNATIONAL DEVELOPMENTS

Although high uncertainty and increasing trade frictions have weighed on global economic activity, the slowdown has so far remained limited.

According to the latest projections in the IMF's October World Economic Outlook (WEO), growth at the global level is expected to slow from 3.3 % in 2024 to 3.2 % in 2025 and 3.1 % in 2026. The United States are particularly affected by the current slowdown,

although the projected annual growth rate of 2.0 % in 2025 remains higher than in the euro area (1.2 %), where growth continues to be subdued (Figure 1). While uncertainty has somewhat diminished from its all-time highs in recent weeks – thanks in part to several bilateral trade deals with the United States – the economic and financial consequences of past shocks, especially those related to rising protectionism, will only be felt with a lag and could affect countries and regions asymmetrically.



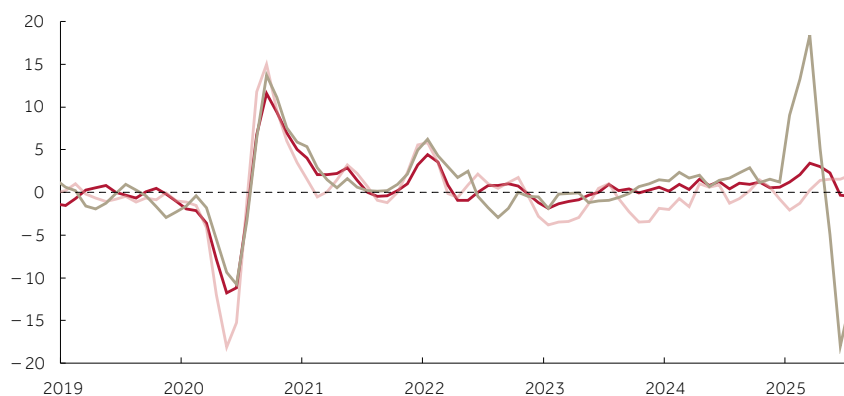
Global trade growth has remained subdued over the past year, with recent uncertainty surrounding US trade policy contributing to significant volatility in US imports during the first half of 2025. While global imports showed weak but positive growth for most of the year, this trend reflects the overall muted pace of global economic activity. Anticipation of potential US trade policy announcements led to fluctuations in global trade figures in the first and

second quarters of 2025. This volatility was driven by inventory build-up in the United States in Q1, where imports surged by more than 18 % compared to the previous quarter, followed by a similarly sharp decline in Q2 (Figure 2). Overall, the impact of rising US tariffs on global trade remains uncertain, as short-term adjustments by importers continue to obscure the longer-term structural effects.

— World
— Euro area
— United States

Figure 2
Global import growth
(3m-o-3m in percent)

Source: CPB Netherlands,
own calculations.



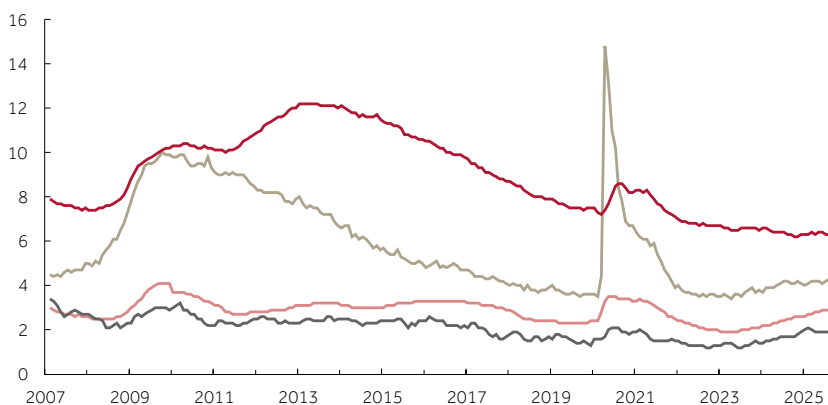
Despite overall weak economic activity, unemployment rates have remained close to historic lows. The global slowdown in GDP growth – driven by elevated inflation and interest rates as well as trade policy uncertainty – has not translated into a significant deterioration in labour market conditions. This resilience is largely due to demographic trends and persistent labour shortages. In the euro area, where

the cyclical downturn was particularly pronounced during the interest rate hikes, the unemployment rate remained at a historic low of around 6 %. Labor market data from the United States, Switzerland, and Liechtenstein reveal similar patterns, although unemployment rates have edged up slightly (Figure 3), and job vacancy rates have also moderated over the past year.

— United States
— Euro area
— Switzerland
— Liechtenstein

Figure 3
Unemployment rates
(percent)

Source: National sources.



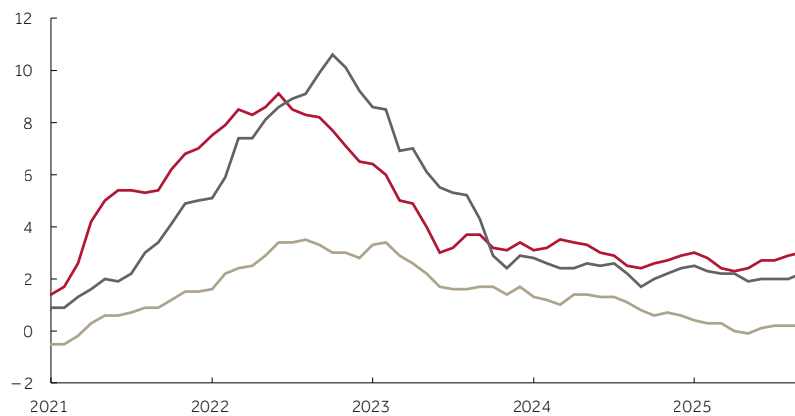
Inflation has continued to decline over the past year but remains above target in the United States (Figure 4). In Switzerland, inflation temporarily dipped into negative territory and hovers near zero, partly due to the strength of the Swiss franc, raising concerns about renewed deflationary pressures. In the euro area, inflation returned to target levels of around 2 %, although significant heterogeneity persists across member countries. In contrast, inflation in the United States began rising again before reaching the 2 % target, with early signs suggesting that increased

tariffs may be contributing to renewed inflationary pressures. In fact, core inflation has already risen above 3 %, making it increasingly difficult for the Federal Reserve to deliver on its dual mandate. Overall, inflation developments have diverged across major economies, and underlying inflation dynamics have become more volatile following the strong increase in inflation over the past three years, driven by stronger wage growth, widespread indexation mechanisms and second-round effects in many countries.

— United States
— Euro area
— Switzerland

Figure 4
Inflation
(y-o-y in percent)

Source: National sources.



BOX 1

Fragmentation and uncertainty drags on the Liechtenstein economy*by Andreas Brunhart, Martin Geiger, and Elias Hasler*

Current global political and economic developments are weighing heavily on Liechtenstein's economy.

As a very small and highly open economy, Liechten-

stein is particularly exposed to external shocks. Since 2022, the slowdown – driven by supply-chain disruptions, Russia's war against Ukraine, elevated energy and other commodity prices, and the global tightening of monetary policy to contain inflation – has dampened real GDP (see Figure B1.1).



Liechtenstein has historically exhibited a strong sensitivity to international business-cycle conditions, reflecting its small size and its sectoral concentration in investment-goods manufacturing and financial services. Figure B1.1 – an international comparison of indexed real GDP – underscores the resulting high volatility. This pattern characterises small economies, given limited domestic buffers, a reduced scope for counter-cyclical monetary or fiscal policy, and lower diversification (Brunhart, 2025).

Volatility in Liechtenstein's GDP is further amplified by its sectoral composition. Liechtenstein ranks among the European OECD countries with the highest gross value-added shares in industry and the second highest in financial and insurance services (Brunhart and Geiger, 2024, p. 337). Investment-goods manufacturing and financial services – two key pillars of the domestic economy – are typically more cyclical than aggregate GDP¹. These structural features contribute to pronounced fluctuations in output.

¹ Demand for capital goods is characterised by "wait-and-see" behavior and tends to be deferred more often, which is why investment typically fluctuates more strongly than GDP (see e.g. Francois and Woerz 2009). The evaluation of Eurostat data shows that – on average across EU countries (since 2000) – the standard deviation of the quarterly growth rate of real gross value added in the sector "financial and insurance activities" is more than twice as high as that of the total gross value added of all sectors.

Liechtenstein reacts not only sensitively to international economic developments but also earlier than its peers (Brunhart, 2017). The tendency for Liechtenstein's GDP to lead that of neighbouring countries cannot be explained by the sensitivity to general global business-cycle dynamics (Geiger and Hasler, 2021). Instead, it likely reflects the economy's heightened vulnerability to major disruptions, stemming from its strong dependence on foreign trade – particularly exports of investment goods and financial services. Rising geopolitical fragmentation and broader uncertainty are transmitted quickly through external demand channels, amplifying the impact on domestic activity.

While Liechtenstein's economy is highly sensitive to the global business cycle, the nature of current shocks is particularly adverse. The typically larger cyclical response in Liechtenstein, relative to its larger neighbours, was muted during the COVID-19 recession in 2020 (Brunhart, Geiger and Ritter, 2022). Since then, however, the economy has been affected both earlier and more severely by global fluctuations and rising geopolitical tensions.

The global economy is becoming increasingly fragmented, accompanied by heightened uncertainty. The first panel of Figure B1.2 shows the Geopolitical Fragmentation Index (GFI) developed by

BOX 1

Figure B1.2
Panel A: Geopolitical
Fragmentation Index
(index)

Source:
Fernández-Villaverde et al. (2024).

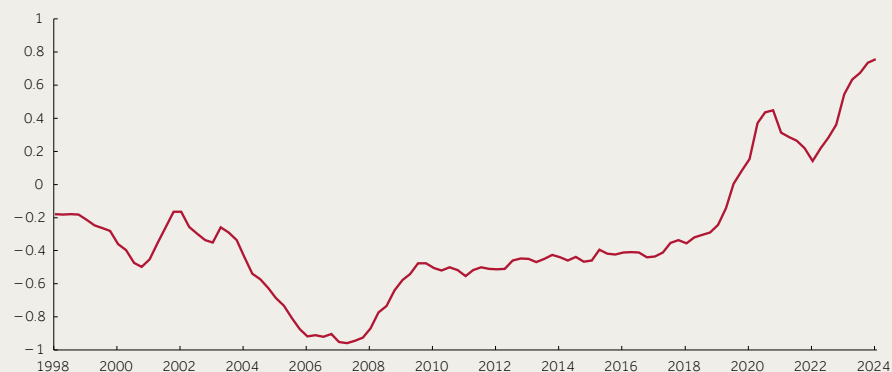
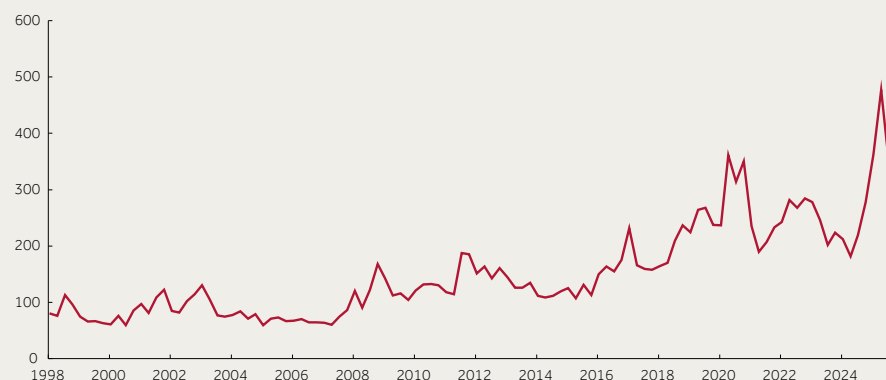


Figure B1.2
Panel B: Economic Policy
Uncertainty Index
(index)

Source: Baker et al. (2016).



BOX 1

Fernández-Villaverde et al. (2024). Estimated using a dynamic hierarchical factor model, the GFI captures latent fragmentation across four dimensions: (1) trade, (2) finance, (3) mobility, and (4) policy. Higher values signal greater fragmentation – countries drifting apart – while lower values reflect deeper integration and interdependence. The index has trended upward for nearly a decade, coinciding with the Brexit referendum, shifts in US trade policy beginning under the first Trump administration, and Russia's invasion of Ukraine. The latest data point (2024 Q1) marks the highest level since the beginning of the series, and fragmentation has likely increased further since.

Political and economic fragmentation are contributing to heightened uncertainty regarding the future framework of international economic cooperation and global economic developments. The Panel B of Figure B1.2 shows the global Economic Policy Uncertainty (EPU) index by Baker et al. (2016). While the global financial crisis of 2008–09 and, in particular, the COVID-19 pandemic were characterised by unprecedented uncertainty – with uncertainty itself shaping the economic outcomes of those episodes – the first

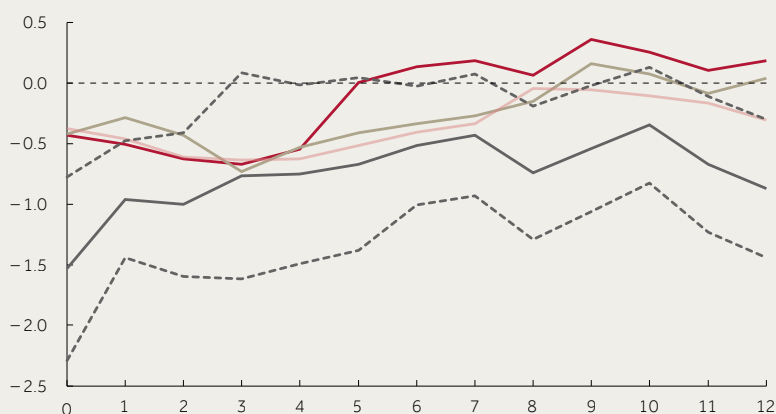
two quarters of 2025 have recorded even higher EPU readings. Continued political and economic tensions, with countries drifting apart, are thus associated with record levels of economic policy uncertainty.

Recent economic and political disruptions involve both first-moment news shocks and second-moment uncertainty shocks. Events linked to political and economic fragmentation appear to both convey information about, and create uncertainty over, financial and economic conditions, impacting the global economy through various channels. News shocks alter expectations about future economic conditions, which can immediately influence current activity, for example via wealth effects and investment decisions. Uncertainty shocks, conversely, decrease the predictability of outcomes, leading to precautionary behaviour, delayed investment, and tighter credit conditions (see e.g. Caldara et al., 2016 or Baker et al., 2024). To evaluate the effects of first-moment and second-moment shocks, we estimate the effects of surges in the GFI and EPU on quarterly real GDP employing local projections of the following form for several European economies:

— Liechtenstein
-- Liechtenstein – confidence bands
— Switzerland
— Austria
— Germany

Figure B1.3
Panel A: Impulse response functions of quarterly real GDP to a GFI shock over 12 quarters (percent)

Sources: Office of Statistics, Eurostat, Liechtenstein Institute (GDP estimate 2024, quarterly GDP estimates; price, seasonal, and structural break adjustments). Own calculation of local projections. Dashed lines indicate the 68 percent confidence intervals. Impulse response functions are normalised to a standard-deviation shock in the respective indices.



$$y_{(t+h)} = \alpha_h + \sum_{(l=0)}^2 \beta_{(l,h)} x_{(t-l)} + \sum_{(l=1)}^2 \gamma_{(l,h)} y_{(t-l)} + \delta_h t^2 + \theta_h t + \varepsilon_h$$

The dependent variable, y_t , denotes indexed real GDP in period t (for comparability) and x_t is either the GFI, or the EPU, respectively. Figure B1.3 shows the impulse response functions based on the series of $\beta_{(0,h)}$ -coefficients associated with an unanticipated surge in the indices.

A rise in geopolitical fragmentation leads to an immediate and strong response of the Liechtenstein economy. An average shock in the GFI reduces Liechtenstein's real GDP by about 1.5 per cent within the quarter (as shown in Panel A of Figure B1.3). This effect is markedly larger than in Germany, Switzerland or Austria, for which the on-impact response lies outside the 68 percent confidence interval of the Liechtenstein estimate. Moreover, the response in Liechtenstein tends to be more persistent. These findings suggest that rising geopolitical fragmentation is particularly detrimental to the Liechtenstein economy compared to the reference countries. Further analysis of GFI subindices indicates that this sensitivity is primarily driven by reactions to trade and financial fragmentation, unsurprising given Liechtenstein's high reliance on goods exports and financial services.

A swift and strong reaction is also evident in response to surges in uncertainty. Similar to the GFI, a rise in the EPU index leads to a particularly strong and immediate decline in Liechtenstein's real GDP (see Panel B of Figure B1.3). Overall, the analyses indicate a high sensitivity of Liechtenstein's economy to first- and second-moment shocks associated with recent geopolitical disruptions, including shifts in US trade policy and the deterioration in international security. These findings also help explain Liechtenstein's tendency to respond very early to international business-cycle fluctuations.

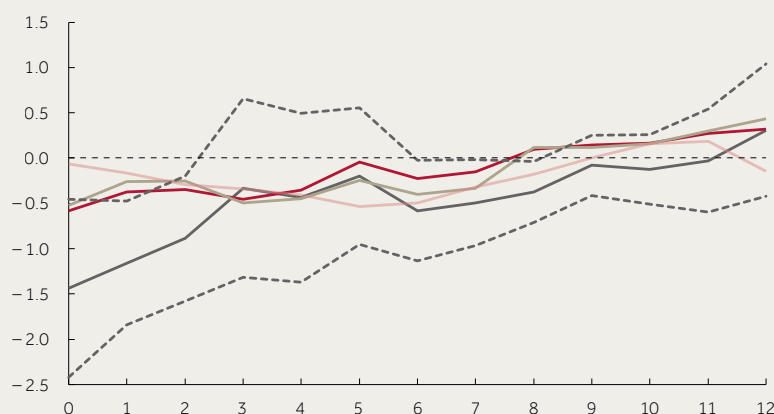
References

- Baker, S. R., Bloom, N., and Davis, S. J. (2016). Measuring economic policy uncertainty. *Quarterly Journal of Economics*, 131(4), 1593 – 1636.
- Baker, S. R., Bloom, N., and Terry, S. J. (2024). Using disasters to estimate the impact of uncertainty. *Review of Economic Studies*, 91(2), 720 – 747.
- Brunhart, A. (2017). Are Microstates Necessarily Led by Their Bigger Neighbors' Business Cycle? The Case of Liechtenstein and Switzerland. *Journal of Business Cycle Research* [Vol. 13, Iss. 1]; pp. 29 – 52.
- Brunhart, A. (2025). Country Size and Exposure to International Economic Shocks: New Evidence from the Financial Crisis. *International Economics and Economic Policy* [Vol. 22, Iss. 3].
- Brunhart, A. and M. Geiger (2024): Wirtschaftliche Integration Liechtensteins und der Zollanschlussvertrag mit der Schweiz. In: G. Baur, C. Frommelt and F. (ed.): *Die Beziehungen Liechtenstein – Schweiz. Beiträge aus Anlass des 100-Jahr-Jubiläums des Zollanschlussvertrags*. Liechtenstein Politische Schriften (Bd. 64). pp. 317 – 362.
- Brunhart, A., M. Geiger, and W. Ritter (2022): Besonderheiten der Corona-Rezession und die Rolle des Binnenmarktes. *LI Focus 1 / 2022*. Liechtenstein-Institut.
- Caldara, D., Fuentes-Albero, C., Gilchrist, S., & Zakrajšek, E. (2016). The macroeconomic impact of financial and uncertainty shocks. *European Economic Review*, 88, 185 – 207.
- Fernández-Villaverde, J., Mineyama, T., and Song, D. (2024). Are we fragmented yet? Measuring geopolitical fragmentation and its causal effect (No. w32638). National Bureau of Economic Research.
- Francois, J. and J. Woerz (2009): Follow the Bouncing Ball – Trade and the Great Recession Redux. In: Baldwin, R. (ed.): *The Great Trade Collapse: Causes, Consequences and Prospects*, Centre for Economic Policy Research: pp. 87 – 94.
- Geiger, M. and E. Hasler (2021): Die Effekte globaler Konjunkturschwankungen auf liechtensteinische Güterexporte. *LI Focus 1 / 2021*. Liechtenstein-Institut.

— Liechtenstein
-- Liechtenstein – confidence bands
— Switzerland
— Austria
— Germany

Figure B1.3
Panel B: Impulse response functions of quarterly real GDP to an EPU shock over 12 quarters (percent)

Sources: Office of Statistics, Eurostat, Liechtenstein Institute (GDP estimate 2024, quarterly GDP estimates; price, seasonal, and structural break adjustments). Own calculation of local projections. Dashed lines indicate the 68 percent confidence intervals. Impulse response functions are normalised to a standard-deviation shock in the respective indices.



DOMESTIC ECONOMY

Liechtenstein's economy continues to face headwinds amid global uncertainty and geopolitical fragmentation. Although the KonSens, a business cycle indicator for Liechtenstein, showed a modest improvement in Q2 2025 – rising from – 1.1 to – 0.6 – it remains in negative territory, reflecting below-average growth (Figure 5). Business sentiment has slightly improved, yet key indicators such as goods exports and employ-

ment growth remain weak. The index has now remained negative for fourteen consecutive quarters, underscoring the prolonged nature of the downturn and the fragile pace of recovery despite recent signs of stabilisation. Business surveys have been in decline since Q4 2023, with the recent shift in US trade policy adding further downward pressure. Industry and construction expect conditions to remain unchanged in Q3 2025, while a slight deterioration is anticipated in the services sector.

Figure 5
Business cycle index KonSens
(index)

Source: Liechtenstein Institute.



According to the latest national accounts, Liechtenstein's GDP rebounded strongly in 2023, but economic momentum has since weakened.

While the domestic business cycle had historically mirrored OECD trends, recent estimates from the Liechtenstein Institute suggest increasing divergence (Figure 6). Real GDP has been in decline since the last

quarter of 2023, driven largely by rising geopolitical fragmentation and uncertainty. These external shocks appear to impact Liechtenstein's economy swiftly and significantly, as expected, due to the extraordinarily high business cycle sensitivity to global developments (see Box 1).

Figure 6
Real GDP developments
(index; Q4 2019 = 100)

Source: Office of Statistics, OECD, Liechtenstein Institute (GDP estimate 2024, quarterly GDP estimates; price, seasonal, and structural break adjustments).



The global macroeconomic environment is mirrored in weak external demand for Liechtenstein's industrial sector. The global cooldown is reflected in stagnating goods exports, with recent US trade policy – particularly the announcement of a 15 % tariff in August – adding direct pressure on manufacturers exporting to the US and indirectly dampening demand in other key markets. While seasonally adjusted exports did not fall further following the announcement (Figure 7), likely due to anticipation

effects, nominal direct exports to the US have underperformed relative to total exports in recent quarters. This suggests that US trade policy has already weighed on export performance in Q1 and Q2 2025. Additionally, the appreciation of the Swiss franc against the US dollar likely exacerbated the decline. The overall stagnation in goods exports is also linked to structural changes within Liechtenstein's industrial sector (for a related analysis, see Box 1 in the Financial Stability Report 2024).

— Direct exports
— Direct imports

Figure 7
Direct exports and imports
(y-o-y real growth in percent)

Source: Liechtenstein Institute, Office of Statistics. Seasonally adjusted, without exports / imports to / from CH.



While Liechtenstein's domestic unemployment rate has remained low, the economic downturn is clearly reflected in employment figures. The latest unemployment rate stood at 1.9 % in September, close to its historical average. However, growth in quarterly employment, measured in full-time equivalents, has

slowed markedly since mid-2022 and turned negative in the fourth quarter of 2024. This downward trend has persisted through the first three quarters of 2025, indicating that the labour market is increasingly affected by the broader economic slowdown despite the still low headline unemployment rate (Figure 8).

Figure 8
Employment in FTE
(q-o-q growth in percent, seasonally adjusted)

Source: Liechtenstein Institute, Office of Statistics. Quarterly data based on preliminary and non-revised figures.



Liechtenstein's public finances have remained remarkably sound. Maintaining fiscal discipline, preserving high reserves to cushion against unforeseen economic shocks, and remaining independent from international debt markets are priorities shared across all political parties in parliament. Sound public finances are also a key focus for the new government, as evidenced by the Government Programme released in October 2025. Although countercyclical fiscal policy is constrained by a low fiscal multiplier (see Box 2), preserving fiscal space is crucial for the functioning of automatic stabilisers and for implementing supply-side stabilisation measures. Since 2014, Liechtenstein has consistently reported budget surpluses, amounting to 2.5 % of GDP in 2021, 3.3 % in 2022, and 4.4 % in 2023. Strong public finances reflect, in part, a lean and efficient administration providing high-quality services (see Box 3). Following a sharp decline in financial reserves in 2022 due to adverse market developments, net financial reserves at the general government level recovered in 2023, reaching CHF 7.7 billion – more than 100 % of GDP. While official data for 2024 are not yet available at the general government level, FMA estimations based on central government figures, combined with five-year averages for municipalities, social insurances, and public enterprises, suggest a continued, but somewhat lower budget surplus at the general government level of around 1.2 % of GDP in 2024. In light of positive

market developments, net financial reserves increased significantly in 2024 – by around CHF 298 million at the central government level and approximately CHF 250 million in social insurances. Data from the municipal level are still pending. Against this backdrop, Liechtenstein's public finances remain well-positioned to meet future challenges.

Limited data availability continues to pose challenges for economic analysis in Liechtenstein.

Currently, official national accounts are published only on an annual basis, in nominal terms, and with considerable time lags, complicating timely GDP-based assessments. Data gaps also persist in other key areas, such as the external and real estate sector. However, since Liechtenstein's accession to the IMF at the end of 2024, notable progress has been made. The government has established a cross-departmental coordination group to identify data deficiencies and develop a coordinated action plan. The initial focus is on enhancing the national accounts, both in terms of coverage and timeliness, followed by efforts to establish comprehensive balance of payments statistics. In parallel, work is underway to align existing datasets with international standards, particularly in the area of public finances, and to improve public access to financial sector data. Overall, these initiatives are expected to significantly strengthen the availability and quality of macroeconomic statistics over the coming years.

BOX 2

Liechtenstein's fiscal multiplier and implications for fiscal policy*by Elias Hasler*

Over the past fifteen years, research on fiscal multipliers has expanded rapidly, yielding a comprehensive body of work on how government spending affects output. Before the global financial crisis of 2007–08, estimates of fiscal multiplier magnitudes and their determinants were scarce. Confronted with collapsing demand and the threat of deflation, governments worldwide resorted to sizeable fiscal stimulus hoping to avert a depression. That policy imperative spurred extensive empirical and theoretical studies estimating the magnitude of the fiscal multiplier and how it varies with structural characteristics of an economy.

The fiscal multiplier quantifies how a one-unit increase in government spending translates into GDP. A multiplier of 1 implies that an additional CHF 1 of public outlays raises GDP by exactly CHF 1, whereas e.g. a multiplier of 0.1 means that CHF 1 of spending yields only an increase of GDP by CHF 0.10. Precisely estimating this parameter is critical for policymakers to calibrate stimulus measures effectively, balancing the short-term benefits of additional demand against long-term fiscal sustainability.

The fiscal multiplier is less policy-relevant for Liechtenstein than for other countries. Before delving into the determinants of the fiscal multiplier, it is worth recalling why this metric is typically important for governments: it quantifies GDP's response to a one-unit increase in public spending, which in turn drives two other critical variables – employment and tax revenues – that also underpin policy decisions. According to Okun's Law, higher GDP should translate into higher employment (and lower unemployment). Yet in Liechtenstein, there is virtually no correlation between real GDP and domestic

employment (correlation coefficient – 0.03), reflecting labour-hoarding during downturns amid skilled-labour shortages (Brunhart and Lehmann, 2021). Consequently, fiscal stimulus has a negligible effect on employment. Similarly, most countries exhibit short-term tax buoyancies around 1, so that a multiplier close to unity allows governments to recoup part of their spending through higher revenues. However, Liechtenstein's short-run tax buoyancy is estimated at – 0.17, indicating no meaningful link between short-term GDP fluctuations and tax receipts. Because neither employment nor tax revenues respond to output changes, government spending can neither be offset by buoyant inflows nor reliably generate jobs. In light of these features, Liechtenstein's fiscal multiplier matters far less for its budgetary and stabilisation policy than in other economies.

Estimating the fiscal multiplier is difficult. Recent studies place multipliers for advanced economies between 0.6 and 1 (Ramey, 2019). The core challenge lies in its endogenous nature: governments tend to boost spending when activity falters. This coincidence makes it hard to isolate truly exogenous spending shocks. Furthermore, structural features – trade openness, labour-market rigidity, the size of automatic stabilisers, the exchange-rate regime, debt levels and the quality of expenditure management – all shape the multiplier's magnitude. However, by mapping a country's structural features onto established empirical estimates, one can assess its likely fiscal multipliers (Batini et al., 2014).

Liechtenstein's fiscal multiplier is likely close to zero. Batini et al. (2014) outline the so-called IMF "bucketing" approach in a technical note for gauging the multiplier when no direct estimates exist. According to this view, certain features tend to raise the multiplier – low trade openness (no), high labour-market rigidity (no), small automatic stabilisers (no) and a fixed exchange-rate regime (no) – while

others push it down – low public debt (yes) and effective expenditure management (yes). The answers in parentheses reflect whether each characteristic applies to Liechtenstein. On balance, this profile places Liechtenstein in the “low” bucket (0.1 – 0.3), though the true effect is probably even smaller because Liechtenstein is a rather extreme case within the profile. In a similar vein, the IMF’s 2015 Switzerland staff report notes that “scope for fiscal policy to support aggregate demand is limited by Switzerland’s fiscal rule and the small, open nature of Switzerland’s economy.” Given that Liechtenstein’s GDP is only about 1 percent of Switzerland’s and that its openness is even greater, its fiscal multiplier almost certainly lies near zero.

Liechtenstein’s economy is particularly exposed to external disturbances owing to its high degree of openness. Box 1 shows that geopolitical-fragmentation shocks transmit more rapidly and with greater amplitude to Liechtenstein than to its German-speaking peers. By contrast, the domestic labour market exhibits limited cyclical sensitivity: the unemployment rate remains broadly unchanged following such a shock, underscoring the weak empirical link between unemployment and GDP growth. Hence, while these shocks entail a sizeable but short-lived fall in activity, their social footprint is limited.

Stabilising Liechtenstein’s economy via increased government spending would be challenging. First, the economy’s swift rebound from a negative geopolitical-fragmentation shock, for example, makes precise timing essential: a stimulus mistimed by even a few quarters risks being procyclical, amplifying rather than dampening business-cycle swings. Second, the 68 percent confidence bands around Liechtenstein’s GDP impulse-response reveal substantial uncertainty about the size of the response. Consequently, any fiscal response must not only estimate the magnitude of the shock but also identify its nature (e.g. aggregate-

supply, demand or monetary-policy, geoeconomic-fragmentation) and consider how a combination of such shocks would interact.

Given Liechtenstein’s low fiscal multiplier, smoothing the business cycle through additional spending would be costly. Back-of-the-envelope calculations – assuming a multiplier of 0.1 – indicate that offsetting a 1 percent quarterly GDP decline would require over CHF 170 million in spending. A well calibrated fiscal policy response is not only difficult to achieve – owing to precise timing requirements and the risk of overshooting – but also relatively expensive. Moreover, since GDP and unemployment in Liechtenstein are not correlated, even a perfectly timed and sized intervention would leave labour-market outcomes largely unchanged, further undermining the case for active fiscal stabilisation.

Liechtenstein should continue to prioritise supply-side measures, like short-time work schemes. Both domestic and international evidence shows that such schemes effectively stabilise output in response to temporary shocks (Giupponi et al., 2022; Giupponi and Landais, 2023). By preserving existing employer-employee relationships, they enable a rapid rebound and avoid the costly process of recruiting and training specialised staff. Moreover, during the COVID-19 pandemic, Liechtenstein not only deployed short-time work but also implemented a mix of complementary measures, underlining the adaptability and effectiveness of its policy toolkit (Brunhart and Geiger, 2023).

References

- Brunhart, A. and Lehmann, J. (2021). *Konjunkturelle Sensitivität der Beschäftigung in Liechtenstein*. *LI Focus*, 3/2021.
- Giupponi, G., & Landais, C. (2023). *Subsidizing labour hoarding in recessions: the employment and welfare effects of short-time work*. *The Review of Economic Studies*, 90(4), 1963 – 2005.
- Giupponi, G., Landais, C., & Lapeyre, A. (2022). *Should we insure workers or jobs during recessions?*. *Journal of Economic Perspectives*, 36(2), 29 – 54.
- Brunhart, A., & Geiger, M. (2023). *Stützungsmaßnahmen für die Wirtschaft in Liechtenstein während der Corona-Pandemie: Eine abschliessende Evaluation*.
- Batini, N., Eyraud, L., Forni, L., & Weber, A. (2014). *Fiscal multipliers: Size, determinants, and use in macroeconomic projections*. *International Monetary Fund*.
- Ramey, V. A. (2019). *Ten years after the financial crisis: What have we learned from the renaissance in fiscal research?*. *Journal of Economic Perspectives*, 33(2), 89 – 114.

BOX 2

BOX 3

Liechtenstein's lean public sector: Special characteristics and fiscal policy implications

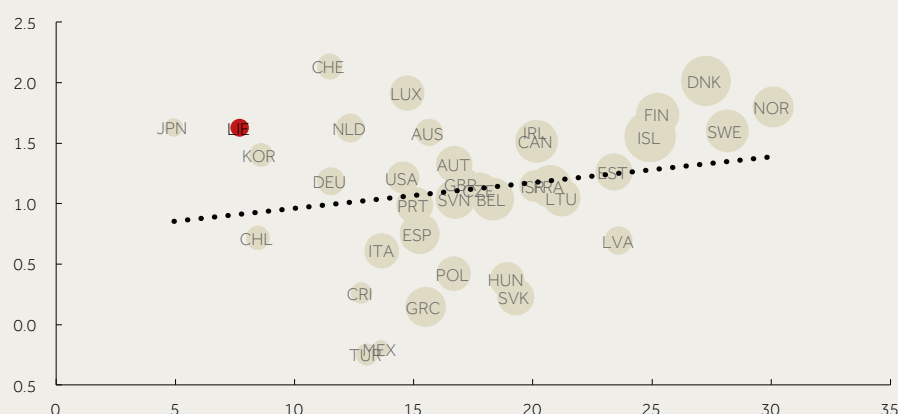
by Martin Meier and Zora Walch

Liechtenstein's public sector remains exceptionally lean by international standards, both in terms of workforce share and fiscal footprint. Public sector employment in Liechtenstein ranks among the lowest across advanced economies. Based on the standard System of National Accounts (SNA)² definition – which includes general government units and non-market producers controlled by the government – public employment in Liechtenstein accounted for just 7.7 percent of total employment in 2023, substantially below the OECD median of approximately 17 percent. This employment-based metric, the standard benchmark in OECD, IMF and World Bank analyses, highlights the compact size of Liechtenstein's administrative apparatus. The general government wage bill absorbs barely 5 percent of GDP, roughly half the OECD average. This outcome reflects both deliberate policy

choices and structural features. A notable share of core services is delivered through private or semi-autonomous institutions. Healthcare is primarily delivered by private providers under public regulation and financed via mandatory insurance. Similarly, besides the first (public) pillar, occupational pensions (the "second pillar") are mandatory and an important part of the pension system. They are managed by private pension funds and financed through joint contributions from employers and employees. Utilities like electricity, water, and waste are typically run by municipal or corporatised entities combining autonomy with public service duties. This model enables the central and municipal governments to focus on core administrative functions, keeping employment levels low while maintaining broad access to public services. As a result, the wage bill remains modest despite Liechtenstein's high-income status. Together, these factors underpin a compact public sector with a limited fiscal footprint, without compromising the breadth or quality of public services.

Figure B3.1
Public employment and
government effectiveness
(y-axis: government
effectiveness index; x-axis:
public employment
(in % of total employment);
Size of datapoint:
public wage bill
(% of GDP)

Sources: OECD, Office of Statistics,
own calculations.



² United Nations; Commission of the European Communities; International Monetary Fund; Organisation for Economic Co-operation and Development; World Bank. (2009). *System of National Accounts 2008*.

Despite the small public sector, government effectiveness is remarkably high in international comparison. Liechtenstein performs strongly on international governance metrics, regardless of its lean structure. Figure B3.1 illustrates this relationship using cross-country data from OECD³ member countries on public employment (as a percentage of total employment) and government effectiveness⁴ based on the World Bank's "Worldwide Governance Indicators" (WGI). Bubble size reflects the public wage bill as a percentage of GDP. Compared to other OECD countries and the overall trend, Liechtenstein occupies a distinctive position: it combines a small public workforce and low wage bill with a government effectiveness score of 1.6, comparable to, or even exceeding, that of countries with much larger public sectors. Liechtenstein also scores strongly across other WGI dimensions. Its 1.6 rating for political stability exceeds top OECD performers like Iceland (1.2) and Switzerland (1.1). Regulatory quality as well as voice and accountability are also well above the OECD median, reflecting robust institutional performance across governance pillars.

Public sector compactness supports expenditure discipline. Liechtenstein's small public sector plays a central role in maintaining sound public finances and long-term resilience. The country's fiscal strength stems from both robust revenues and disciplined spending. Budget surpluses have been recorded consistently over the past decade, and net financial assets at general government level exceed 100 percent of GDP. This position reflects a broad tax base and significant investment income from public financial reserves. At the same time, expenditure restraint – reflected e.g. in a wage bill of just 5 percent of GDP and an overall low fiscal share (21.4 % in 2023) in terms of GDP – has played a key role in keeping recurrent spending structurally low. This approach is anchored in a legal and institutional framework that prioritises balanced budgets and long-term fiscal prudence, as set out in the Financial Budget Act (FHG)⁵. Alongside the structural features mentioned, the combination of disciplined expenditure management, a lean public sector, and strong revenue buoyancy has supported the accumulation of reserves equivalent to roughly one-third of GDP at the central government

BOX 3

³ OECD. (2025). *Government at a Glance 2025*. OECD Publishing, Paris. Accessed July 20, 2025. <https://doi.org/10.1787/0efd0bcd-en>.

⁴ Government effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately – 2.5 to 2.5. World Bank. (2024). *Worldwide Governance Indicators: Government Effectiveness*. www.govindicators.org. Accessed July 20, 2025.

⁵ Articles 25 – 27 of the Financial Budget Act (Finanzhaushaltsgesetz, FHG) requires a four-year financial plan, balanced budgets, self-financing of at least 90 percent of investment, a financial-assets-to-liabilities ratio above 420 percent, and financial assets equivalent to one to three times annual operating expenditure.

BOX 3

level, while gross public debt remains virtually zero. The associated buffers, coupled with high government effectiveness, help support the public sector in managing and addressing emerging pressures and future challenges. These include demographic burdens on social insurance systems, the digital transformation of public services, and the potential need for targeted investments in infrastructure and climate adaptation (International Monetary Fund, 2025). Maintaining a fit-for-purpose and fiscally prudent state structure will be essential to navigating these challenges without compromising fiscal sustainability. Against the backdrop of very sound public finances, identified gaps or weaknesses in infrastructure and / or public services – such as the limited availability of macroeconomic data which are also important for effective policy-making – can and should be addressed to ensure an effective, service-oriented public sector going forward.

References

United Nations; Commission of the European Communities; International Monetary Fund; Organisation for Economic Co-operation and Development; World Bank. (2009). *System of National Accounts 2008*.

OECD. (2025). *Government at a Glance 2025*. OECD Publishing, Paris. Accessed July 20, 2025. <https://doi.org/10.1787/0ef0b0cd-en>.

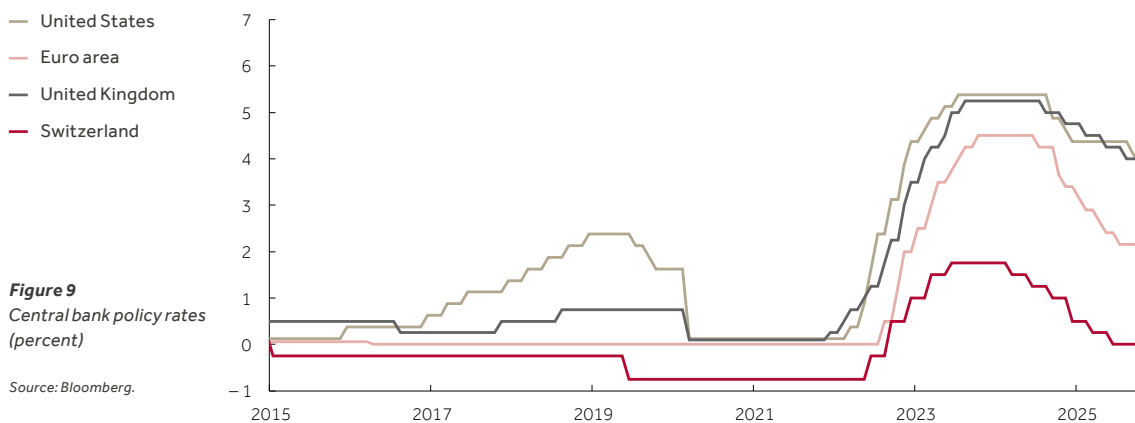
World Bank. (2024). *Worldwide Governance Indicators: Government Effectiveness*. www.govindicators.org. Accessed July 20, 2025.

International Monetary Fund, European Department. (2025). *Principality of Liechtenstein: Selected Issues*. IMF Staff Country Reports, 2025(077). Accessed July 20, 2025. <https://doi.org/10.5089/9798229005791.002>.

FINANCIAL MARKET DEVELOPMENTS

Amidst easing inflation and slowing economic activity, central banks worldwide have continued to loosen monetary policy (Figure 9). The European Central Bank (ECB) began its easing cycle in June 2024, lowering the deposit rate to 2 % by June 2025 and subsequently holding rates steady as inflation risks became more balanced. In Switzerland, the Swiss National Bank (SNB) started easing even earlier, in March 2024. With policy rates reaching the zero lower bound by June 2025, persistently low inflation and the continued appreciation of the Swiss franc have raised

concerns about renewed deflationary pressures, making Switzerland a clear exception compared to other advanced economies. Inflation has remained more persistent, particularly in the United Kingdom and the United States. As a result, policy rates have stayed higher – at 4 % in the UK and within a 3.75 – 4 % band in the US. The Federal Reserve was initially hesitant to cut rates in 2025, partly due to uncertainty over the impact of higher tariffs, but ultimately lowered its policy rate twice in September and October following unexpectedly weak labour market data, which revealed that job growth had been significantly overestimated over the past year.



With the exception of Switzerland, long-term sovereign bond yields have remained elevated across major economies despite recent monetary easing. Following the broad-based rise in inflation and interest rates in late 2021 and early 2022, long-term yields have stabilised at higher levels in both the United States and the euro area. Even Japan has seen a notable increase in long-term rates after decades of exceptionally low yields. These higher borrowing costs

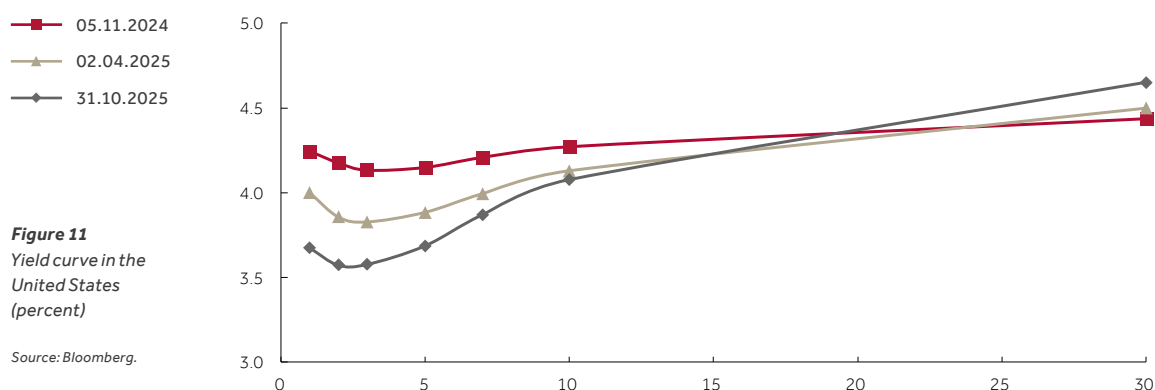
reflect both increased inflation expectations and growing concerns over public debt. This is also evident in narrowing spreads between Italian and German bonds, as well as record-low corporate bond spreads. In Switzerland, however, long-term sovereign bond yields have declined over the past two years and are now hovering near zero. However, they have not returned to the negative levels observed prior to the COVID-19 pandemic (Figure 10).



Since the publication of last year's Financial Stability Report – coinciding with the US elections in 2024 – the US yield curve has shifted notably.

Until April 2025, before the announcement of the first "reciprocal" tariffs, the yield curve showed little movement, aside from some decline at the short end due to a slowing economy. However, since then, the curve has steepened, with short-term interest rates

falling further while long-term rates have risen substantially (Figure 11). Higher long-term rates may signal expectations of a stronger economy or, alternatively, higher inflation expectations. In contrast, Switzerland's yield curve has shifted downward across all maturities, reflecting lower inflation and interest rate expectations going forward.

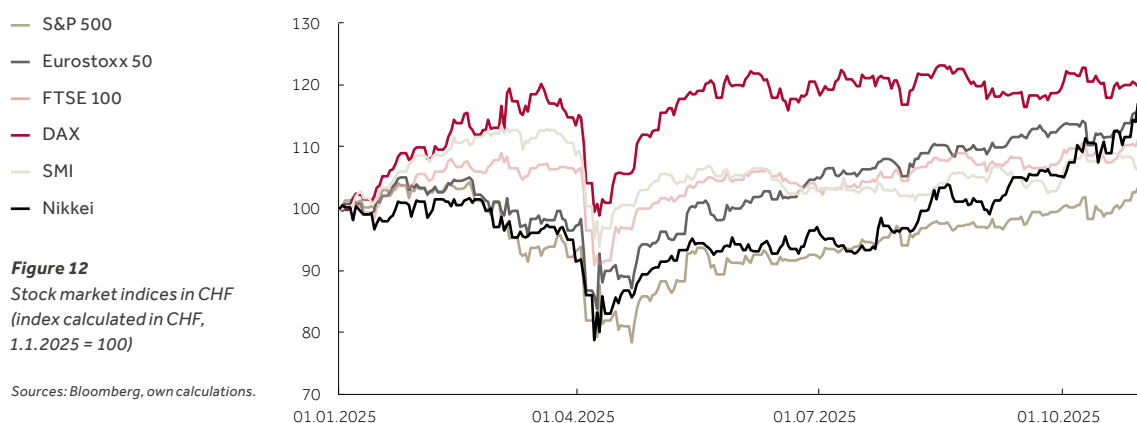


Despite a temporary setback in April following US tariff announcements, global stock markets have rallied over the past year. Major indices – including the S&P 500, Eurostoxx 50, FTSE 100, NIKKEI, and DAX – are at or near all-time highs, with valuation metrics also at elevated levels. Markets have largely shrugged off weak global growth, policy shocks, fiscal

vulnerabilities, and geopolitical tensions, with the US rally especially driven by large technology firms and optimism about artificial intelligence. Interestingly, gold has also rallied alongside equities, which does not typically signal high risk appetite; rather, it suggests that investors are simultaneously seeking safety amid ongoing uncertainty and inflation concerns. From the

perspective of Swiss and Liechtenstein investors, the stock market rally appears attenuated when measured in Swiss francs, due to the strong appreciation of the currency. In fact, unhedged investments in US equities have resulted in virtually flat returns

in CHF terms since the start of the year. The CHF appreciation also dampened returns in other indices (Figure 12), although the picture is heterogeneous depending on index returns and exchange rate movements.



Amid elevated global uncertainty and persistently low inflation in Switzerland, the Swiss franc has continued its appreciation trend. As a safe-haven currency, it has reached near-record levels against major currencies like the US dollar and the euro. The broad depreciation of the US dollar has further strengthened the franc, which has gained significantly by more than 17 % until end-October 2025 in nominal-

effective terms since early 2021. While this nominal appreciation poses challenges for export-oriented industries due to reduced price competitiveness, it largely reflects inflation differentials between Switzerland and its trading partners. In real-effective terms, the Swiss franc has appreciated more moderately, only by around 3 %, suggesting that the nominal trend is mostly offset by lower domestic inflation (Figure 13).



REAL ESTATE MARKET DEVELOPMENTS

Since 2022, the FMA has been collecting detailed data on mortgage lending, with the scope significantly expanded in 2024 to enhance the monitoring of borrower-based measures. Data is gathered through both the local FINREP reporting framework and in accordance with the ESRB recommendation on closing real estate data gaps⁶. The dataset covers a wide range of indicators, including loan volumes for both outstanding stock and new lending, number of mortgage loans, loan-to-value (LTV) ratios, loan-to-income (LTI) ratios, loan-service-to-income (LSTI) ratios, interest coverage ratios (ICR), and fixation periods of residential real estate (RRE) loans secured by properties in Liechtenstein and Switzerland. In addition to RRE lending, the FMA also

collects data on commercial real estate (CRE) exposures, with a particular focus on LTV ratios, non-performing loans (NPLs), and loan loss provisions. Since 2024, the FINREPL dataset has been further enhanced to include granular information on loan affordability and exception-to-policy (ETP) loans both for new lending and outstanding exposures. These additions improve the ability to assess lending standards and borrower resilience. Together, these comprehensive and quarterly updated datasets provide a robust basis for assessing mortgage lending standards and monitor risk developments in the sector. They also play a key role in evaluating the effectiveness and efficiency of the revised borrower-based measures introduced in 2023 / 2024 and to proactively monitor emerging systemic risks and thus safeguard the financial system.

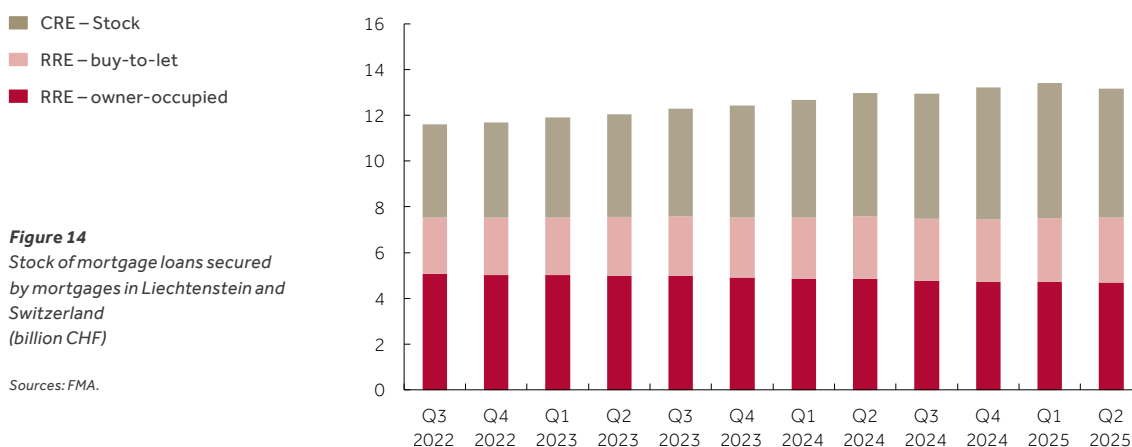


Figure 14
Stock of mortgage loans secured
by mortgages in Liechtenstein and
Switzerland
(billion CHF)

The stock of mortgage loans expanded steadily until the beginning of 2025 but contracted in Q2 (Figure 14). Based on the ESRB classification⁷, mortgage lending secured by immovable property in

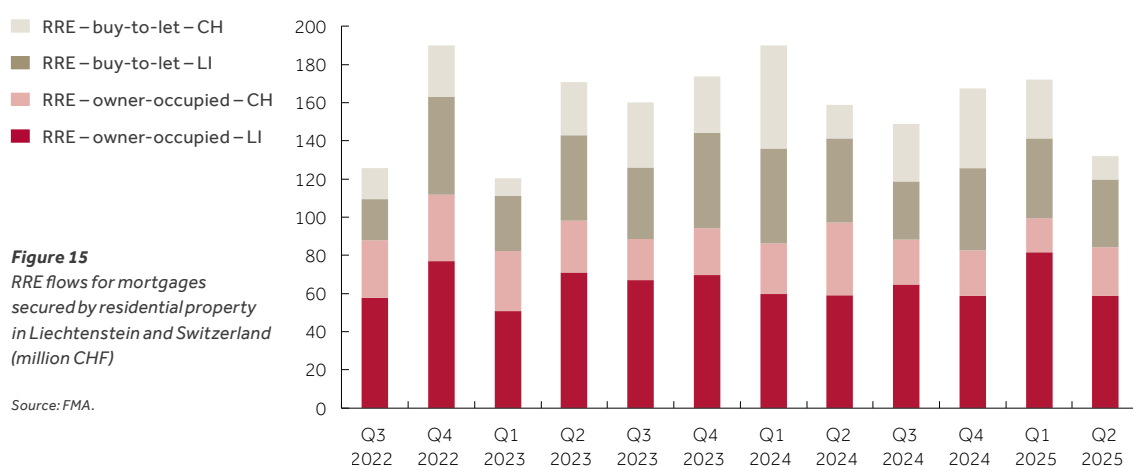
Liechtenstein and Switzerland (covering both residential and commercial real estate) recorded annual growth rates of 5 % to 7 % in recent years, but growth slowed markedly to 1.3 % y-o-y in Q2 2025.

⁶ ESRB recommendation ESRB/2016/14 (as amended). For this dataset, data is only collected from the three O-SIs, as they cover more than 95 % of the domestic mortgage market.

⁷ The national definition of real estate loans classifies RRE (residential real estate) and CRE (commercial real estate) loans according to the property's use (residential vs. commercial), while the ESRB definition mainly differentiates based on the type of borrower (natural vs. legal person).

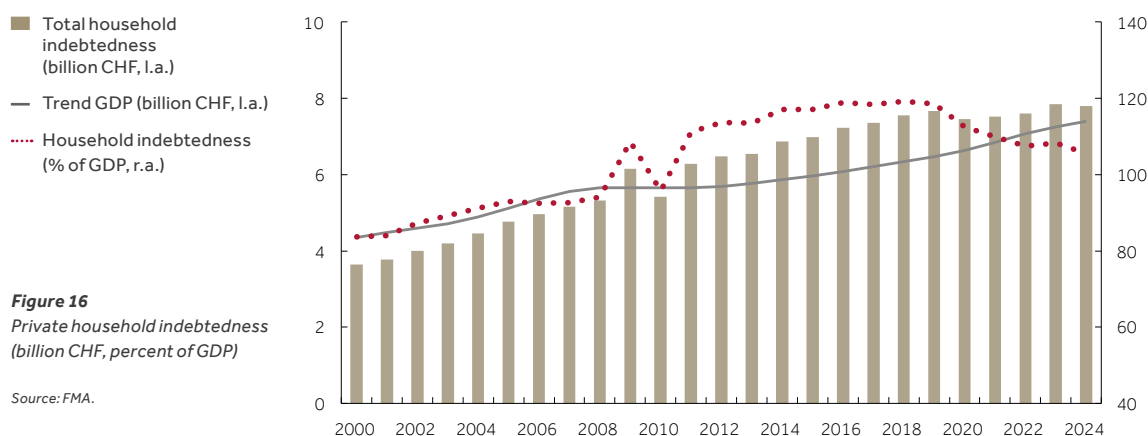
Outstanding residential real estate (RRE) mortgage volumes declined by 0.7 % y-o-y to CHF 7.5 billion in Q2 2025. Given the small size of Liechtenstein's mortgage market, flow data are more volatile in international comparison. Nonetheless, new RRE lending in Liechtenstein fell to its lowest level since Q1 2023,

primarily due to weaker buy-to-let lending. By contrast, owner-occupied loans secured by mortgages both in Liechtenstein and Switzerland remained broadly stable, consistent with their historically lower volatility. Mortgage flow dynamics also diverged between the two countries (Figure 15): while RRE loans



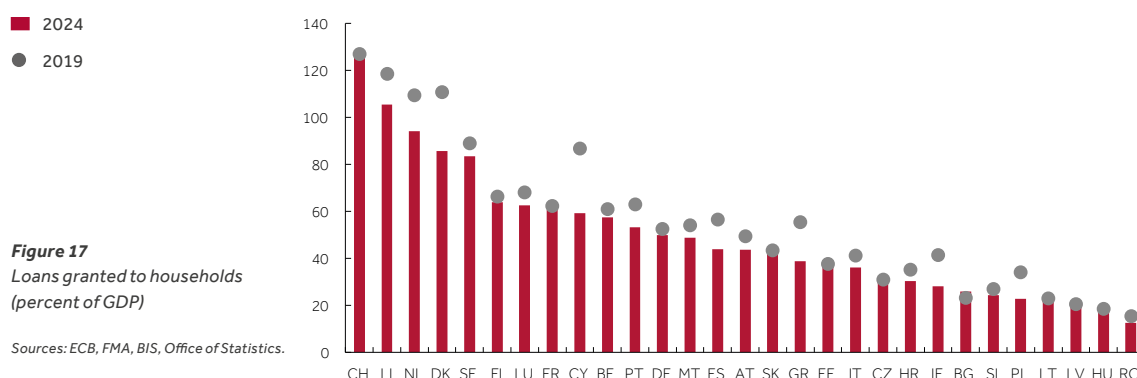
secured by mortgages in Switzerland recorded a marked decline since early 2025 (from CHF 65 million in Q4 2024 to CHF 38 million in Q2 2025), Liechtenstein saw a peak in Q1 2025 (123 million CHF), with volumes broadly in line with trends of the past three years. In recent years, mortgage credit growth has been

supported mainly by buy-to-let and commercial real estate (CRE) lending, particularly for Swiss properties. However, CRE volumes contracted in the latest quarter, with the stock declining from CHF 5.9 billion to CHF 5.6 billion (Figure 16).



Household indebtedness in Liechtenstein has declined slightly in recent years. Household debt decreased from its peak of approximately 120 % of GDP in 2018 to 105 % at the end of 2024⁸. A key driver of this decline has been the strong increase in nominal GDP, most notably the 20.2 % growth recorded between 2020 and 2021. Although GDP contracted by 2.6 % in 2022, preliminary estimates from the Office

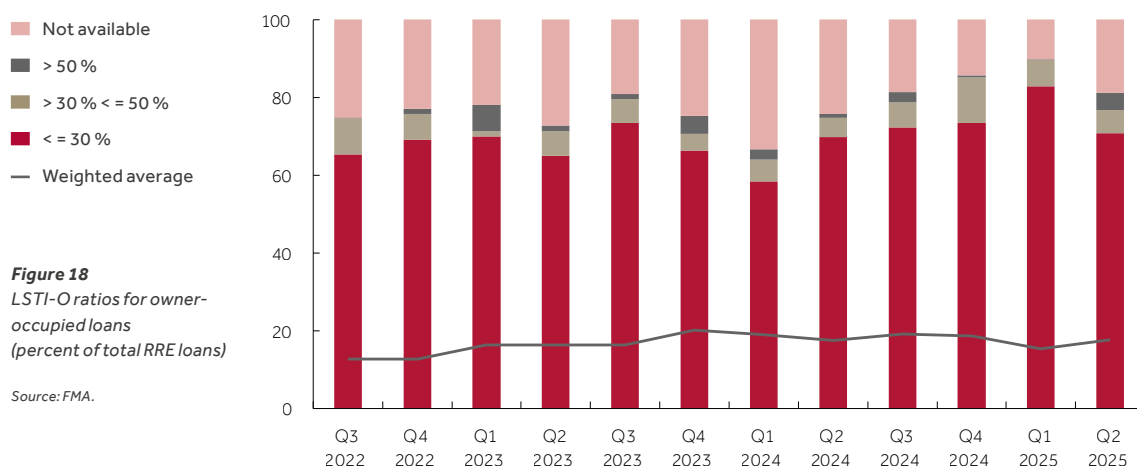
of Statistics indicate a 5.7 % rebound in 2023. Nominal GDP growth in 2024 has declined but remained positive, according to estimations by the Liechtenstein Institute. While the absolute level of household debt has continued to rise, mortgage growth remained low at around 0.4 % annually on average since 2019. As GDP growth outpaced credit growth, the debt-to-GDP ratio decreased significantly (Figure 16).



Although Liechtenstein follows the broader European trend of declining household indebtedness, it continues to report the highest household debt levels among EEA countries (Figure 17). Household indebtedness has also declined across European countries in recent years, partly due to higher interest rates reducing new lending. Nonetheless, Liechtenstein remains among the countries with the highest private household debt levels in Europe. This reflects structural features of the domestic mortgage market, where household debt is predominantly linked to housing credit. While household borrowing can support consumption and GDP growth in the short term, elevated debt levels may increase macro-financial vulnerabilities over time, particularly in the event of adverse economic shocks or abrupt interest rate adjustments. These risks are further amplified

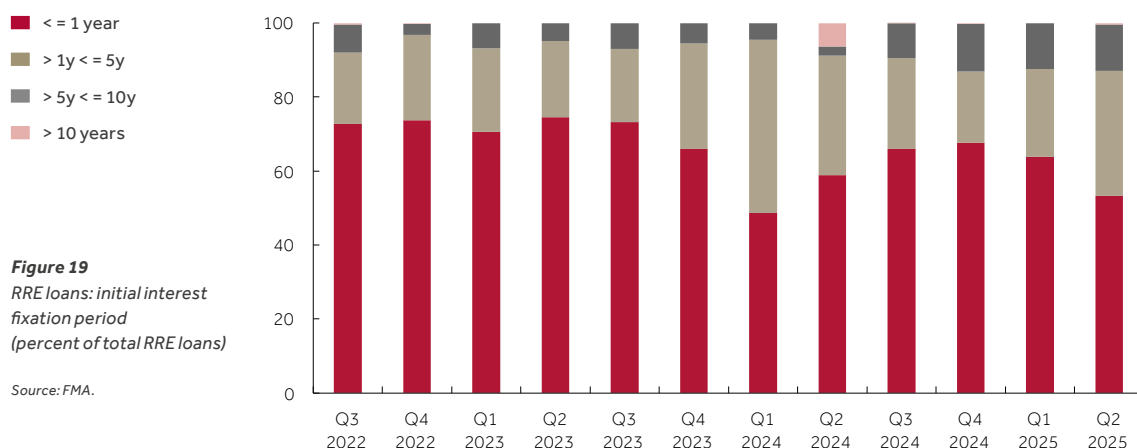
by relatively high loan-to-income (LTI) ratios in Liechtenstein. In Q2 2025, the average LTI ratio for newly originated owner-occupied loans reached 8.0, up from 5.2 in Q2 2024, marking a steady and significant increase over the past year. Although this figure may fluctuate, the current level suggests that a significant share of households, particularly those with lower incomes, remain highly leveraged and therefore more vulnerable to shifts in the economic environment. While household debt levels are not currently a source of acute concern, their elevated nature warrants continued monitoring from a financial stability perspective. Moreover, assessing the full impact of the borrower-based measures, recently adjusted in 2023 / 2024 to mitigate elevated household indebtedness, will require additional time.

⁸ The household debt-to-GDP ratio for Liechtenstein is only approximately comparable to other EEA countries, as the debt figure is not defined on a consolidated basis (i.e. credit within the household sector or even within the family is also included in Liechtenstein). Thus, this definitional issue inflates the ratio relative to other EEA countries. In addition, GDP figures are based on potential GDP estimates, due to the high volatility, substantial reporting delays, and revisions associated with official GDP data.



The monetary policy easing initiated in March 2024 in Swiss franc currency area has strengthened households' debt-servicing capacity, as reflected in slightly lower loan-service-to-income (LSTI) ratios for new lending (Figure 18). While Swiss franc interest rates have risen over the past years, they remained well below levels observed in many European countries. Since rates began to decline in March 2024,

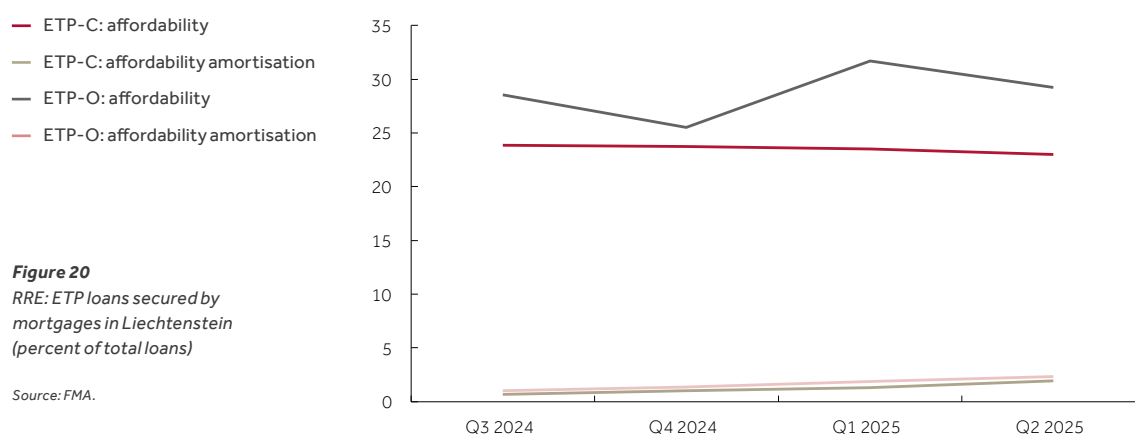
the average weighted LSTI ratio for new owner-occupied loans has fallen from a peak of 20 % at end-2023 to around 15 – 17 % in 2025. The share of loans in higher-risk categories, those with LSTI ratios above 30 % or even 50 %, has also fallen to around 10 %, improving overall loan affordability. These developments mainly reflect stronger household debt-servicing capacity resulting from lower interest rates.



The fixation period for new loans has increased in recent quarters.

When interest rates began to rise in the Swiss franc currency area in 2022, borrowers initially favoured variable or short-term fixed rates, which were significantly lower than long-term fixed rates given the steep yield curve and expectations of further hikes. As a result, the share of variable-rate loans at origination rose to around 75 % in Q2 2023 (Figure 19). Since late 2023, however, this trend has reversed. With the yield curve inverting and markets anticipating rate cuts, longer fixation periods have become more attractive, offering more favourable

conditions than variable loans. By mid-2025, the share of residential real estate loans with variable or short-term fixation periods has fallen to 53 %, although heterogeneity remains across banks and recent quarters. In addition, data show that loans with an LSTI ratio above 30 % have shifted toward longer fixation periods in recent quarters, suggesting that borrowers with lower debt-servicing capacity are opting to limit their exposure to interest rate risk. Given that the bulk of outstanding mortgages remain on fixed rates, the pass-through of higher policy rates to borrowers has been limited, reflecting the prevalence of long fixation periods.

**Exception-to-policy (ETP) loans in the residential real estate (RRE) sector have remained broadly stable.**

Supervisory data from FINREPL, covering RRE loans subject to the revised borrowing-based measures introduced in 2023 / 2024 by the FMA⁹ Communication, show a slow but steady reduction in ETP loans due to affordability within the stock of mortgages secured by immovable property in Liechtenstein (Figure 20). ETPs related to the loan-to-value (LTV) criteria have consistently remained low throughout the period, accounting for less than 1 % of the total loan volume. In particular, ETPs related to amortisation in cases of non-sustainable affordability

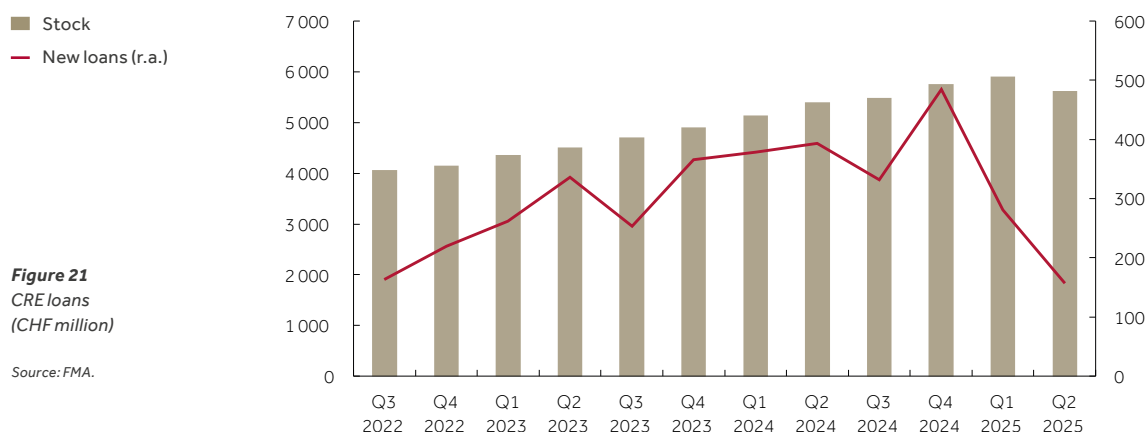
(i.e. where affordability exceeds 37 %), remain low at less than 2 %. This is in line with the principle and expectation set out in the FMA Communication that such exceptions should only be granted in exceptional cases. The low share of such cases supports a gradual reduction of risks over time, consistent with the objective of strengthening long-term financial resilience, while still ensuring access to the mortgage market for borrowers with lower incomes. Moreover, amortisation is an important risk-mitigating factor, as it reduces outstanding debt and thereby enhances borrowers' capacity to withstand sudden interest rate increases or other financial shocks.

9 FMA Communication 2023 / 1 – Addressing risks in the residential real estate sector and mortgage market, <https://www.fma-li.li/fma-li/documents/rechtsgrundlagen/mitteilungen/fma-mitteilung-2023-1.pdf> (available only in German).

Financial stability risks from rising interest rates are mitigated by several factors unique to Liechtenstein's real estate and household sector.

The domestic labour market has shown high resilience, with virtually no correlation between GDP growth and unemployment, providing households with strong job security, stable incomes, and greater planning certainty. Conservative lending standards – particularly low loan-to-value (LTV) ratios at origination –

combined with high asset quality, reflected in low non-performing loan (NPL) ratios, contribute to containing systemic risk. Moreover, the comparatively moderate rise in interest rates in recent years – reflecting lower inflation than in many other (European) countries – together with the high share of fixed-rate mortgages in domestic banks' portfolios, further dampen the immediate impact of rising rates on households and banks.



Recent data indicate that lending standards and asset quality in the commercial real estate (CRE) sector have remained broadly stable, suggesting limited risk to domestic financial stability.

Based on the ESRB definition of CRE loans, the total outstanding volume increased by 4 % over the past year (Figure 21). LTV ratios have remained steady, with a slight decline observed in recent quarters, reflecting continued prudent lending standards. As of mid-2025, the average LTV ratio stands at 60 % for the overall CRE loan portfolio, underscoring conservative lending behaviour. Debt-service-coverage-ratios (DSCR) have also continued to demonstrate resilience, with the average DSCR in the outstanding CRE loan portfolio rising to approximately 260 % in June 2025, up from

180 % in Q2 2024. This upward trend reflects a strong capacity among borrowers to meet their debt obligations and has remained stable even during periods of rising interest rates. Asset quality indicators further support the assessment of stability in the CRE sector. Non-performing loans (NPLs) in the CRE segment stood at 0.9 % in Q2 2025, while provisioning levels remained stable at 0.2 % of outstanding CRE loans. These indicators suggest that credit risk in the sector is well-contained. Overall, the combination of conservative lending standards, strong debt-servicing capacity, and low levels of distress in the CRE loan portfolio indicates that the sector does not currently pose elevated systemic risks.

RECENT DEVELOPMENTS AND SYSTEMIC RISKS IN THE FINANCIAL SECTOR

CROSS-SECTORAL DEVELOPMENTS AND SYSTEMIC RISKS

Macro-financial risks

Although the recent decline in interest rates has contributed to a reduction in vulnerabilities within the real estate sector, the broader macro-financial risk environment has become increasingly fragile. Global uncertainty remains elevated, driven by a combination of persistent geopolitical tensions, rising protectionism, and the erosion of multilateral cooperation. Market concerns have shifted from immediate tail risks, such as abrupt trade shocks (see the associated trade policy uncertainty in Figure 22), toward the more structural and long-term implications of sustained tariff regimes and geopolitical fragmentation. The

economic and financial consequences of these developments are difficult to quantify but are likely to weigh on investment sentiment, disrupt global supply chains, and dampen cross-border capital flows.

For Liechtenstein's economy, the implications are particularly significant. The recent increase in US tariffs marks a paradigm shift in global trade, potentially ending the long-standing trend of tariff reduction. US tariff levels are now the highest since before World War II (Figure 23), and the multilateral trade framework under the World Trade Organization (WTO) is under growing pressure. Liechtenstein's large industrial sector relies heavily on global market access, and its business cycle has historically mirrored global trends. Although the imposed 15 % bilateral tariff is lower than the levels announced in early April, it still adds significant pressure to the industrial

Figure 22
Global trade policy
uncertainty
(index)

Source: Data based on Caldara
et al., 2019.

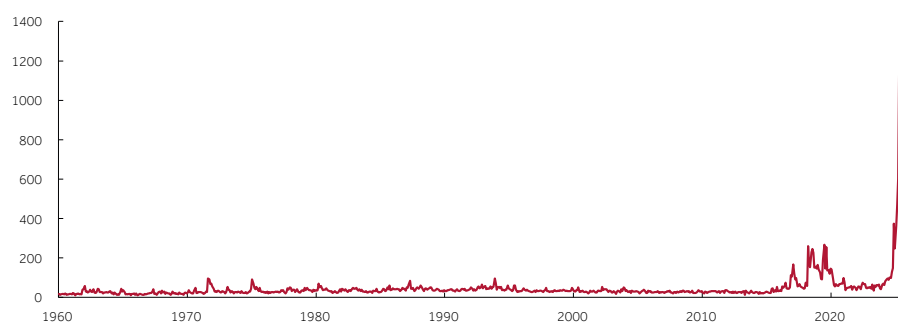
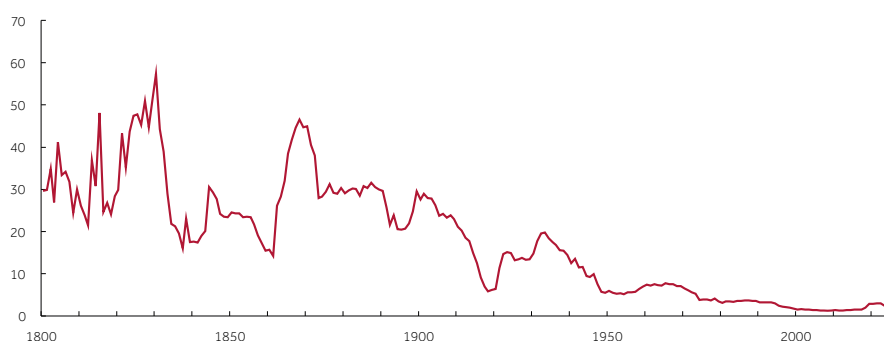


Figure 23
Average tariffs
on US imports
(percent)

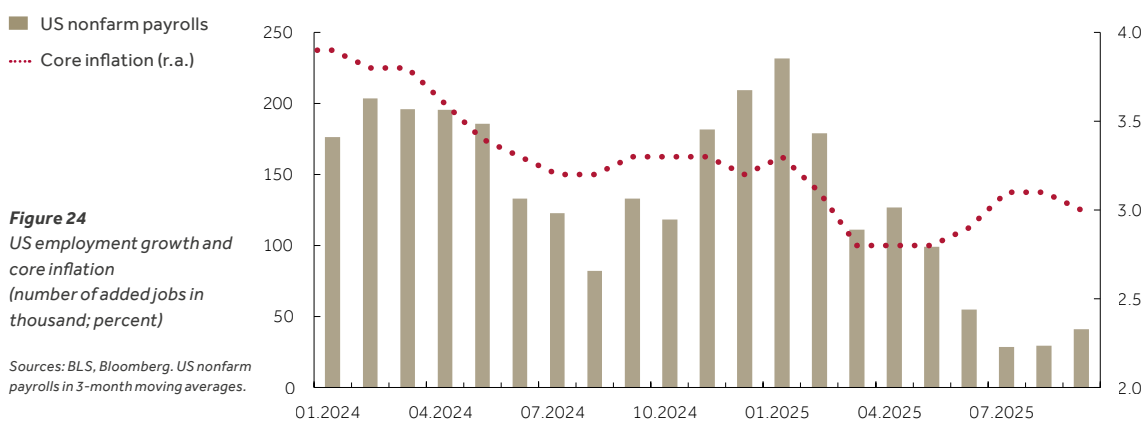
Source: The Budget Lab at Yale.



sector. Additional tariffs across various sectors may further affect the economy and trading partners – especially Switzerland – further dampening external demand. Moreover, persistent uncertainty around global trade policy may discourage long-term investment and complicate strategic planning for firms in Liechtenstein's open, export-oriented economy.

While the global economy has weathered recent policy shocks relatively well, downside risks remain significant. In particular, sluggish job growth alongside rising core inflation suggests that the Federal Reserve faces increasing challenges in meeting its dual mandate. The combination of a weakening labour market and mounting price pressures (Figure 24) highlights growing stagflation risks in the United States – developments that could have far-reaching implications for the global economy.

Global stock markets have reached new highs, driven by investor enthusiasm for artificial intelligence and expectations of monetary easing, despite mounting risks. Credit spreads are exceptionally tight, valuations are stretched, and market performance is narrowly concentrated in large US tech and AI-related firms. This optimism contrasts with fragile economic fundamentals, persistent geopolitical tensions, and signs of a global slowdown. Concerns are growing over possible doubts regarding the Federal Reserve's independence and the reliability of US economic data, which further complicate the policy outlook. The subdued volatility and compressed spreads suggest a degree of complacency, leaving markets vulnerable to sharp and correlated corrections. Structural fragilities in the non-bank financial sector – such as liquidity mismatches and leverage – could amplify stress if sentiment shifts abruptly.



Furthermore, a challenging fiscal outlook in several countries is raising concerns about investor confidence and the potential for stress in sovereign bond markets. In the United States, doubts over fiscal credibility and growing institutional frictions could weaken international demand for the dollar and US Treasuries. While investors have increasingly hedged their USD exposure, they have not yet significantly reduced their holdings, though a steepening

yield curve and shifting sentiment suggest rising caution. Concerns about sovereign debt sustainability have also emerged in Europe, particularly in France, where long-term yields have increased significantly in recent weeks. Additional pressures stem from increased public spending needs – particularly for defence, aging populations, and climate-related investments – which may strain fiscal sustainability and heighten market sensitivity to policy missteps.

In Liechtenstein, risks in the real estate market have decreased on the back of decreasing interest rates and a high effectiveness of the revised borrower-based measures. Domestic private household debt has followed a declining trend over recent years, both due to upward revisions to GDP and moderate mortgage growth, and the revised borrower-based measures have been consistently applied throughout the banking sector. While the share of exceptions-to-policy (ETP) loans related to affordability remains relatively high, these loans are typically (partially) amortised, which helps reduce associated risks over time. Against this background, while the FMA continues to monitor possible vulnerabilities in the real estate sector, it has to be emphasised that risks have decreased over recent years.

Reputational risks

Failures in financial integrity (FI), particularly in the areas of anti-money laundering (AML), combating the financing of terrorism (CFT), and sanctions compliance, pose structural risks to the effective functioning of financial markets. As financial systems become increasingly interconnected, the potential for risks to spread across institutions and jurisdictions heightens the importance of strong governance in managing FI-related threats.

While reputational risks have somewhat declined thanks to Liechtenstein's strong political and regulatory commitment to financial integrity, reflected in favourable international peer reviews, strict adherence to global standards remains essential. Liechtenstein has long attached the highest priority to combating money laundering and terrorist financing. As a member of the EEA, Liechtenstein fully aligns with EU financial regulations and operates under the same legal framework as EU

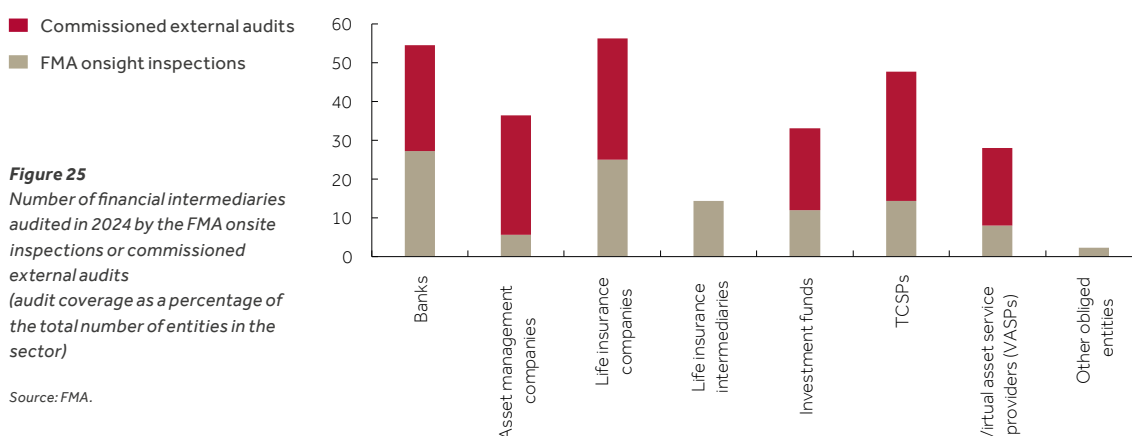
countries. Recent assessments underscore this commitment. In June 2022, MONEYVAL commended Liechtenstein's efforts on AML / CFT. Based on the positive findings, Liechtenstein is subject to MONEYVAL's regular follow-up process (rather than the enhanced follow-up), making it one of only a few countries to achieve this outcome. MONEYVAL also highlighted the progress made by Liechtenstein in recent years and encouraged the country to further strengthen its efforts to combat money laundering and terrorist financing. In addition, the OECD Global Forum awarded top ratings for tax transparency in November 2022. These endorsements affirm both the effectiveness of the country's supervisory regime and its importance for maintaining financial centre stability.

In past years, the FMA also further enhanced its supervisory activities, in particular to ensure a larger onsite inspection coverage in its inspection cycle. One of the priority actions recommended in the MONEYVAL report was the enhancement of supervisory activities in relation to higher risk entities in the trust or company service providers (TCSP) sector. Although the focus generally remained on TCSPs with high-risk profiles, the FMA also increasingly carried out onsite inspections at obliged entities with lower risk profiles. The FMA doubled its own onsite inspections coverage of TCSPs from 6 % in 2020 to approximately 14 % of the total market in 2024. These inspections focused on the main risks and vulnerabilities identified in the Liechtenstein's "National Risk Assessment"¹⁰ (NRA) as well as compliance with targeted financial sanctions. In addition, the FMA has also significantly increased the number of commissioned external audits, amounting to a total coverage of 48 % of TCSPs by either the FMA onsite inspections or commissioned external audits (Figure 25). In total, 134 financial institutions and intermediaries were

10 <https://www.regierung.li/files/attachments/nationale-risikoanalyse-iii.pdf> (available only in German)

inspected on-site by the FMA itself in 2024. As in previous years, the FMA has summarised the key findings from the 2024 inspections for the banking, life insurance, asset management, fund, and fiduciary sectors, and illustrated them using examples of observed “good and bad practices” in the feedback letters available on the FMA’s webpage.

These feedback letters primarily contain supervisory observations regarding organisational and operational requirements, risk-based monitoring, processes related to suspicious activity reports and verification measures, as well as reporting obligations in connection with restrictive measures (sanctions).



Domestic authorities have reinforced their supervisory expectations regarding financial intermediaries’ risk management practices in relation to foreign sanctions, adopting a more stringent and proactive stance. Recent developments have highlighted potential reputational and operational risks within the fiduciary sector, including the inclusion of four Liechtenstein fiduciary firms and related individuals and entities on the OFAC sanctions list following allegations of violating US sanctions. Against this background, the FMA published a communication¹¹ in 2024 formalising its existing interpretation and expectations regarding the management of risks related to foreign sanctions. The FMA communication highlights that foreign sanctions, particularly OFAC sanctions, although not directly applicable, must be considered in the context of the financial institutions’ risk management. Failing to comply with them can result in severe reputational, operational, and legal

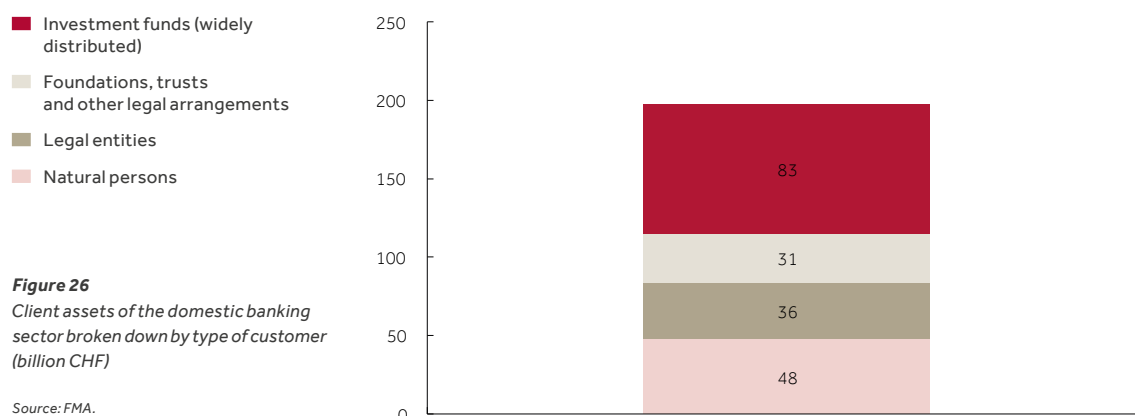
risks for supervised entities and their business partners, which may also pose a risk to the entire Liechtenstein financial market and the country as a whole. Thus, the FMA emphasises that in cases related to foreign, in particular US, sanctions the immediate termination of business relationships is the only effective way to mitigate risk. The potential risk of being designated by OFAC already exists if a financial institution or intermediary or its client is active in certain sectors in Russia, regardless of whether the customer is a sanctioned person. These sectors are determined by the US Treasury (“determined sectors”) and are broadly defined. They include sectors such as financial services, accounting services, fiduciary services, management consulting services, architecture, engineering and construction, manufacturing, transportation, etc., among others. The Liechtenstein Institute of Professional Trustees and Fiduciaries has also set out its clear commitment to a zero-tolerance

11 FMA communication 2024 / 2: fma-m-2024-2-sanktionen-und-risikomanagement.pdf

policy in its own "Guideline on Dealing with Foreign Sanctions", which provides further guidance for practitioners on the scope of the above-mentioned "determined sectors".

As a result of the zero-tolerance approach of the FMA and domestic authorities, an extensive de-risking in the domestic fiduciary sector has been observed. In light of the authorities' approach and due to the broad scope of application of the "determined sectors", many fiduciaries in Liechtenstein have terminated their business relationships with Russian customers, even if many of those clients were not individually sanctioned by OFAC. As a result of the termination of business relationships, several legal entities have no longer directors or trustees and became "orphaned". They are legally existing but functionally frozen – with nobody in charge to manage assets or oversee liquidation. The

majority of these orphaned entities are assets of non-sanctioned individuals, who often have only a remote link to Russia. This zero-tolerance approach has led to resignations of fiduciaries. As of 21 October 2025, the steering group reported 218 entities with a Russia-connection. Of these, 71 entities are considered orphaned, i.e. legally recognised but functionally frozen, as the fiduciary or board directors have stopped managing the assets or overseeing liquidation. Data in this dynamic situation are subject to change. Given the associated risks involved, finding replacement of these orphaned legal entities within the country is difficult. To develop options to resolve the pending status of these orphaned entities, a dedicated steering group has been appointed by the Government. The group has been tasked to monitor and resolve the situation in ways that are sound from a legal and reputational risk point of view and ensure that assets of sanctioned persons and entities remain frozen.



Assets attributable to collective investment funds, for which Liechtenstein banks act as custodian banks, represent by far the largest share of client assets in the banking sector. Assets held for foundations, trusts and similar legal arrangements are primarily attributable to the fiduciary sector (this segment also include bankable assets of companies held by foundations or trusts). This segment accounts for about 15 % of the client assets (Figure 26). The

segment "legal entities" comprises both commercially active companies (such as industrial or commercial businesses) and personal asset holding vehicles (including "private investment funds"). The "natural persons" segment comprises both assets attributable to retail customers as well as those attributable to private banking customers and correspond to around 25 % of client assets of the banking sector.

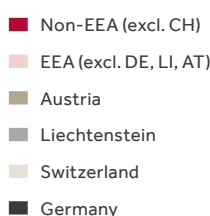


Figure 27
Client assets of the domestic
banking sector broken down by type
of customer and residency
(billion CHF)

Source: FMA.

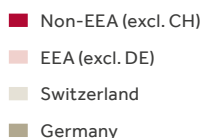
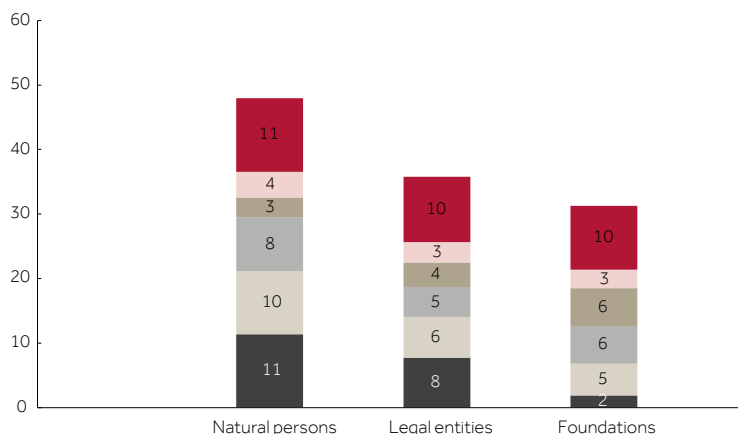
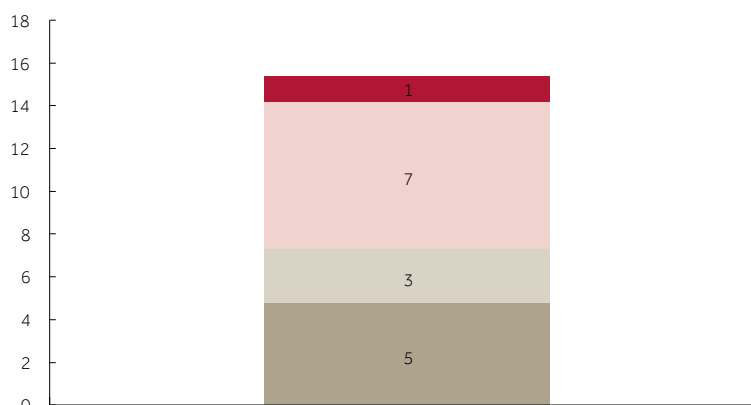


Figure 28
Client assets of the domestic
insurance sector broken down by
residency of the premium payers
(billion CHF)

Source: FMA.



An assessment of the residence of clients holding assets in the domestic banking and insurance sector indicates that the majority of business relationships involves clients of German-speaking and neighbouring countries. An assessment of client assets in the banking sector indicates that a large share originates from clients residing in Germany, Switzerland, Liechtenstein¹², Austria and other EEA countries, regardless of whether the business relationship is with natural persons, legal entities, or

foundations. Due to their political, legal and economic stability, relatively low crime rates and high AML standards, these jurisdictions are considered to have a comparatively low geographical risk, which is a positive factor from a reputational risk perspective (Figure 27). As regards clients' assets of the insurance sector, a similar pattern emerges (Figure 28). Premium payers are almost exclusively resident in EEA countries or Switzerland, with the share originating from outside the EEA below 10 %.

¹² The relatively high portion of Liechtenstein clients is partly due to the fact that the legal entities segment includes the bankable assets of large Liechtenstein industrial companies and the premium reserve accounts of Liechtenstein insurance companies. The "foundations and trusts segment" comprises the assets of private and charitable foundations established by Liechtenstein families.

Existing data gaps challenging an effective monitoring of interconnectedness across the financial sector will be closed in the course of the implementation of the EU AML package. To identify additional needs for assessing systemic risks within the financial system, the FMA will undertake a comprehensive review of the current reporting framework, aligning it with forthcoming data requirements under the EU AML Package and the AMLA Regulatory Technical Standards (RTS). These standards, which will be published in the coming quarters, specify the data points to be collected for the purpose of risk-rating obliged entities. Remaining data gaps will be closed as part of this review, strengthening the FMA's ability to safeguard financial market stability.

The adoption of the EU's AML Single Rulebook and the establishment of the anti-money laundering authority (AMLA) in summer 2024 represent a key development in the EEA's AML framework. The AML package is designed to achieve greater regulatory harmonisation through the Single Rulebook and the newly established EU Anti-Money Laundering Authority (AMLA), strengthen supervisory convergence via AMLA's direct and indirect oversight and the enhancement of cooperation between Financial Intelligence Units (FIUs), including the conduct of joint analyses across the EEA. In addition, the new EU AML Package will entail a harmonised risk data reporting framework for EEA financial institutions and other obliged sectors (e.g. TCSPs, accountants, real estate agents, etc.). This ultimately allows for a harmonised risk categorisation of all financial institutions and intermediaries in Europe. Liechtenstein is already actively taking part in the AMLA and committed to the full and timely transposition of the package. Preparatory work on the

incorporation of the AML Package into the EEA Agreement and subsequent implementation into national law is already underway. Application of the Single Rulebook is expected in the second half of 2027, largely in sync with the EU's timeline, contingent on formal approval by the competent governmental and parliamentary bodies.

Systemic cyber risks

The regulatory landscape for cybersecurity in Europe has been significantly strengthened by the Digital Operational Resilience Act (DORA), which came into force in Liechtenstein on 1 February 2025. DORA represents a major advancement in the management of information and communication technology (ICT) risks across the financial sector by introducing harmonised requirements for ICT risk management, incident reporting, testing, and ICT third-party risk management, substantially raising the regulatory standards. Compared to the previously applicable FMA ICT Guidelines¹³, the new framework has been expanded both in scope, now for example encompassing crypto-asset service providers under MiCAR as well, and in detail. Under DORA, financial intermediaries are required to undertake extensive implementation efforts, for instance in relation to contractual realignments with ICT third-party service providers and the fulfilment of enhanced technical and operational requirements. On the supervisory side, the FMA assumes new responsibilities, including active participation in the joint examination teams (JETs) regarding the European oversight of critical ICT third-party providers and support for threat-led penetration tests (TLPTs).

13 FMA-Richtlinie 2021 / 3 – Richtlinie IKT-Sicherheit (only available in German)

Financial institutions in Liechtenstein are affected to varying degrees by the new regulation, depending on their size and overall risk profile, complexity of operations, and existing ICT infrastructure. The introduction of DORA has firmly embedded ICT risks within the core of financial institutions' risk management frameworks. Institutions are now required to establish comprehensive ICT governance structures, conduct regular risk assessments, and maintain detailed inventories of third-party service relationships. New reporting requirements have also come into effect, most notably the periodic submission of the register of information, the prompt notification of major ICT-related incidents and the voluntary notification of significant cyber threats. While the initial submission of the register of information by 31 March 2025 focused on completeness, the FMA will place greater emphasis on improving data quality going forward. To support implementation, the FMA held targeted workshops with industry bodies and key ICT providers, helping to clarify expectations and build awareness around third-party risk management.

Cyber risks in the domestic financial sector are increasing due to the growing degree of digitalisation and interconnectedness, leading to an increasing number of ICT-related incidents, in particular, of Distributed Denial of Service (DDoS) attacks. Although the number of major ICT-related incidents increased sharply in 2025, this rise may largely reflect the new classification criteria and expanded reporting obligations introduced under DORA, which extend beyond cyberattack reporting, and are less influenced by structural or geopolitical factors. Around half were cyberattacks primarily affecting the banking sector. The other half were non-malicious, often linked to third-party service disruptions. This underscores the rising importance of third-party risk management

and robust continuity planning. However, the actual number of incidents is likely higher, as unreported cases might stem from gaps in detection and proper classification, as well as limited familiarity with the new reporting thresholds. Overall, cyberattacks are growing in complexity, reflecting both the increasing sophistication of threat actors and the deployment of AI-driven methods. DDoS attacks remain the most frequently observed attack vector also in Liechtenstein.

Climate-related risks

Climate-related risks have the potential to threaten financial stability through two main channels: physical risks and transition risks. Physical risks arise from the increasing frequency and severity of extreme weather events, such as floods, storms, and wildfires, which can damage physical assets, disrupt economic activity, and lead to financial losses for investors, insurers, and other market participants. Transition risks stem from the structural changes associated with the shift to a low-carbon economy. These include policy measures, technological developments, and evolving market preferences that may adversely affect the valuation of carbon-intensive assets, particularly in sectors such as fossil fuels and heavy industry. Importantly, these two types of risks are interconnected. Ambitious climate mitigation policies may intensify transition risks in the short term by accelerating the reallocation of capital and the repricing of assets. However, such measures can contribute to a reduction in physical risks over the longer term by limiting the extent of future climate-related damage. Understanding and managing the interplay between physical and transition risks is therefore essential for safeguarding financial stability in the face of climate change.

Assessing the impact of climate-related risks on financial institutions remains complex, as highlighted in previous Financial Stability Reports. This involves identifying climate-exposed assets, estimating potential losses, and understanding sector-specific vulnerabilities. Transition risks are influenced by regulatory developments, carbon pricing, technological change, and investor preferences, while the interplay between physical and transition risks, along with cross-sectoral linkages, further complicates assessments. In Liechtenstein, limited data and inconsistent methodologies hinder accurate evaluation of these risks. On the international level, efforts have been made to improve climate risk assessment frameworks. The EU has introduced a taxonomy for sustainable activities, and institutions such as the ESRB and ECB are developing macro-prudential tools and conducting climate stress tests. Global bodies like the NGFS, IMF, and BCBS are also advancing supervisory practices.

The FMA adopts a risk-based and proportional supervisory approach concerning sustainable finance. In July 2024, it published its supervisory approach to sustainable finance, emphasizing the financial sector's role in supporting the transition to a sustainable economy. Key priorities include enhancing transparency, preventing greenwashing, and integrating ESG risks into financial institutions' strategies. The FMA applies a risk-based and proportional supervisory approach, supported by internal inspections and external audits. The evolving data landscape, shaped by the Corporate Sustainability Reporting Directive (CSRD) and European Sustainability Reporting Standards (ESRS), is expected to improve ESG strategy implementation. The FMA has also been developing sustainability audit guidelines for implementation from 2025 and maintains ongoing dialogue with stakeholders to ensure effective regulation and financial stability.

BOX 4

AI-risks impacting financial stability*by Martin Meier*

The rapid development of artificial intelligence (AI) is likely to reshape the financial sector through two main channels: internal adoption by financial institutions and growing use by clients. Financial institutions are increasingly deploying AI across a range of activities, including credit scoring, asset management, customer interaction, and fraud detection, with the aim of improving efficiency and predictive accuracy (Aldasaro, 2024a). At the same time, clients – both institutional and retail – are making use of AI-powered tools for trading, financial advice, and decision-making. In parallel, the financial sector is also playing an important role in financing AI-related innovation, particularly in capital- and data-intensive segments of the technology sector (Kerbl, 2025). More broadly, AI may also affect financial stability indirectly, as potential structural shifts in the real economy feed through to credit and liquidity risks on financial institutions' balance sheets (FSB, 2024). Given its dual role as both user and enabler of AI, the sector's exposure to these developments merits close monitoring.

Despite broad agreement on AI's transformative potential, current approaches to assessing related financial stability risks remain limited. No standard has yet emerged on how to categorise such risks, and many of the available assessments group AI-related risks without a consistent framework. Most studies concentrate on AI adoption within the financial sector itself, while indirect effects – such as structural shifts in non-financial industries – receive less attention. Where these are considered, the discussion tends to remain focused on cyber risk and misinformation (Kerbl, 2025). An exception is the Bank of International Settlements (BIS), which links AI-induced productivity shocks to output and inflation (Aldasaro, 2024b). Overall, the literature suggests that while AI can

support supervisory frameworks, the existing frameworks may need revisioning when failures become apparent (FSB, 2024).

Among the more specific risk types, model opacity, herding, cyber risk, and supplier concentration feature most prominently. Model opacity refers to the limited explainability of AI-based outputs, which can undermine governance and complicate supervisory review (Kerbel, 2025). Herding arises if institutions rely on similar models or data sources, potentially increasing correlated exposures and amplifying market swings (Leitner et al, 2024). Cyber risks are heightened by AI-enabled attacks on financial infrastructure and by the use of deepfakes or targeted social engineering in fraud schemes. Supplier concentration adds an additional layer of vulnerability, as dependence on a small number of foundational model providers or infrastructure firms could raise operational, legal, and pricing risks (FSB, 2024).

These AI-related risks can be structured along two dimensions: whether the application originates within the financial system or outside of it, and the nature of the resulting impact. For internal use cases, risks may be idiosyncratic – such as model opacity – or systemic, for instance through widespread reliance on similar models leading to market concentration. External use cases, by contrast, can give rise to direct risks such as increased competition or targeted cyberattacks, as well as indirect risks, including broader macroeconomic effects from AI-induced productivity shocks. Over time, more disruptive effects could emerge if adoption causes productivity shocks (Kerbl, 2025).

In 2023, the FMA conducted a survey to assess the use of AI across key segments of the Liechtenstein financial sector. The results suggest that AI adoption is still in its early stages. A small number of institutions – primarily larger banks and insurers – reported

AI tools in use or under development, but overall use remains limited. Most applications are focused on process optimisation (e.g. customer interaction, data analysis) as well as in compliance and conduct, with a clear preference for external providers over in-house development. Governance frameworks – including minimum standards, risk assessments, data protection etc. – are only partially established. Key risks identified by respondents with respect to the use of AI tools include decision errors, lack of explainability, data quality issues, loss of control, and reputational damage linked to flawed AI deployment.

The EU Artificial Intelligence Act, which will apply in Liechtenstein once it has been incorporated into the EEA Agreement, establishes a technology-neutral framework for the regulation of AI systems across sectors, including financial services. The Act defines AI systems based on seven functional characteristics: they must be machine-based, exhibit a degree of autonomy, optionally adapt through learning, pursue defined goals, generate outputs through inference, influence physical or virtual environments, and do so in a way that goes beyond static rule-based programming. This broad definition captures a wide range of technologies, from neural networks to expert systems, and aims to serve as the basis for risk classification. The Act prohibits certain high-risk practices – including manipulative systems, biometric categorisation of sensitive traits, and real-time facial recognition in public spaces – where these are deemed incompatible with fundamental rights. For financial institutions, several AI applications fall under the high-risk category. These include credit scoring and creditworthiness assessments used in lending decisions, as well as pricing and underwriting tools in life and health insurance. Such systems will be subject to specific requirements regarding data quality, technical documentation, human oversight, transparency, and post-market monitoring. Other use cases

common in the financial sector – such as fraud detection – are not classified as high-risk but remain subject to general transparency and accountability provisions. Importantly, the AI Act allows institutions to build on existing governance frameworks under financial sector regulation, provided they are adapted to address AI-specific risks such as model drift, traceability, and output monitoring. Supervision of AI systems in the financial sector will fall under the remit of national competent authorities and the European Supervisory Authorities (ESAs), and the Act's extraterritorial scope means non-EEA providers serving Liechtenstein institutions must also comply with its provisions.

References

- Aldasoro, I., Gambacorta, L., Korinek, A., Shreeti, V., & Stein, M. (2024a). *Intelligent financial system: How AI is transforming finance* (BIS Working Papers No. 1194). Bank for International Settlements. <https://www.bis.org/publ/work1194.htm>
- Aldasoro, I., Doerr, S., Gambacorta, L., & Rees, D. (2024b). *The impact of artificial intelligence on output and inflation* (BIS Working Paper No. 1179). Bank for International Settlements. <https://www.bis.org/publ/work1179.pdf>
- Financial Stability Board (FSB) (2024). *Artificial Intelligence in Finance: Financial Stability Implications*. Basel: FSB. <https://www.fsb.org/uploads/P14112024.pdf>.
- Kerbl, S. (2025, forthcoming). *Good AI, bad for banks? Oesterreichische Nationalbank*.
- Leitner, G., Singh, J., van der Kraaij, A., & Zsámboki, B. (2024). *The rise of artificial intelligence: Benefits and risks for financial stability*. European Central Bank. https://www.ecb.europa.eu/press/financial-stability-publications/fsr/special/html/ecb.fsrart202405_02-58c3ce5246.en.html.

BOX 4

BANKING SECTOR

Liechtenstein's banking sector remains well capitalised, though the CET1 capital ratio has been on a gradual downward trajectory in recent years.

The ratio declined from 20.4 % in Q4 2023 to 19.0 % in Q4 2024, before increasing to 19.4 % in Q2 2025¹⁴ (Figure 29). In contrast to Liechtenstein, EEA banks¹⁵ have recently strengthened their capital ratios. Figure 29 compares the weighted average CET1 ratio of the Liechtenstein banking sector with the EEA median and interquartile range over time. Whereas Liechtenstein consistently ranked at or above the 75th percentile for many years, it has moved closer to the median in recent quarters. The use of the standardised approach (SA) for calculating credit risk suggests that the sector's capitalisation may be understated relative to banks using the internal ratings-based (IRB) approach¹⁶. Nevertheless, the leverage ratio – which is independent of risk weights – points to a similar conclusion. Liechtenstein's banks are now only slightly above the EEA median (7.0 %), with a ratio of 7.3 % in Q4 2024. Furthermore, when comparing capitalisation relative to bank size, Liechtenstein is broadly in line with systemically important EEA banks of similar size. When measured against domestic GDP, however, the domestic banking sector is considerably larger than in any other EEA country. This structural characteristic implies that, despite robust capital

levels, the banking sector carries greater macro-financial risks in Liechtenstein than elsewhere, reinforcing the case for maintaining a high capitalisation.

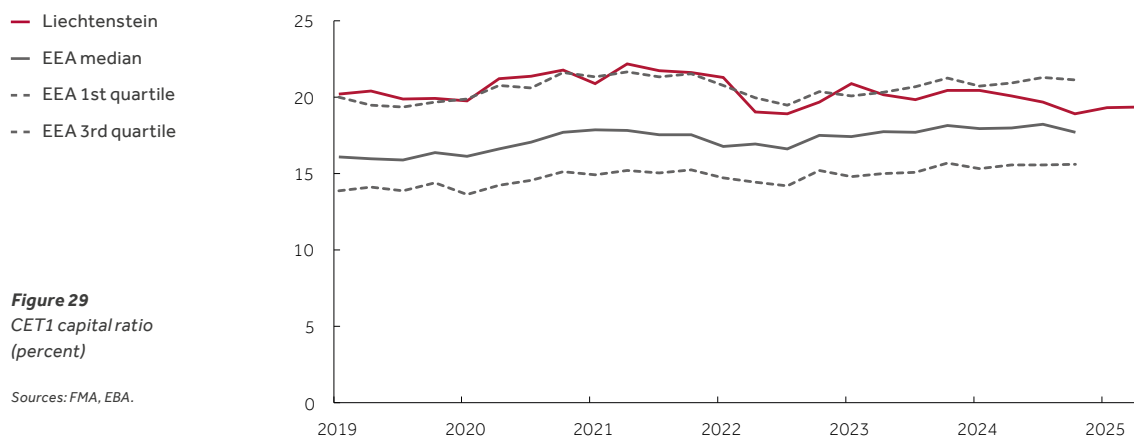
Banks in Liechtenstein are largely independent of wholesale funding. The weighted average loan-to-deposit ratio of the three O-SIs stood at 76 % in Q2 2025, underscoring that deposits constitute the main source of funding. This is also reflected in the net stable funding ratio (NSFR) of 158 %, which is markedly above the EEA average of 127 %. In addition, the liquidity coverage ratio (LCR) amounts to 173 % in June 2025, a relatively high and stable level. Taken together, these indicators highlight the deposit-based funding structure of domestic banks, their limited reliance on wholesale markets and strong liquidity profile. At the same time, this robust liquidity position is highly dependent on sticky deposits, which ultimately rests on confidence in the soundness of the banking sector. Preliminary results of the newly conducted liquidity stress test similarly emphasise the importance of deposit stickiness, as a large share of deposits is theoretically withdrawable overnight or within a few days. Against this backdrop and also considering recent empirical evidence on the changing nature of bank runs¹⁷, maintaining strong capitalisation complements liquidity risk management by underpinning confidence and thereby safeguarding funding resilience.

¹⁴ Data are always reported on a weighted consolidated basis, unless otherwise indicated.

¹⁵ EEA banks in this chapter refer to the EBA list of large institutions, encompassing systemically important banks of each EEA country.

¹⁶ For an in-depth analysis between the two approaches please refer to Box 4, in the 2019 FSR.

¹⁷ See Box 5 in the Financial Stability Report 2023.



Profitability indicators of Liechtenstein banks continue to lag behind their euro area peers.

The cost-income ratio (CIR) has shown a slight improvement compared to last year. On a consolidated basis, the CIR stood at 76.2 % in Q2 2025, down from 78.1 % in the previous year. The indicator remains structurally high, reflecting the private banking and wealth management focus of domestic institutions¹⁸. The improvement was primarily driven by income growing at a higher pace (+ 8.8 %) than expenses (+ 6.1 %). This development is also mirrored in earnings before taxes (EBT), which increased year-on-year from CHF 383.7 million in Q2 2024 to CHF 463.0 million (+ 20.6 %) in Q2 2025. Supported by the improved CIR, return on equity (RoE) rose from 6.2 % in Q2 2024 to 8.0 % in Q2 2025. Similarly, return on assets (RoA) increased from 0.61 % in the first half of 2024 to 0.75 % in the first half of 2025. This positive performance is also captured in the sustained growth in assets under management (AuM), which grew by 1.6 % to CHF 500.1 billion from 2024 Q2 to 2025 Q2, with an increase in net new money of CHF 24 billion. While net new money inflows were particularly strong in the first

half of the year, total AuM declined slightly. The decline stems from valuation effects including from exchange rate developments, as the depreciation of the US dollar against the Swiss franc reduced the reported value of dollar-denominated assets.

The overall effect of the newly introduced CRR III remains to be seen.

In April 2025, CRR III – the revised EU Capital Requirements Regulation implementing the final Basel III standards with stricter, risk-sensitive capital rules – took effect in Liechtenstein. While, in general, higher risk weights are expected to decrease the CET1 capital ratio – all else equal – the impact has thus far been modest. The CET1 capital ratio even increased slightly in Q2 2025, which also reflects balance-sheet adjustments in anticipation of the CRR III. Moreover, we observe sizeable shifts across exposure classes due to CRR III-related reclassifications, which complicate quarter-on-quarter comparisons. These changes will be monitored and assessed as further data become available. To date, as the CRR III entered into force on 1 April 2025 in Liechtenstein, only one post-implementation quarter can be evaluated.

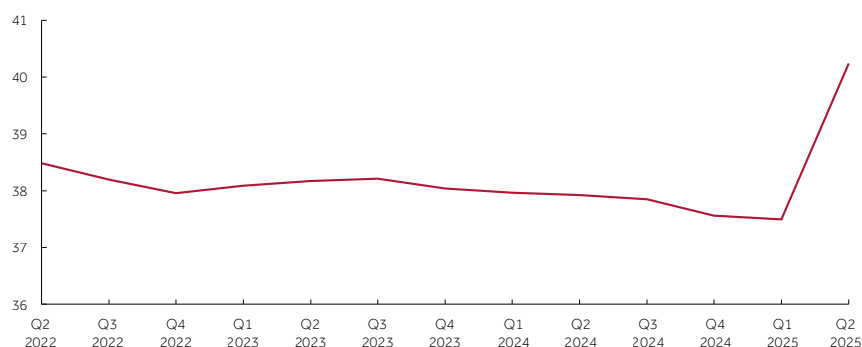
¹⁸ For a more detailed analysis of the profitability of the Liechtenstein banking sector, please refer to page 48 and following of the Financial Stability Report 2024.

As expected, average risk weights on credit secured by mortgages on immovable property and on acquisition, development and construction (ADC) exposures increased markedly with the introduction of CRR III. While a full assessment of the impact on the CRR III will follow once additional data is available, the near-term effect on risk-weighted assets for immovable-property exposures has already materialised as expected. Figure 30 illustrates the average risk weights over the last three years, highlighting the step-up from 37.2 % to 40.2 % in Q2

2025. This increase is mainly driven by higher risk weights for income-producing real estate (IPRE), ADC and commercial real estate. By contrast, the move towards greater risk sensitivity reduces average risk weights for owner-occupied residential mortgages, reflecting the comparatively low loan-to-value ratios in this segment. Anticipating the regulatory increase in average risk weights for mortgages on immovable property, the Financial Stability Council already decided last year to let the stricter national requirements expire¹⁹.

Figure 30
Average risk weights on credit secured by mortgages on immovable property and ADC exposures (percent)

Source: FMA.



With heightened uncertainty surrounding the global socioeconomic and policy outlook, it is essential that banks maintain resilience and remain capable of absorbing shocks. In the short term, periods of elevated policy uncertainty typically benefit Liechtenstein's banks, as clients increase their trading activity. This is reflected in fee and commission income, which increased by 9.5 % for the three O-SII banks in the

first half of 2025 compared to the same period in 2024. Over the medium to longer term, however, risks remain elevated. A cooling of the global economy, possibly combined with persistent inflation, can trigger sharp market adjustments, affecting valuations and balance sheets. At the same time, the ongoing trade tensions may weigh on firms and households, raising credit risks and amplifying vulnerabilities in the financial system.

¹⁹ For further details on the CRR III and the expired national requirements, see the chapter on "policy developments".

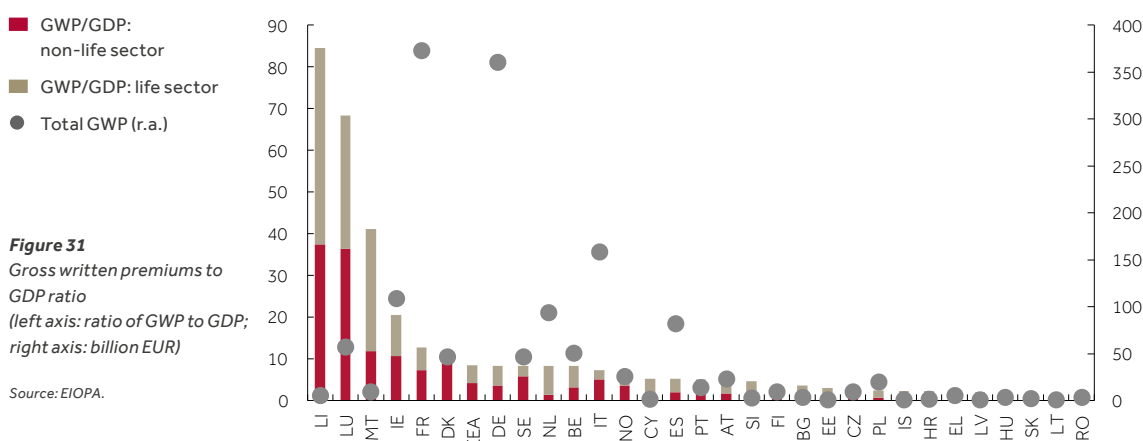
NON-BANK FINANCIAL SECTOR

Insurance sector

Liechtenstein's insurance sector is characterised by its strong cross-border orientation and a high degree of market concentration. By end-2024, Liechtenstein had 32 insurers (15 life, 15 non-life, and 2 reinsurers), including seven captive non-life insurers and reinsurers. The market is highly concentrated, with four insurers generating 54.5 % of total gross written premiums (GWP) in 2024. In the non-life sector, concentration is even higher, with three insurers accounting for 78.7 % of total GWP. In addition, the domestic insurance sector is mainly outward-oriented, with over 99 % of GWP generated abroad. Key target markets include Switzerland, Ireland, Germany and the Netherlands. This international focus is facilitated by Liechtenstein's membership in the EEA, which grants insurers access to the EU single market for cross-border services. Furthermore, insurance groups from third countries continue to leverage Liechtenstein as a strategic regulatory entry point to the EU.

Although the size of Liechtenstein's domestic insurance sector has declined in recent years, from a balance sheet total of CHF 36 billion in 2021 to CHF 27 billion in 2024, it remains large by international standards. This is particularly evident when comparing GWP. While the EEA average stands at 8.5 % of GDP, Liechtenstein's GWP amounted to more than 80 % of GDP in 2024 (Figure 31). This underscores the relatively large, albeit decreasing, scale of the sector.

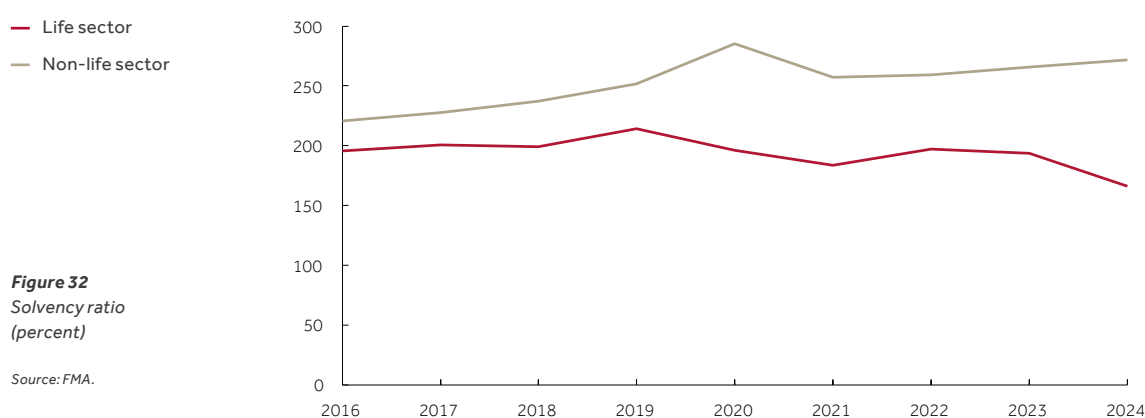
Gross written premiums remained broadly stable in 2024. Total premium volume reached CHF 5.7 billion in 2024, representing a slight year-on-year decrease of 0.9 % from the previous year. Of this total, CHF 3.3 billion was generated in the non-life segment and CHF 2.4 billion in the life segment. Reinsurance business remained broadly stable, continuing to represent only a minor share of total GWP volumes (0.5 %). The composition of the most significant lines of business remained largely unchanged from previous years, with medical expense insurance, fire and other property damage, and general liability insurance continuing to dominate.



While the domestic insurance sector maintained a robust solvency ratio, it remained below the European median.

As of end-2024, the domestic median solvency capital requirement (SCR) ratio stood at 217 %, well above the regulatory minimum of 100 % and up from 206 % in the previous year. Sector-specific SCR ratios were 272 % for non-life insurers, 166 % for life insurers, and 239 % for reinsurers (Figure 32). According to EIOPA's Financial Stability Report²⁰, the median SCR ratio for life insurers in the EEA declined to 230 % at year-end 2024, down from 246 % in Q4 2023, marking a reversal of the upward trend observed in previous years. However, significant cross-country heterogeneity persists. The median SCR ratios for composite and non-life undertakings also decreased, though to a lesser extent, reaching

216 % and 214 %, respectively, compared to 225 % and 217 % in the previous year. In the domestic life insurance segment, the high market concentration meant that developments at a few undertakings with below-average solvency positions significantly influenced the aggregate result, contributing to the figure remaining below that of European peers. In addition, the comparatively lower SCR ratios are largely attributable to group structures that optimise capital allocation at group level rather than at the level of the individual undertaking in Liechtenstein. Furthermore, the limited use of transitional measures in calculating solvency ratios, widely applied across EU countries, may also contribute to lower reported SCR ratios at the international level. Looking ahead, the solvency ratio is expected to remain stable.



Profitability increased slightly in 2024, supported by stronger results in the non-life segment.

Profitability, as measured by the weighted average return on equity (RoE) from the statutory report, rose to 3.4 % by end-2024, compared with 2.9 % in the previous year. Life insurances recorded a RoE of 0.9 %, significantly lower than in the previous year of 2.2 %.

This decrease is mainly driven by the negative performance of a few large undertakings. In contrast, the non-life segment saw an improvement in RoE, rising to 4.1 % from 2.7 % in 2023. This reflects the sector's enhanced performance, which is also supported by the favourable combined ratios. The small reinsurance sector has again been highly profitable and recorded

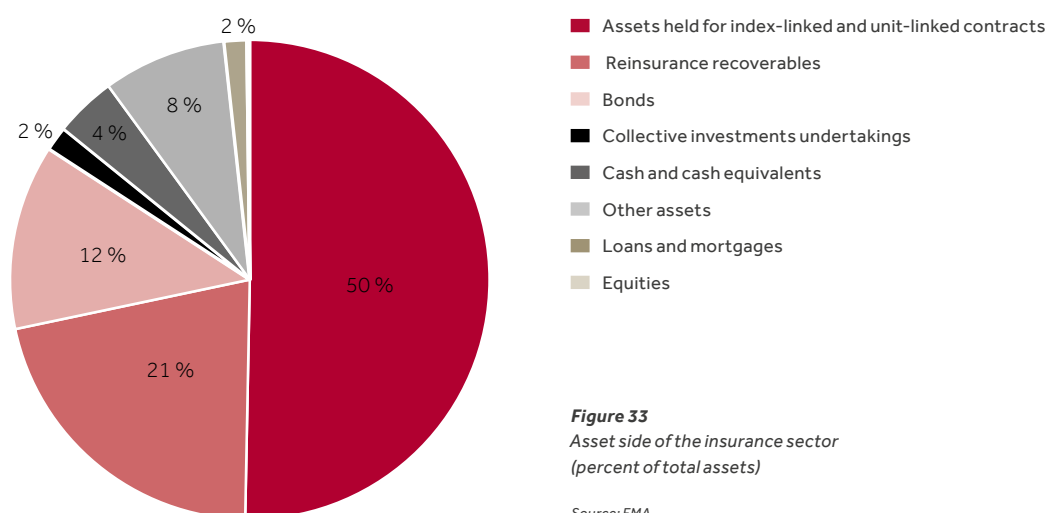
20 EIOPA (2025) Financial stability report. June 2025.

a RoE of 8.4 %, slightly down from 8.9 % in 2023. Overall, profitability remained modest in aggregate terms. Compared on the international level with the EEA median return on excess assets over liabilities (Solvency II data), a proxy for the RoE, which stood at 9.3 % as of end-2024 (8.0 % in 2023), profitability in Liechtenstein remains modest. This lower RoE is driven by several factors: Some insurers in Liechtenstein remain in a growth phase and have not yet achieved profitability, while others operate as part of larger international groups where strategic decisions, such as internal reinsurance arrangements, significantly influence their standalone RoE. As a result, domestic RoE figures may not fully reflect the underlying profitability, given the impact of group-level strategies. Moreover, overall market profitability is strongly shaped by a small number of dominant insurers, making it challenging to draw general conclusions about sector-wide trends.

When examining underwriting performance based on the combined ratio, Liechtenstein outperformed the EEA average, indicating relatively strong underwriting discipline and cost management in the non-life and reinsurance sector. The net combined ratio, calculated as the sum of net claims and expenses incurred divided by net earned premiums, increased slightly in 2024. It stood at 92 % as of end-2024, up from 87 % in 2023, while the gross combined ratio (insurer's performance before reinsurance) amounted to 79 %. This compares favourably to the average net combined ratio in the EEA, which stood at approximately 98 %. The increase in the net combined ratio over the past year was driven by several factors, most notably a rise in the expense ratio from 22 % to 36 %, despite a significant decline in the claims ratio from 64 % to 56 %. One contributing

factor has been the rising cost of reinsurance, due to reduced availability of coverage and more restrictive contractual terms. While the generally favourable combined ratios reflect disciplined underwriting and effective cost management practices of the non-life insurance sector, the sector's structural features, particularly the prevalence of specialised captive insurers that are typically highly profitable, well-capitalised and equipped with substantial equalization reserves ("Schwankungsrückstellungen"), tend to dampen overall returns, resulting in a comparatively low RoE.

The structure of invested assets in the domestic insurance sector is shaped by insurers' business models and their generally conservative approach to risk (Figure 33). As of end-2024, 50 % of total assets were associated with unit-linked and index-linked contracts, where the investment risk is borne by policyholders. Accordingly, fluctuations in market value are not associated with direct investment risk for the insurer, as the risk is transferred to policyholders under these types of contracts. Reinsurance recoverables accounted for 21 % of total assets as of end-2024. This position reflects the portion of technical provisions expected to be reimbursed by reinsurers in the event of a claim, thereby reducing the amount of risk retained by the insurer. However, the size of this item does not directly indicate the overall degree of reinsurance usage, as it is influenced by the specific structure of reinsurance contracts, the level of technical provisions, and timing effects related to claims settlement and reserving practices. Bonds represented 12 % of total assets. This comprised 8 % in corporate bonds and 4 % in government bonds. Equity holdings remained below 1 %, underscoring the sector's limited exposure to market volatility and its continued adherence to a conservative investment strategy.



Conduct of business (CoB) supervision remains a key regulatory priority both at the European and domestic level.

While significant progress has been made both in supervisory practices and in the business conduct of Liechtenstein insurance undertakings in recent years, substantial challenges remain, particularly in cross-border activities. Given the international business model of Liechtenstein insurers, compliance with country-specific “General Good” requirements pose a significant challenge. According to EIOPA²¹, these provisions refer to national rules that go beyond EU minimum harmonisation standards and include additional country-specific requirements intended to serve the general interest, particularly in the context of cross-border activities conducted under the freedom to provide services (passporting). Such requirements may include, for example, information obligations or consumer protection rules introduced by EU Member States to reflect local market conditions. The FMA will continue to actively collaborate and exchange information with EIOPA and other national competent authorities (NCAs) to help mitigate conduct-related risks and further strengthen

supervisory cooperation, governance and mutual trust within the European regulatory framework. These efforts have contributed to a more robust regulatory environment, enhancing the credibility of Liechtenstein’s insurance sector and fostering greater confidence among European supervisory authorities.

While the insurance sector remains well-capitalised and stable, it is increasingly challenging to maintain the country’s location-specific advantages in the insurance sector.

Liechtenstein’s international focus is facilitated by Liechtenstein’s membership in the EEA, which grants insurers access to the EU single market for cross-border services. In addition, there exists a bilateral direct insurance agreement between Liechtenstein and Switzerland, which allows insurance companies from Liechtenstein to offer products in Switzerland and vice versa. For Liechtenstein, it is however increasingly challenging to maintain location-specific comparative advantages. Especially for small or niche insurance undertakings considerable effort is necessary to remain compliant with the increasing density of regulation. Moreover, given the

²¹ See IDD General Good Provisions - EIOPA for an overview of General Good Provisions.

large cross-border market, ensuring compliance with various country specific general good provisions is challenging for insurance companies in Liechtenstein. In addition, larger insurance groups benefit from economics of scale, which has also contributed to observable market consolidation.

Pension schemes

Following a weak performance in 2022, the positive annual results of the public pension system (AHV) in 2023 continued into 2024. In 2024, the public pension system (AHV) recorded an annual surplus of CHF 250 million, up CHF 75 million (+ 43 %) from 2023. The improvement was primarily driven by strong investment performance, with a return of + 8.1 % in 2024 generating CHF 262 million in income, compared to a return of 6.2 % in 2023, which yielded CHF 188 million. Contributions increased by 4.3 % to CHF 314 million, while expenditures rose by 3.5 % to CHF 357 million.²² The structural reform of the public pension system in 2013 reduced the state's contribution, leading to the necessity for the AHV to generate positive investment returns to maintain stable financial reserves. In 2024, this income-expenditure gap (excluding the profit / loss from financial investments but including the annual ordinary state contribution) amounted to approx. CHF 11.8 million (2023: CHF 12.4 million). However, this deficit was more than offset by favourable financial market conditions and strong investment performance in 2024. Thus, sustained positive investment returns remain essential to keep the reserves stable.

The AHV is underpinned by substantial financial reserves, ensuring the stability of the public pension system. As of end-2024, financial reserves stood at CHF 3.65 billion, nearly 50 % of domestic GDP, providing a solid foundation for the AHV. This robust financial buffer corresponds to approximately 10.22

annual expenditures of 2024. Although this remains below the 2021 ratio of 11.35, it represents an increase compared to the previous year (9.86) and clearly exceeds the statutory minimum reserve of five annual expenditures. However, investment returns of the magnitude recorded in 2024 cannot be expected on a regular basis, as the AHV's portfolio is subject to considerable market volatility. Moreover, given demographic trends, particularly the rising number of retirees, spending is expected to increase over time. As a result, the 2024 reserves-to-expenditure ratio of 10.22 years is projected to significantly decrease over time.

Liechtenstein's second pillar of the pension system, the occupational pension provision, also saw positive investment returns in 2024, leading to a further increase in coverage ratios. The significant negative investment returns in 2022 (– 12.5 %) following a sharp financial market correction had caused a decline in coverage ratios in that year, defined as the ratio of available assets to liabilities. However, by 2023, the median investment return had recovered to + 5.9 %, and in 2024 it improved further to + 7.5 %, lifting the median coverage ratio from 105.1 % at the end of 2022 to 113.1 % at the end of 2024. Coverage ratios across different pension schemes ranged from 101 % to 132 % at end-2024.

The recent decline in interest rates has varying implications for pension funds in the short and long term. The recent decline in interest rates has had a mixed impact on the pension fund sector. On the one hand, strong equity market performance has supported asset growth, contributing to an increase in coverage ratios. On the other hand, lower interest rates raise the present value of future pension obligations, which increases liabilities and puts downward pressure on coverage ratios. In the short term, these opposing effects may offset each other, resulting in stable or slightly improved funding

²² The annual report is available on the AHV website.

positions. However, over the longer term, persistently low interest rates reduce yields on new fixed-income investments, making it more difficult for pension funds to meet their return targets. To compensate, pension funds may shift toward riskier asset classes, increasing exposure to market volatility and necessitating closer supervisory oversight to safeguard solvency. Additionally, the decline in in-house pension funds has concentrated risks within competitive collective schemes ("Sammelstiftungen"), which require close supervision and monitoring. For a comprehensive risk assessment, please refer to the FMA's annual report on pension schemes available on its website.

In 2024, Liechtenstein introduced structural reforms to the occupational pension system for state employees (SBPVG) to ensure its long-term sustainability. The reform of the "Stiftung Personalvorsorge Liechtenstein" (SPL), which covers around 4,600 public sector employees, was initiated by a government proposal, approved by parliament, and subsequently confirmed by public referendum in December 2024. A key objective of the reform was to eliminate unintended redistribution from active members to pensioners and to partially compensate for past imbalances. Additional goals included ensuring adequate funding in light of long-term expected investment returns and preserving current benefit levels. These objectives were achieved through the legal and financial separation into two plans: a closed plan for pensioners with entitlements before July 2014, and an open plan for current employees and future pensions to improve long-term benefits and ensuring the financial viability of the system.

Rising life expectancy presents growing challenges for the long-term sustainability of pension systems.

Demographic pressures were a key driver behind the development of the national strategy for the elderly (Altersstrategie), published by the government in December 2023. The strategy is structured around several key areas of action and cross-cutting themes, addressing the diverse needs of older people while promoting coordinated efforts across sectors. Within this framework, the field of action on retirement provision focuses on ensuring the long-term sustainability of the pension system. Projections indicate that, without reform measures, the AHV will be able to meet its obligations over the next 20 years, however, reserves could fall below the legally defined threshold of five years of expenditures by 2043²³. Addressing this shortfall would require a combination of measures, such as increasing contribution rates, raising the state's financial contribution and / or adjusting the statutory retirement age to stabilise pension reserves. Comparable reviews aimed at strengthening the long-term viability of the second pillar are also currently under consideration, where reforms may be needed to broaden coverage, adjust minimum contribution rates, and address the growing use of lump-sum withdrawals. In addition, the strategy identifies insufficient awareness of pension issues, particularly among younger generations, as an additional structural challenge. In light of these risks, the elderly strategy pursues the goal of safeguarding the quality of life of the population into old age and strengthening the long-term financial sustainability of the pension systems.

²³ Please also refer to the AHV annual report for a more comprehensive analysis, BuA Nr. 122 / 2024 on "Bericht und Antrag der Regierung an den Landtag des Fürstentums Liechtenstein betreffend das versicherungstechnische Gutachten 2024 für die AHV", "Altersstrategie für das Fürstentum Liechtenstein" and "Erster Monitoringbericht zur Umsetzung der Altersstrategie für das Fürstentum Liechtenstein" from 8. April 2025 (only available in German).

Within the broader strategy for the elderly, pension provision forms a central field of action, reflecting the importance of safeguarding long-term viability of both the AHV and the occupational pension system. In the first pillar (AHV), several measures to secure the fund's assets in the long term are currently under review. These include allowing contribution gaps to be closed through employment beyond the statutory retirement age, a critical reassessment of the relationship between minimum and maximum pensions and questioning the voluntary pension insurance for Liechtenstein nationals living abroad. As part of the actuarial report presented to parliament in late 2024, the potential impact of raising the statutory retirement age from 65 to 66 years for cohorts born in 1968 or later was also analysed. The study concluded that such a step could improve the ratio of the AHV fund to expected annual expenditures. In addition, further measures are being discussed, such as increasing the contribution rate, raising the indexed state contribution or implementing a combination of these approaches.

Liechtenstein authorities also continued preparatory work on a potential reform of the second pillar, the Occupational Pensions Act (BPVG) as part of its broader strategy to strengthen retirement provision. The ongoing review addresses key structural issues, including the role of lump-sum withdrawals at retirement compared to lifelong pension payments, and the possible restriction or adjustment of early capital withdrawal options. Additional measures under discussion include raising minimum contribution rates for old-age insurance, extending mandatory coverage to self-employed, part-time, and low-income workers, and enhancing the tax deductibility of voluntary contributions. Furthermore, awareness-raising and advisory initiatives are intended to reinforce individual

responsibility in pension planning. The proposed measures aim to enhance financial stability by increasing reserves and contribution revenues through a higher retirement age and broader contributor base. At the same time, they seek to reduce unintended redistribution, enhance flexibility for insured persons in choosing pension benefit options, and improve the adequacy of old-age benefits.

Investment funds sector

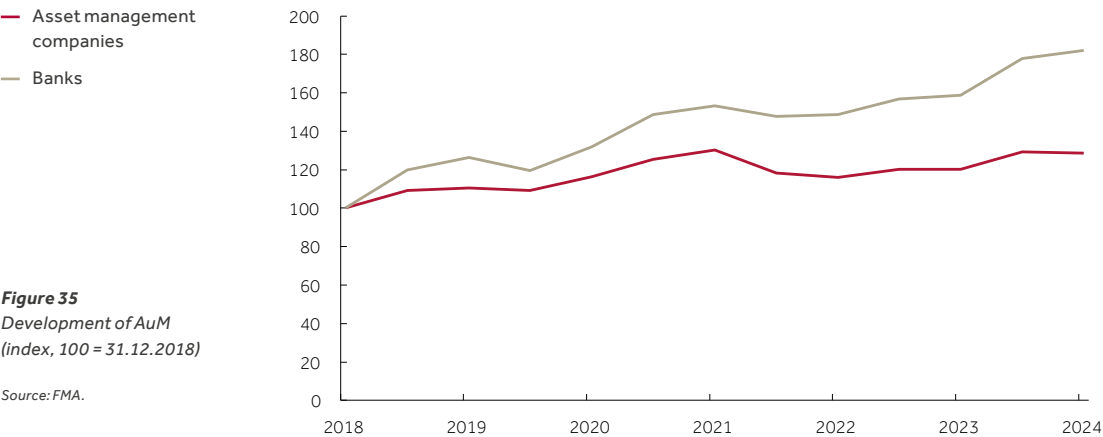
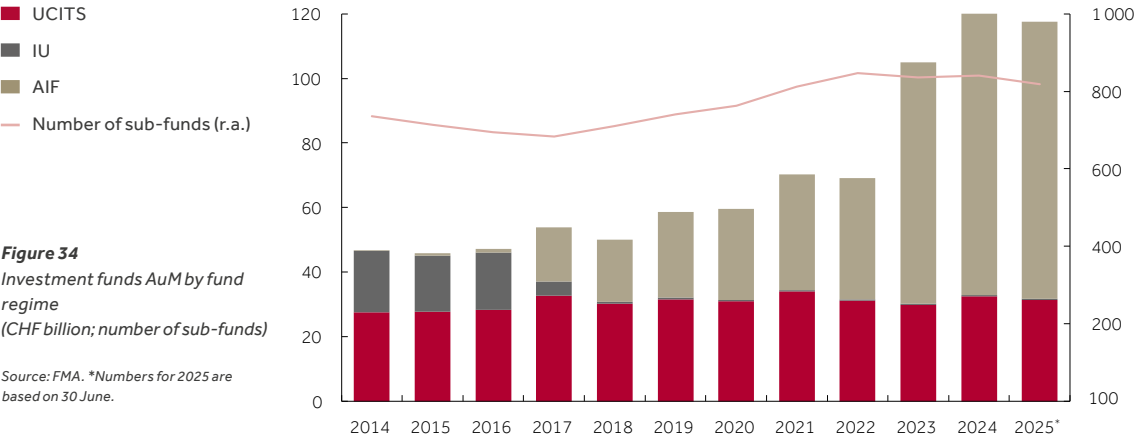
The investment fund sector has experienced robust growth in recent years, primarily driven by Alternative Investment Funds (AIFs). AIF AuM rose from CHF 37.5 billion in 2022 to CHF 74.8 billion in 2023 and continued the growth path thereafter, settling at CHF 85.8 billion in mid-2025 despite a modest pullback from the 2024 peak (Figure 34). The surge in 2023 was fuelled largely by new fund launches. In contrast, UCITS and IU ("Investmentunternehmen"), a national fund regime, showed little momentum. UCITS AuM fell to CHF 29.9 billion in 2023 and then hovered in the low CHF 30 billion, ending 2025 at CHF 31.4 billion; IU assets were essentially flat remaining below 0.4 billion. Fund structures proved relatively resilient: the number of sub-funds dipped from 847 in 2022 to 836 in 2023, edged up to 840 in 2024, and then declined to 818 in 2025. Overall, the composition of the sector has shifted decisively toward AIFs, while UCITS and IU have struggled to attract sustained net growth.

Macro-financial risks from the domestic fund sector remain limited. Although AIFs are under continued scrutiny at the EU level – given vulnerabilities from liquidity mismatches and leverage, particularly in funds investing in corporate debt and real estate – risks from Liechtenstein's AIFs appear contained, reflecting low leverage, a modest share of less-liquid assets, and conservative liquidity profiles.²⁴

²⁴ For a detailed analysis see the Financial Stability Report 2024.

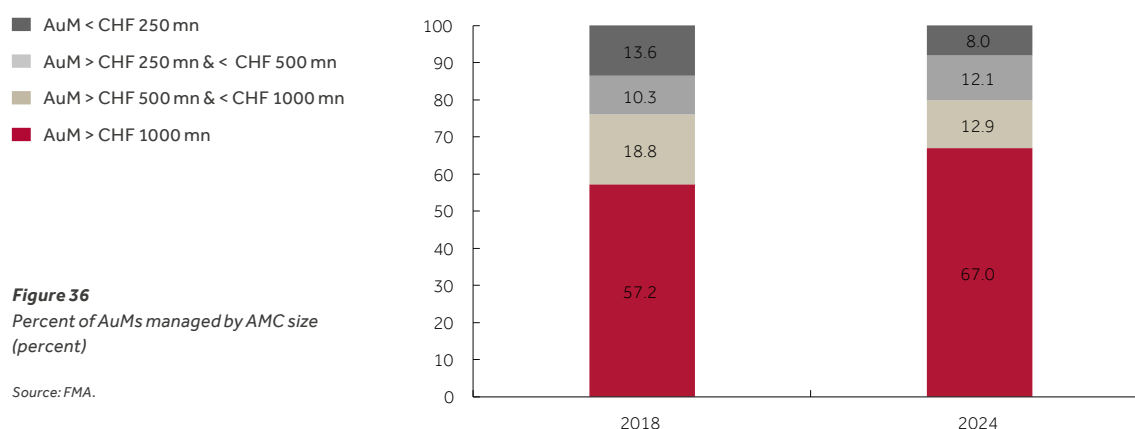
Contrary to the investment funds sector, the relative importance of asset management companies (AMC) has declined in recent years. Nevertheless, they remain a key component of the country's financial landscape, with roughly half of the 54.2 billion in AuM intermediated by domestic banks. However, as shown in Figure 35, AuM growth in the AMC

segment has been markedly slower than in the banking sector: between 2018 and 2024, banking sector AuM rose by 82 %, whereas AMC AuM increased by 28 %. The limited expansion was concentrated among larger AMCs (AuM above CHF 1 billion), with professional-investor mandates accounting for the bulk of managed assets.



These trends have led to rising concentration in the asset management sector, which is likely to continue. The consolidation is particularly visible in AuM: Figure 36 shows that the largest category of asset management companies (AMCs), i.e. AMCs managing more than CHF 1 billion, increased its share from 57.3 % in 2018 to 66.9 % in 2024, while the smallest category's share fell to 8 %. Consolidation is evident not only in AuM but also in the number of asset managers. The smallest category has shrunk

not primarily because firms moved into larger size categories, but because the total number of AMCs declined – from 109 to 89 between 2018 and 2024. The fall was concentrated among firms managing less than CHF 250 million (down from 76 to 48). By contrast, the number of AMCs with more than CHF 1 billion in AuM amounted to 11 entities in 2024. Overall, greater cost-effectiveness at scale and a rising regulatory burden suggest consolidation is likely to persist.



Crypto-asset service providers

Since February 2025, the Markets in Crypto-Assets Regulation (MiCAR) has been in force in Liechtenstein, coexisting alongside the national Token and Trusted Technology Service Providers Act (TVTG). MiCAR became applicable in Liechtenstein through pre-implementation on 1 February 2025 and was formally incorporated into the EEA Agreement on 24 June 2025. The regulation introduces harmonised rules across the EEA for the issuance and offering of asset-referenced tokens (ARTs), e-money tokens (EMTs), and other crypto-assets, as well as licensing requirements for crypto-asset service providers. At the same time, tokenised financial instruments are

regulated under MiFID II and thus also non-fungible tokens (NFTs) lie beyond MiCAR's scope. Nevertheless, the TVTG remains applicable in areas beyond the scope of MiCAR, especially regarding civil law certainty and the legal representation and transfer of rights. To ensure legal clarity and avoid overlaps, the scope of the TVTG was revised in parallel, resulting in two mutually exclusive yet complementary regulatory frameworks. Depending on their business model, some providers may require authorisation under both regimes. However, service providers whose business model now falls under the MiCAR regime may, subject to the applicable transitional periods, continue to operate under the TVTG without the immediate MiCAR authorisation.

The regulatory framework is now marked by a high level of detail. The European Supervisory Authorities (ESAs) have developed over thirty Regulatory and Implementing Technical Standards (RTS) to enhance legal clarity within the regulatory framework, the majority of which have already been adopted by the European Commission. Additional Level 3 guidance, covering Fit & Proper, the Travel Rule, and reverse solicitation, has further clarified supervisory expectations. Despite being a relatively young market, the European regulatory framework is approaching the level of detail found in traditional financial market regulation, drawing heavily on MiFID II, the CRR, and AML standards, and already reflects a regulatory depth comparable to that of more mature financial sectors. To support both legal certainty and a level playing field, the coordination between the European Commission, ESAs, and national authorities has been exceptionally close, with a shared aim of avoiding arbitrage and ensuring consistent implementation across the EEA.

MiCAR introduces a higher entry threshold than the TVTG, which may lead to consolidation within the domestic crypto-asset market. While Liechtenstein established an early, innovation-friendly national regulatory framework for crypto services through the TVTG, with relatively low entry barriers, MiCAR introduces more stringent requirements regarding governance, substance, and prudential supervision, especially for ART and EMT issuers, as well as for service providers like custodians, exchanges, and trading platforms, which results in a significant entry barrier. Existing trusted technology service providers might find it challenging to meet these increased regulatory requirements, not just at the point of licensing, but also under ongoing supervision, which was not part of the TVTG, and are thus expected to

either exit the market or shift toward areas outside MiCAR's scope. At the same time, however, Liechtenstein's track record with the TVTG and its access to the EEA single market are attracting growing interest from international players outside the EEA, such as Switzerland. By 2026, the domestic market is therefore likely to be smaller, while better capitalised and more internationally positioned as envisaged by MiCAR. Against this background, TVTG-registered firms are encouraged to use the transitional period to prepare for authorisation under MiCAR. As of September 2025, the FMA received 2 applications and 12 pre-applications under MiCAR.

Fiduciary sector

The fiduciary sector continues to play an important, albeit declining role in Liechtenstein's financial landscape. As part of the Designated Non-Financial Business and Profession (DNFBP) sector, the fiduciary sector is not considered being part of the financial sector according to international standards. Still, it plays an important complementary role in the Liechtenstein financial market. The number of Trust and Company Service Providers (TCSPs) continued to decline in 2024 to a total number of 541 (previous year: 554). This decrease is likely due to the increase in regulatory requirements and the overall downward trend of trusts and foundations.

The Professional Trustees Act (TrHG) is currently being revised to further strengthen the supervisory powers of the FMA. The Professional Trustees Act (TrHG) was last revised in 2020 to expand the FMA's prudential supervisory responsibilities. However, targeted adjustments in specific areas remain necessary and are being addressed through the currently proposed revision. The proposed amendments can also be seen

as a response to the risks posed by risk-management failures in relation to foreign sanction compliance and the general recommendation made in Liechtenstein's most recent MONEYVAL evaluation to strengthen supervision in this area. The objective is to equip the FMA with additional supervisory tools, thereby bringing its regulatory toolkit more closely in line with regulation for financial institutions. Furthermore, the planned revision of the Professional Trustees Act aims to further strengthen fit and proper requirements and enhance the FMA's powers of intervention. Ultimately, the proposed adjustments aim to further enhance the integrity of trustees and fiduciary companies, thereby protecting their clients, and the reputation of the fiduciary sector in Liechtenstein and ultimately safeguarding trust in the Liechtenstein financial centre.

The listing of four fiduciary companies and individual trustees licensed under the TrHG on the US Treasury's Office of Foreign Assets Control (OFAC) sanctions list in 2024 highlighted the reputational risks inherent in the fiduciary sector.

Although fiduciary companies and trustees are subject to stringent AML and sanctions compliance requirements, the nature of services provided in this sector combined with a rapidly shifting and volatile geopolitical environment continues to entail significant reputational risks. The latest example regarding "orphaned" legal entities and the international media coverage linked to extensive de-risking activities in the domestic fiduciary sector highlight the importance of robust risk management measures to mitigate reputational and indirect foreign sanctions risks in the sector. Targeted regulatory amendments are currently under discussion as highlighted in the preceding paragraph.

POLICY DEVELOPMENTS

RECENT MACROPRUDENTIAL POLICY DEVELOPMENTS

Liechtenstein's macroprudential authorities have continuously adapted the macroprudential policy toolkit to strengthen financial stability and mitigate systemic risks over the past few years. A broad set of capital-based, lender-based, and borrower-based measures has been implemented to increase the resilience of the banking sector and address vulnerabilities in the real estate market. Capital-based tools aim to bolster banks' shock-absorbing capacity and reduce the likelihood of systemic events. Borrower-based measures help contain risk accumulation in residential mortgage lending by setting limits on loan affordability and collateralisation. In parallel, lender-based requirements, such as higher risk weights for riskier mortgage exposures, have been recalibrated and adjusted to reinforce the sector's

ability to absorb potential losses. Together, these coordinated measures contribute to maintaining the stability and robustness of Liechtenstein's financial system.

Capital-based measures

Since the implementation of the CRD V package in 2021, Liechtenstein's macroprudential capital buffer framework has remained unchanged. In 2021, a comprehensive review and recalibration of capital-based measures was conducted. As a result, the Financial Stability Council (FSC) revised both the systemic risk buffer and the capital buffer for other systemically important institutions (O-SIIs), while maintaining the countercyclical capital buffer (CCyB) at 0 %. As of October 2025, the capital and buffer requirements for the domestic banking sector are illustrated in Figure 37.

Capital and buffer requirements as of October 2025		
Sectoral systemic risk buffer*	1.0 %	
O-SII buffer	2.0 %	
Countercyclical capital buffer	0 % **	
Capital conservation buffer	2.5 %	
Pillar II requirements	X %	
Supplementary capital (Tier 2)	2.0 %	Pillar I
Additional Tier 1 (AT1)	1.5 %	
Common Equity Tier 1 (CET1)	4.5 %	

Figure 37
Capital and buffer requirements for Liechtenstein's banks
(in percent of risk-weighted assets)

* applies to loans secured by mortgages on real estate in Liechtenstein
** for domestic exposures

Source: FMA.

In September 2025, the Financial Stability Council (FSC) reaffirmed its decision to maintain the countercyclical capital buffer (CCyB) for domestic exposures at 0 % of risk-weighted assets. The CCyB serves as a capital reserve to absorb potential losses during periods of financial stress, particularly in the context of excessive credit growth. The decision is among others based on the credit gap indicator, which measures the deviation of the private sector's debt-to-GDP ratio from its long-term trend (Figure 38). Currently, Liechtenstein's credit gap remains negative (– 9.7 percentage points), signalling no need for a

buffer increase under the rules-based framework. An alternative credit gap, focusing on mortgage lending by Liechtenstein banks for real estate in Liechtenstein and Switzerland, along with other cyclical risk indicators, likewise shows no evidence of excessive credit growth or rising imbalances. Given these assessments, the FSC considers a CCyB rate of 0 % to be appropriate and has therefore decided not to activate the CCyB. Furthermore, the introduction of a positive cycle-neutral CCyB is currently not planned for various reasons (see Box 5). The FSC will continue to monitor cyclical developments closely and adjust the buffer as warranted.



In its December 2025 meeting, the FSC will take its yearly decision on the buffer for other systemically important institutions (O-SIIs), which is currently set at 2 % of the total risk exposure amount for Liechtenstein's three largest banks. The O-SII buffer requires the institutions to hold additional Common Equity Tier 1 (CET1) capital, thereby enhancing resilience, mitigating potential implicit government support, and supporting market confidence. The identification of O-SIIs is conducted annually based on the EBA guidelines (EBA / GL / 2014 / 10), using a scoring framework across four dimensions: size, importance, complexity and cross-border activity, and interconnectedness. The three largest banks in Liechtenstein are designated as O-SIIs, each scoring well above the 350-point

threshold. Given their systemic relevance and high concentration within the domestic banking sector, it is expected that the 2 % buffer will remain appropriate for all three institutions, applied on both a consolidated and individual basis.

The systemic risk buffer (SyRB) will be recalibrated at end-2025, with the next review scheduled for 2027. The SyRB addresses structural systemic risks not covered by the countercyclical capital buffer (CCyB) or the buffer for other systemically important institutions (O-SIIs), aiming to mitigate potential disruptions to the financial system and the broader economy. In Liechtenstein, a sectoral SyRB of 1 % applies to risk-weighted exposures from loans secured by domestic

residential and commercial real estate. Introduced in 2022, this measure enhances the resilience of the banking sector to real estate-related risks. To prevent regulatory arbitrage and promote a level playing field, the buffer applies at both the consolidated and individual level across all Liechtenstein banks that are active in mortgage lending. The 2025 review will be conducted in the fourth quarter of 2025.

Instruments targeting the real estate sector

Liechtenstein's residential real estate sector is characterised by a structurally high, though declining, level of household indebtedness. High household indebtedness may increase the risk of households struggling to service debt in the event of macroeconomic shocks such as rising interest rates, unemployment, or declining incomes²⁵. In addition, a surge in loan defaults could also lead to falling property prices in case of increasing foreclosures. Potential risks associated with high household indebtedness were highlighted by both the FMA in its comprehensive analysis on the residential real estate sector in Liechtenstein²⁶ and the European Systemic Risk Board (ESRB), which issued a risk warning to Liechtenstein in 2021 (ESRB/2021/14).²⁷

In response, a working group involving the FMA, the Liechtenstein Bankers Association, and major banks (O-SIIs) was formed in 2022. Their findings led the FSC to recommend actions²⁸ in three key areas: (1) enhancing real estate market data by developing a nationwide residential real estate and rental price index and by adjusting the existing FMA data collection to monitor the effectiveness and efficiency of the adapted borrower-based measures, (2) adjusting the existing borrower-based measures (e.g. affordability criteria and amortisation requirements), and (3) promoting risk awareness among both lenders and borrowers.

Following these recommendations, the FMA issued supervisory requirements for sustainable residential real estate lending. These joint efforts aimed to ensure that the risks associated with high household debt are effectively addressed without imposing unnecessary restrictions on borrowers in relation to mortgage financing and access to the mortgage market. The FMA communication 2023 / 1²⁹ not only outlines the scope of the adjusted borrower-based measures but also provides detailed guidance on the associated data collection requirements, definitions, and the applicability of the measures. The new borrower-based measures include shortening the amortisation period for second mortgages

²⁵ Chapter 2.5 provides an update of the recent developments in the domestic real estate and mortgage markets.

²⁶ The report was published by the FMA in October 2021 (available in German only): "Immobilien- und Hypothekarrisiken in Liechtenstein: Risiken aus Sicht der Finanzstabilität". A summary of the main findings of the report can be found in Box 4 of the Financial Stability Report 2021.

²⁷ ESRB warning on medium-term vulnerabilities in the residential real estate sector of Liechtenstein (ESRB/2021/14)

²⁸ FSC recommendation of 26 June 2023: Recommendation on addressing risks in the residential real estate sector and mortgage market (AFMS/2023/2).

²⁹ <https://www.fma-li.li/fma-li/documents/rechtsgrundlagen/mitteilungen/fma-mitteilung-2023-1.pdf> (only available in German)

(i.e. the amount of the mortgage that exceeds a loan-to-value ratio of 66 2/3%) from 20 years to 15 years and establishing minimum harmonised standards for affordability assessments and associated amortisation requirements. The measures came into force in November 2023, with transitional arrangements extending to July 2024. The first reporting of the banking sector started from 1 July 2024 onwards, with the first reference date of September 30, 2024. The FMA continuously monitors the implementation of the borrower-based measures as part of its ongoing risk monitoring activities. Should financial stability considerations warrant it, the FMA will propose further adjustments to the measures to the FSC.

In 2025, the FMA held follow-up discussions with the three O-SIs regarding their residential real estate lending practices in Liechtenstein.

These exchanges were jointly conducted by the FMA's micro-prudential and macroprudential supervisory departments and focused on the implementation of the FMA communication 2023 / 1, which sets out measures to mitigate risks in the domestic residential real estate and mortgage markets.

Overall, the exchange provided the FMA with valuable insights into current mortgage lending practices.

The implementation of the FMA communication has been successful, although some heterogeneity remains across institutions and borrower segments, in particular, between new and existing customers. Banks reported that internal data availability has significantly improved since the new policy was introduced, which has positively contributed to the strengthening of their internal risk management frameworks. Furthermore, improvements in the credit assessment process, particularly in the quality and

clarity of information shared with borrowers, have enhanced borrowers' understanding of loan-related risks. With regard to the adjusted borrower-based measures, banks observed that many borrowers now voluntarily choose to amortise more than the minimum requirement or opt to make lump-sum amortisations to improve affordability. In general, if a loan is classified as an exception-to-policy (ETP) with respect to affordability at origination, it is only in exceptional cases also classified as an ETP in terms of amortisation affordability, since the minimum amortisation requirement of 1 % is typically met. This approach is consistent with the objectives of the FMA communication, which aims to gradually reduce risks associated with high household indebtedness while preserving access to mortgage financing without imposing undue restrictions. As there are no upper limits on how many loans a bank may grant as an ETP, the decision on which loans to issue lies solely with the individual bank. This approach is allowing banks to retain the flexibility to grant ETP loans in accordance with their internal guidelines, if they consider it justifiable within the scope of their risk management. At the same time, better data availability on lending standards has significantly improved the risk assessment framework of the FMA.

In September 2024, the FSC recommended that the option under Article 5 of the Banking Ordinance (BankV) to apply stricter risk weights for domestic residential mortgage lending should expire upon the implementation of the CRR III in Liechtenstein.

This FSC recommendation reflected the expectation that CRR III would introduce more risk-sensitive and, in many cases, higher risk weights for real estate exposures, thereby making the national measure redundant. Until April 2025, domestic regulations

required a 50 % risk weight for residential mortgages in Liechtenstein with loan-to-value (LTV) ratios between 66⅔ % and 80 %, compared with the 35 % risk weight under CRR II. With the entry into force of CRR III in Liechtenstein on 1 April 2025, these stricter national requirements expired, as the new European regulation replaced the respective national requirements.

CRR III fundamentally revises the treatment of exposures and risk weights secured by immovable property.

Risk weights are now determined based on granular exposure-to-value (ETV) buckets, increasing the risk sensitivity of capital requirements. For residential mortgages, Article 125(1) introduces a 20 % risk weight up to 55 % of the property value, with the excess treated as unsecured exposure. For commercial real estate, Article 126 likewise links risk weights to property values. In general, these regulatory changes have raised capital requirements for banks with higher-risk mortgage portfolios, thereby strengthening resilience against credit risk. At the same time, Article 124 still provides national authorities with the option to impose higher risk weights or stricter ETV limits if needed to safeguard financial stability.

Given that the effects of both CRR III and the expiry of the national measure could not be fully anticipated, the Financial Stability Council (FSC) will assess their combined impact once sufficient data become available, starting from September 2025.

In line with Article 124(9) CRR III, the appropriateness of real estate risk weights will be reviewed at least annually. This assessment will also inform the recalibration of the systemic risk buffer at end-2025. The FSC will continue to monitor these developments closely and take measures if warranted.

BOX 5

Policy considerations for introducing a positive neutral CCyB in Liechtenstein*by Sophia Döme*

The countercyclical capital buffer (CCyB) is a key macroprudential policy tool for strengthening banking sector resilience to cyclical risks and for countering procyclicality in the financial system by supporting credit supply during a downturn.

Developed by the Basel Committee on Banking Supervision (BCBS), the CCyB requires banks to build up additional Common Equity Tier 1 (CET1) capital during periods of excessive credit growth. Its main objective is to safeguard the financial system by mitigating the risk of credit booms that could lead to severe downturns. By raising capital requirements in good times, the CCyB helps ensure that banks have a buffer to draw upon during stress periods, enabling them to absorb losses and maintain lending. When released during downturns, the CCyB aims to support the continued credit flow to the real economy, preventing regulatory capital constraints from amplifying economic contractions. This mechanism aims to smooth the financial cycle and reduce the impact of future crises (BCBS, 2010).

A “positive cycle-neutral CCyB approach” to setting the CCyB has gained momentum across the EEA and beyond in recent years, motivated by the COVID-19 pandemic and other shocks that can disrupt the financial cycle at any point. This approach involves setting a non-zero CCyB rate even when cyclical systemic risks are neither high nor low, with

the goal of building releasable capital buffers early in the cycle. Such buffers can be released during periods of financial stress to help banks absorb losses and maintain credit supply to the real economy. Unlike structural buffers, such as the systemic risk buffer or the systemically important institutions buffer, which stay relatively constant over time, releasable buffers like the CCyB are a valuable flexible tool to support the economy during periods of stress. However, the limited accumulation of CCyB capital prior to the COVID-19 pandemic significantly constrained its effectiveness during the downturn, reducing the macroprudential space available for crisis response.³⁰ While subdued cyclical risks justified low buffer rates in many jurisdictions before the pandemic, in some cases the CCyB remained insufficiently activated despite emerging vulnerabilities (ESRB, 2022). This was partly due to an overreliance on the common reference guide, the credit-to-GDP gap, which became increasingly uninformative following the global financial crisis. Considering these shortcomings, many macroprudential authorities have recently moved toward a positive cycle-neutral CCyB approach, applying non-zero rates even in the absence of excessive credit growth, to ensure buffers are in place before shocks materialise (Döme and Sigmund, 2025).

The ESRB and the ECB published a report (ESRB and ECB, 2025) in early-2025 examining the growing application of the positive neutral CCyB approach to promote peer learning and foster a shared understanding of its use. Seventeen EEA countries have currently adopted this strategy to enhance finan-

³⁰ Before the COVID-19 pandemic, the aggregate CCyB in the EU amounted to only around 0.3 % of risk-weighted assets, compared to the combined buffer requirement of around 4 % of risk-weighted assets (ESRB 2022).

cial resilience and ensure timely buffer availability throughout the cycle. Based on the survey conducted across EEA countries, the report provides an overview of how countries have approached the positive neutral CCyB in their jurisdiction, whether through implementation, consideration, or opting against it. It highlights the key motivation for its adoption, which relate to (i) considerations on the need to build up the CCyB in a timely manner, by also addressing uncertainties in detecting systemic risks early in the cycle, (ii) allowing for a more gradual buffer build-up, and (iii) increasing the amount of buffers available for release, which also enhances the resilience to a broader range of shocks. In addition, the report assesses (perceived) benefits and costs, calibration practices, as well as interactions with other capital instruments, buffer usability and reciprocity considerations. While the report highlights several challenges, it also emphasises shared understandings across countries, such as the view that the positive neutral CCyB is intended as a proactive tool within the existing framework, rather than a new capital buffer.

The report also highlights key challenges to its wider adoption, such as potential overlaps with other tools like the systemic risk buffer and uncertainties within the current EU regulatory framework. To address these issues, the ESRB member institutions suggest clarifying the European macroprudential framework, reducing dependence on credit-to-GDP indicators, and updating the ESRB recommendation ESRB / 2014 / 1 (ESRB, 2014) to support a consistent yet adaptable implementation. Overall, there is broad support among ESRB members for a more harmonised

use of the CCyB, allowing for its early and flexible application while also maintaining a degree of national discretion to account for national specificities.

While a growing number of jurisdictions have adopted a positive cycle-neutral CCyB to enhance resilience and build releasable buffers, Liechtenstein's authorities have so far refrained from activating the buffer. Since its introduction in 2015, the CCyB rate for domestic exposures has remained at 0 % of risk-weighted assets, reflecting the absence of excessive credit growth in Liechtenstein and structural features of the financial system that may limit the CCyB's expected effectiveness. In Liechtenstein's globally oriented banking sector, dominated by private banking and wealth management activities, domestic exposures constitute only a small share of total exposures (around 13 %). As the CCyB applies only to domestic exposures, a positive (cycle-neutral) CCyB would only generate a modest amount of releasable capital³¹, offering limited macroprudential flexibility during periods of stress. In addition, the domestic banking sector is generally characterised by solid levels of capitalisation and liquidity, and the risk of a credit crunch is currently assessed to be low, further reducing the potential benefits of early buffer accumulation. As a result, the CCyB's ability to absorb shocks or address cyclical systemic risks related to foreign exposures may be constrained. While the buffer could provide a cushion for a domestic downturn, the limited size of domestic exposures means that the capital accumulated would likely be insufficient to significantly enhance macroprudential flexibility.

31 A hypothetical CCyB of 1 % applied to domestic exposures would represent approximately 0.7 % of total CET1 capital as of year-end 2024.

BOX 5

Targeted macroprudential tools may be more effective in increasing the resilience of the Liechtenstein banking sector against periods of stress.

Alternative macroprudential instruments that apply to total exposures, such as the buffer for other systemically important institutions (O-SII buffer) or borrower-based measures, are likely to be better suited to protect the banking sector from unexpected shocks in light of the risk profile and structural features of Liechtenstein's financial system. Liechtenstein authorities have also introduced a 1% sectoral systemic risk buffer (sSyRB) for domestic real estate exposures to strengthen the banking sector's resilience to real estate-related risks and help limit the build-up of systemic vulnerabilities in the real estate market and associated credit growth. Nevertheless, cyclical risks are continuously monitored, and a positive CCyB buffer rate will be introduced if deemed necessary based on the evolving risk assessment.

References

- BCBS (2010). *Guidance for national authorities operating the countercyclical capital buffer*. December 2010.
- Dôme, S. and Sigmund, M. (2025), *From Official Guidelines to Practice: Decoding Europe's Countercyclical Capital Buffer Decisions*. *International Review of Economics and Finance*. Volume 104, 104705.
- ESRB (2014). *Recommendation of the European Systemic Risk Board of 18 June 2014 on guidance for setting countercyclical buffer rates (ESRB / 2014 / 1)*. June 2014.
- ESRB (2022). *Review of the EU Macroprudential Framework for the Banking Sector. A Concept Note*. March 2022.
- ESRB / ECB (2025). *Using the countercyclical capital buffer to build resilience early in the cycle. Joint ECB / ESRB report on the use of the positive neutral CCyB in the EEA*. January 2025.

INTERNATIONAL COOPERATION

Liechtenstein's authorities have consistently implemented the recommendations and warnings issued by the European Systemic Risk Board (ESRB). Since the establishment of the Liechtenstein Financial Stability Council (FSC) in 2019, the country has pursued an ambitious approach in addressing not only the ESRB's recommendations issued after Liechtenstein became a member, but also those adopted prior to its accession. Over the past year, the authorities have concentrated on several key areas, including the residential and commercial real estate sector, macroprudential measures and their reciprocity, the calibration of the countercyclical capital buffer (CCyB), and the possible setting of CCyB rates for exposures to material third countries. As regards the real estate sector, the FMA has continued to enhance its risk monitoring framework, promote sound lending practices, and strengthen the resilience of financial institutions. As part of this effort, the FMA also engaged with the three O-SIIs in 2025 to discuss lending practices, sector-specific risks, and developments in the real estate market. In addition, Liechtenstein's authorities are effectively implementing the relevant ESRB recommendations and the risk warning addressed to Liechtenstein, while maintaining close cooperation with the ESRB Secretariat, with the overarching goal of safeguarding the real economy and financial system against emerging (systemic) risks.

On 21 October 2024, Liechtenstein joined the International Monetary Fund (IMF), marking a significant milestone in strengthening the country's long-term financial stability by establishing an additional financial safety net in times of crises. As Liechtenstein does not have a central bank, it lacks a formal,

fully-fledged lender of last resort. However, Liechtenstein banks have access to the facilities of the Swiss National Bank (SNB) on the same terms as Swiss institutions, including the SNB's liquidity-shortage facility and emergency deposit depot, ensuring access to liquidity even during periods of severe stress. At the same time, access to extraordinary liquidity support is limited due to cross-border legal impediments and the relatively small size of Liechtenstein banks in the context of the Swiss franc currency area. In this context, Liechtenstein's membership in the IMF plays a critical role by providing access to additional financial resources for the state under specific conditions. Thus, this membership represents a key step in strengthening financial market stability. Moreover, IMF membership is expected to enhance institutional capacity, improve the availability of financial and economic data, and further bolster transparency and credibility with international investors.

As part of its membership, Liechtenstein joined the Swiss-led IMF constituency, thereby further strengthening collaboration and deepening its relations with Switzerland. Switzerland has explicitly supported Liechtenstein's IMF accession and provided technical assistance throughout the process, including in establishing the SNB's role as Liechtenstein's depository and enhancing data availability. Over the coming years, Liechtenstein also plans to develop a balance of payments (BoP) statistics framework and improve other macroeconomic data. Building these statistics requires close cooperation with, and technical support from, the SNB. This collaboration has already proven effective and highly valuable in the run-up to IMF membership, and the SNB has committed to continue providing technical assistance.

The first Article IV consultation, held in January 2025, highlighted Liechtenstein's strong fiscal position and prudent economic policies, while recommending further measures to strengthen the country's economic resilience over the long run.

The IMF commended the country's prudent economic policies that have delivered strong fundamentals. They cautioned, however, that risks to the outlook are tilted to the downside, reflecting the potential for a global slowdown, geoeconomic fragmentation, and policy uncertainty. The IMF also highlighted the strength of Liechtenstein's fiscal position while encouraging a broader fiscal focus to balance buffer accumulation with long-term investment needs. As regards financial stability, the IMF emphasised the need for continued close supervision of Liechtenstein's large and complex financial sector. They noted that banks remain well-capitalised, liquid, and with strong asset quality, but highlighted high household indebtedness and called for continued calibration of macroprudential policies. They also stressed continued vigilance in light of Liechtenstein's international financial center model, particularly regarding AML / CFT compliance, and the importance of further mitigating risks in the fiduciary sector. In terms of structural policies, the IMF pointed to the importance of addressing labour market imbalances, skills shortages, and pension sustainability, while also strengthening efforts on productivity enhancing policies and cybersecurity. Finally, they emphasised the importance of more timely and comprehensive macro-economic data to support effective policy-making and transparency.

To improve macroeconomic data, as highlighted by the Article IV consultation, Liechtenstein authorities have established a dedicated coordination group.

Chaired by a representative from the Office of Statistics, the group also includes members from the Ministry of General Government Affairs and Finance, the FMA, and the Liechtenstein Institute. Its main objective is to oversee and guide the improvement of Liechtenstein's macroeconomic statistics over the next few years. The group also seeks to consolidate technical expertise to ensure methodological soundness, data quality, and alignment with international standards by managing technical and operational tasks and coordinating their implementation. The group is initially focusing on expanding unemployment statistics, developing productivity indicators, and exploring the development of a real estate price and rental index to enhance data on property market trends, before moving on to modernizing the national accounts and enhancing the timeliness of selected statistics. It will also assess the publication of real GDP figures and refine methodologies to enable quarterly GDP estimates, providing a more timely and frequent measure of economic activity. Given the absence of balance of payments statistics, the group will, as a next step, examine available data on Liechtenstein's economic relations with the rest of the world, with a particular focus on Switzerland, as the two countries form a customs union. The work of the coordination group is designed as a long-term effort and involves close collaboration with the IMF Statistics Department to ensure methodological soundness and alignment with international standards.

RECENT DEVELOPMENTS IN MICROPRUDENTIAL SUPERVISION AND POLICY

The FMA conducts annual risk assessments of each bank as part of the Supervisory Review and Evaluation Process (SREP). This process consolidates findings from supervisory activities to provide a comprehensive view of each institution, covering business models, internal governance, and risks related to capital and liquidity. While all domestic banks, e-money institutions, and payment providers are assessed, particular attention is given to Liechtenstein's O-SIs, reflecting their size, broad client bases, and more complex operations. Based on the SREP results, the FMA may impose additional capital requirements under Pillar 2 (P2R) to address institution-specific risks, including those related to cyberthreats, anti-money laundering (AML), counter-financing of terrorism (CFT), and environmental, social, and governance (ESG) factors. These measures strengthen the capital, solvency, and liquidity of individual institutions and safeguard overall financial stability.

In February 2025, the national covered bonds act (Pfandbriefgesetz, PfbG) entered into force, establishing a legal framework for the issuance of covered bonds in Liechtenstein. Covered bonds (Pfandbriefe) can be issued by banks or other authorised institutions and secured by high-quality collateral (e.g., mortgages), providing dual protection: repayment is guaranteed both by the issuer and, in the event of the issuer's insolvency, by the cover assets. They have a long tradition in countries such as Switzerland, Germany, and Austria and contributed to financial stability during the global financial crisis. The newly established domestic PfbG aims to establish a national legal framework for the issuance of covered bonds in Liechtenstein, tailored to the local market. Given the small

market size, particular emphasis is placed on "pooling" mortgages, i.e. a joint issuance through a specialised covered bond institution. The law is modelled on the well-established Swiss system and introduces product regulation distinguishing between the high-quality "Liechtenstein Pfandbrief", backed exclusively by first-class domestic mortgages, and other covered bonds that may include foreign real estate collateral. The EU covered bonds directive (Directive (EU) 2019 / 2162) has been implemented in Liechtenstein through the Act on European Covered Bonds (EuGSVG) and is clearly distinct from the newly introduced national covered bonds framework. The aim of the newly established law was to provide safeguards to protect both investors and property owners in times of stress, thereby strengthening financial stability, ensuring resilient and maturity-matching refinancing of the real estate market, and protecting the broader economy against adverse effects of financial crises.

The FMA has introduced a liquidity stress test in 2025, complementing the existing capital stress test. Modelled on the ECB's 2019 approach, it maps on- and off-balance-sheet items into a maturity ladder under a baseline scenario and two idiosyncratic shocks (adverse, extreme). The stress test tracks the net liquidity position by offsetting projected cash-flow gaps with counterbalancing capacity across currencies and consolidation levels. The exercise provides a forward-looking view beyond the 30-day liquidity coverage ratio (LCR) and stock metrics like the net stable funding ratio (NSFR), translating collateral into usable funding capacity, standardising run-off assumptions, and highlighting potential cliff effects. For supervisors, it enables consistent cross-bank benchmarking of survival periods, also with the results of the 2019 ECB stress test, and early-warning flags for potential liquidity shortfalls.

RECENT REGULATORY DEVELOPMENTS

The Basel III reform has been finalised in EEA law through the adoption of CRR III and CRD VI, strengthening the resilience of the banking sector to future economic shocks. Regulation (EU) 2024/1623 ("CRR III") and Directive (EU) 2024/1619 ("CRD VI") finalise the implementation of the current international standards of the Basel Committee on Banking Supervision (so-called "Basel III reform") in EEA law. The aim of the Basel III reform was to learn the lessons of the financial crisis and make the banking sector in the EEA significantly more resilient to economic shocks. The reforms implemented to date have focused on:

- increasing the quality and amount of regulatory capital that banks must hold to cover potential losses.
- reducing the excessive indebtedness of banks.
- increasing the resilience of banks to short-term liquidity shocks.
- reducing banks' dependence on short-term funding and concentration risk; and
- solving problems related to the systemic importance of banks for the financial system of an individual EEA Member State or the EEA.

CRR III primarily brings changes in the area of calculating capital requirements. The requirements for the calculation of credit risk according to the standardised approach, the calculation of operational risk and of capital requirements for several types of risk using internal models are affected. In line with the revised international standards of the Basel Committee, the revision of the regulations for calculating capital requirements for credit risk in accordance with the standardised approach primarily involves tightening up the provisions regarding residential and commercial real estate loans. The calculation meth-

ods for the capital requirements for operational risk will be completely revised. For banks that calculate their own funds requirements using internal models, an output floor will be introduced to prevent banks from achieving positive effects on their own funds requirements by not calibrating these models in line with the risks involved. The adjustment of the requirements for the calculation of own funds requirements in the area of market risk ("fundamental review of the trading book"), which began with CRR II, is to be continued.

CRD VI brings a number of amendments to the current framework. The main changes can be summarised as follows:

- In the area of the independence of supervisory authorities, minimum requirements are introduced to avoid conflicts of interest in the supervisory tasks of the competent authorities, their staff and their management bodies.
- The access of third-country undertakings to the EEA single market will be newly regulated for the provision of certain banking services ("core banking services"): Third-country undertakings must in future have a physical presence at least in the form of a licensed branch to be effectively subject to the EEA legal framework for banking supervision.
- To take account of the significant risks faced by banks due to climate change and the profound economic changes required to manage all ESG risks, the regulatory provisions will be supplemented with new requirements for the consideration of ESG risks in certain areas, e.g. risk management.
- To counteract potential risks that arise for banks from their risk positions in crypto assets and that are not sufficiently covered by the existing supervisory framework, a standard for the supervisory treatment of risk positions in crypto assets will be introduced.

- More detailed requirements for professional qualifications and personal reliability (fit & proper regime) are introduced for members of the management body of banks. In addition, such requirements are also defined for holders of key functions.
- General requirements are established for the organisation and effectiveness of a bank's internal control functions (risk management function, compliance function and internal audit).
- CRD VI adapts the modalities for setting the systemic risk buffer, the O-SII buffer and the additional own funds requirement in order to prevent these two own funds requirements from being unjustifiably increased once a bank is tied to the output floor.

CRR III is already applicable in Liechtenstein, while the implementation of CRD VI through amendments to the Banking Act is expected to follow in 2027.

Since its incorporation into the EEA Agreement on 1 April 2025, CRR III has been directly applicable in Liechtenstein. At present, CRD VI has not yet been incorporated into the EEA Agreement but is expected to be adopted in the course of 2027. CRD VI must be implemented in national law by amending the Banking Act. The legislative process for the implementation of CRD VI was initiated by the government in June 2025.

Other recent regulatory developments included the entry into force of key European legislative frameworks that are also directly relevant for Liechtenstein as a member of the EEA.

In addition to the updated Capital Requirements Regulation and Directive (CRR / CRD) and the Covered Bonds Act, these include the Markets in Crypto-Assets Regulation (MiCAR), the Digital Operational Resilience Act (DORA), and the revised Alternative Investment Fund Managers Directive (AIFMD II). Their incorporation into the EEA Agreement ensures that Liechtenstein's financial

sector remains fully aligned with European standards, thereby safeguarding market access, strengthening investor protection, and enhancing operational resilience. These frameworks are of particular importance for Liechtenstein given the strong international orientation of its financial centre and the significance of cross-border services. For further details, please refer to the dedicated chapters of this report.

RECENT DEVELOPMENTS IN CRISIS MANAGEMENT AND BANK RESOLUTION

The minimum requirement for own funds and eligible liabilities (MREL) is a cornerstone of bank resolution frameworks. MREL requires banks to hold sufficient funds of adequate quality that can be written off or converted into capital in times of crisis. Its purpose is to ensure that banks can absorb losses and recapitalise without relying on public funds. The overall MREL consists of two elements: A loss absorption amount (LAA) and a recapitalisation amount (RCA). While the LAA is the portion of MREL intended to cover a bank's losses in the event of resolution, the RCA represents the capital required to restore a bank's viability after losses.

However, from a resolvability point of view, meeting MREL targets is not just a matter of quantity – the composition and quality of eligible instruments are critical to ensuring effective resolution. A key challenge arises when banks fulfil their MREL requirements primarily with Common Equity Tier 1 (CET1) capital. While CET1 represents high-quality capital designed for loss absorption and high levels are therefore associated with lower default rates and bank resolution risks, it is not suitable for recapitalisation purposes. To restore a bank's capital position after absorbing losses, it is essential that banks have enough subordinated (and other bail-inable) liabilities available. These instruments can be converted into capital through the so-called "bail-in" mechanism during a crisis.

To address this issue, the FMA introduced a revised MREL policy (FMA Communication 2022 / 2)³², which provides targeted incentives to improve MREL composition by promoting the use of eligible and subordinated liabilities. Under specific conditions, banks with a sound mix of these instruments and a demonstrated balance sheet quality may benefit from a lower overall MREL. This is achieved by a reduction of the RCA through a lower market confidence charge (MCC), an add-on to RCA intended to maintain market confidence during and after resolution. This incentive to reduce the overall MREL by holding a certain level of eligible and subordinated instruments aims to strengthen the recapitalisation capacity and ensures that banks cannot only withstand shocks but also emerge from resolution as viable entities – a critical step toward maintaining financial stability.

Beyond MREL compliance, a bank's operational readiness for resolution is equally critical. Resolvability testing is the process through which banks and resolution authorities assess, validate, and confirm that the capabilities needed for resolution are fit for purpose, well maintained, and operationally ready. Resolution authorities develop a three-year testing

program for each resolution entity, employing activities such as dry runs (e.g., bail-in simulations), walkthroughs (detailed reviews of specific capabilities), or tabletop exercises (scenario-based discussions with senior management). These tests ensure that banks possess the necessary tools, systems, and processes to implement their resolution plans effectively in practice.

To guarantee that banks can be credibly resolved in times of crisis, the FMA is conducting resolvability testing across multiple dimensions, carried out by external auditors through 2026. These assessments focus on key capabilities such as payment moratoria (i.e., temporary suspension of a bank's payment obligations during resolution), data availability for resolution purposes, and execution of the resolution strategy. Having reviewed the initial audit reports, the FMA will closely monitor the banks' progress, particularly regarding the closure of identified gaps. Furthermore, the FMA will refine the approach to resolvability testing in close cooperation with the banks in the coming years. This ensures that resolution strategies are not only theoretically sound but also operationally feasible.

32 Link: [fma-m-2022-2-mrel-policy.pdf](#), revised version published in February 2025.

ANNEX: STRUCTURAL BACKGROUND

STRUCTURAL CHARACTERISTICS OF THE ECONOMY

Liechtenstein, a small yet highly specialised economy, exhibits unique structural characteristics that differentiate it from other small economies and regional financial centres. The economy is marked by its robust export-oriented industrial and manufacturing base, high innovation levels, a relatively large financial sector and a unique legal and economic relationship with both Switzerland and the European Union, through its membership in the European Economic Area (EEA).

A defining feature of Liechtenstein's economy is its strong industrial sector. As of 2022, this sector contributed approximately 42.2 % to the country's Gross Domestic Product (GDP), more than twice the share of the financial services sector, which stands at about 17.3 % even when including complementary services usually not counted as financial services such as lawyers, auditors and tax advisors. The presence of high-tech manufacturing firms and niche players in global markets underscores the industrial sector's importance. Companies in this sector benefit from substantial investments in research and development (R&D), which drive innovation and economic growth.

Liechtenstein's economy is characterised by high levels of innovation, driven by substantial private sector investment in R&D. In 2023, R&D spending, predominantly driven by industrial companies, amounted to 448 million CHF, representing about 6 % of the country's GDP. This investment places Liechtenstein ahead of all OECD countries regarding R&D expenditure relative to GDP. The result is a highly innovative economy, with the number of patent applications per capita far exceeding those in countries like Switzerland and Sweden.

Liechtenstein's labour market is also unique, with total employment exceeding the number of inhabitants. In 2024, the total population stood at 40,886, while the number of employed people was 43,600, with a significant proportion being cross-border commuters from Switzerland and Austria. This dynamic is indicative of the country's strong economic activity and its attractiveness as an employment hub in the region.

The small size of Liechtenstein's economy contributes to high volatility in GDP growth. Single transactions by large firms can significantly impact macroeconomic indicators, making the economy susceptible to abrupt changes in economic performance. Data availability is a challenge, with many economic indicators either unavailable or published with considerable delay. Despite this, Liechtenstein maintains a range of statistical indicators that help policymakers monitor economic developments and respond accordingly.

Liechtenstein benefits from a unique legal and economic relationship with Switzerland and the EEA. The customs union with Switzerland, established in the 1920s, and the adoption of the Swiss franc in 1924, provide economic stability and integration with the Swiss market. Membership in the EEA since 1995 allows Liechtenstein full access to the European Single Market, aligning its regulatory framework with EU standards. This integration is vital for the country's economic success, facilitating trade and economic collaboration with both Switzerland and the EU, as well as with all countries through which Liechtenstein has free trade agreements through its membership in the European Free Trade Area (EFTA).

STRUCTURAL CHARACTERISTICS OF THE FINANCIAL SECTOR

Banking sector

The banking sector, characterised by its solid level of capitalisation and liquidity, plays a significant role in Liechtenstein's financial system. The total assets of Liechtenstein's predominantly domestically owned banking sector stand above CHF 105 billion on a consolidated level, which is roughly 15 times the country's GDP. This substantial size, coupled with a high concentration – where three domestic systemically important institutions (O-SIIs) – the LGT, the LLB and the VPB – account for over 90 % of total assets – highlights the critical need for robust macroprudential measures to manage systemic risks effectively.

Liechtenstein's financial sector is highly interconnected with global financial markets. Thanks to its membership in the European Economic Area (EEA), banks have full access to the European Single Market. Additionally, some banks operate outside the EEA with subsidiaries and branches in Switzerland, the Middle East, and Asia. After facing challenges following the global financial crisis, AuM have been on an upward trajectory in recent years, driven by net money inflows, acquisitions abroad, and positive market developments. The AuM of Liechtenstein banks are well diversified across the globe, underscoring the international interconnectedness of the domestic banking sector. Moreover, Liechtenstein banks benefit from the safe-haven status of the Swiss franc, which typically attracts increasing net new money flows during global crises.

Liechtenstein banks focus on private banking and wealth management services, which are central to their revenue structure. Roughly two-thirds of total revenues for O-SIIs derive from fee and commission income, while only one-third come from interest income. This revenue composition highlights

the sector's reliance on wealth management and private banking activities, setting it apart from larger global banks with more diversified income streams.

Profitability within the banking sector remains stable but not particularly outstanding compared to European peers. The high cost-income ratios (CIR) reflect the sector's operational challenges, driven by a staff-intensive business model and stringent regulatory requirements. Enhancing operational efficiency and managing administrative costs are essential for sustaining profitability over the medium to long term. High regulatory pressure has been particularly challenging for smaller banks, with related expenses, such as compliance costs, pushing the CIR upward. Staff costs in compliance, particularly in anti-money laundering and regulatory units, internal audit, and risk management, have increased significantly in recent years. Global competition will likely remain challenging, and efficiency indicators suggest further room for improvement. Achieving a sustained reduction in the CIR and a strengthening of structural efficiency in the banking sector will remain key challenges in the coming years.

The liability side of Liechtenstein banks' balance sheets relies primarily on deposits. Due to banks' focus on private banking activities, the sector is relatively abundant in deposits, which account for more than 80 % of total liabilities. As a result, market-based funding plays a minor role, representing less than 6 % of total liabilities. The stable funding base is further evidenced by the high loan-to-deposit ratio, which hovers between 70 % and 80 %.

Asset quality is stable despite the recent interest rate cycle, with non-performing loans (NPLs) remaining at low levels. As of mid-2025, the NPL ratio of the banking sector on a consolidated level amounted to 1 %, placing it among the lowest values across European countries. The low level has to be seen in light of the stable development of Liechtenstein's

economy in the past few decades, despite the global financial crisis, the COVID-19 pandemic and the recent interest rate cycle.

The currency treaty between Liechtenstein and Switzerland ensures the equivalence of Liechtenstein and Swiss banks regarding central bank funding from the Swiss National Bank (SNB). Despite the comfortable liquidity position of Liechtenstein banks, ensuring access to liquidity in the unlikely event of a crisis remains important. Since Liechtenstein is part of the Swiss franc currency area under an intergovernmental treaty, monetary policy is conducted by the SNB. While Liechtenstein banks have access to SNB funding on the same terms as their Swiss counterparts, access to extraordinary liquidity support may be limited in certain cases due to cross-border legal impediments and the relatively small size of Liechtenstein banks in the context of the Swiss franc currency area. Therefore, the availability of highly rated securities on banks' balance sheets that can be used as collateral in monetary policy transactions is essential for ensuring liquidity in a crisis. Along with their Swiss peers, Liechtenstein banks can also use the SNB's liquidity-shortage financing facility and emergency pledged securities account, ensuring access to liquidity even in periods of severe shortage. Thus, the banking sector benefits from being part of one of the world's most stable currency areas, with central bank funding guaranteed by an intergovernmental treaty. Additionally, some banks have access to central bank funding in other countries (e.g., the euro area) through their foreign subsidiaries.

Insurance sector

Liechtenstein's insurance sector is highly concentrated. As of end-2024, 32 insurance undertakings were authorised in Liechtenstein, comprising 15 life insurers, 15 non-life insurers, and 2 reinsurers. Among the non-life undertakings, seven are captives, typically

established by industrial groups to insure their own risks. Several insurers specialise in well-defined niche markets such as industrial or health insurance. The market is dominated by a small number of major players, with four companies accounting for 54.5 % of total premium income across the entire sector. In the non-life segment, this concentration is even more pronounced, as three companies generate 78.7 % of all premiums, highlighting significant market dominance.

A substantial share of premium income originates from international markets thanks to direct market access to EEA countries and Switzerland. Liechtenstein's insurance sector exhibits a significant level of dependence on international markets, with a notable concentration in neighbouring countries. More than 99 % of gross written premiums (GWP) earned by Liechtenstein insurance companies are generated abroad, underscoring the sector's reliance on foreign markets. Among these markets, Switzerland, Ireland and Germany stand out as the most important, contributing the majority of these international premiums. This heavy reliance on premiums earned in these countries reflects the interconnected nature of the Liechtenstein insurance industry within the broader European market.

In recent years, Liechtenstein's insurance sector has experienced contrasting trends between its life and non-life segments. Gross written premiums (GWP) in the life insurance sector declined during the low interest rate environment but have shown a slow recovery over the past two years. Meanwhile, since 2017, GWP in the non-life sector have consistently exceeded those in the life sector. Reinsurance remains a minor component of the market, contributing less than 1 % to total GWP in Liechtenstein as of end-2024.

Premiums of unit-linked products experienced a significant decline over several years, followed by a period of stabilisation more recently. The non-life business in Liechtenstein is primarily driven by fire and

other damage to property insurance, medical expense insurance, and health insurance, while the life business is dominated by index-linked and unit-linked insurance. Since 2016, the share of premiums from unit-linked products has been steadily decreasing from 78 % to 40 % in 2022. Since then, this trend has reversed, with the share of life insurance remaining broadly stable.

Due to special structural characteristics, the insurance sector in Liechtenstein shows relatively low profitability, yet it maintains a robust solvency capital requirement (SCR) ratio. The overall SCR ratio for Liechtenstein's insurance companies surpasses the 200 % threshold, its median standing at 217 % as of end-2024. This indicates a robust capitalisation despite the pressures of low profitability, although the return on equity (RoE) across the entire insurance industry increased slightly to 3.4 % in 2024 from 2.9 % in 2023. However, a comparison with other peer countries is difficult, as many Liechtenstein insurance companies are part of international insurance groups, with domestic profitability not showing the complete picture of intra-group risk management strategies.

Pension schemes

Liechtenstein's pension system is built on three pillars. The first pillar consists of old age, disability, and survivors' insurance (AHV / IV), managed by the state. This public insurance program is supplemented by mandatory occupational pension schemes (pillar two) and voluntary private pension plans (pillar three). The first pillar's primary goal is to secure the financial well-being of insured individuals and their families in cases of old age, disability, or death. The second pillar is designed to maintain the individual's standard of living after retirement, while the third pillar offers voluntary, individual pension options to address any financial gaps not covered by the first two pillars.

The second pillar of Liechtenstein's pension system plays a crucial role in maintaining the standard of living after retirement, holding significant economic importance for the country. This component comprises autonomous legal entities in the form of foundations, which are subject to the Occupational Pensions Act (BPVG) and are under the supervision of the FMA. Funding for occupational pension provision is derived from contributions made by both employers and employees. Over the past years, there has been a consolidation trend, with the number of such entities decreasing from 33 in 2010 to 15 in 2024. This trend is expected to persist in the near future, as larger pension funds benefit from scale effects. As of year-end 2024, total assets (i.e. the sum of provision capital and technical reserves) in the pension scheme amounted to CHF 8.08 billion, approximately 108 % of Liechtenstein's GDP. This not only reflects the robustness of Liechtenstein's retirement system but also underscores the pivotal role of the second pillar in pension provision.

Investment funds and asset management companies

The asset management sector in Liechtenstein remains a key component of the country's financial landscape. By the end of 2024, 19 management companies (ManCos) were authorised to manage investment funds, with the ManCos of the three largest banks controlling the majority of assets under management (AuM). In contrast, the remaining independent ManCos are significantly smaller, underscoring the dominance of banking-affiliated ManCos within the sector. Additionally, asset management companies continue to play a vital role in Liechtenstein's financial industry, overseeing approx. CHF 54 billion in assets in 2024, with approximately half of these assets managed by domestic banks.

The fund sector's connection to domestic banks is substantial, with most of the largest sub-funds managed by ManCos tied to Liechtenstein's three largest banking groups. This symbiotic relationship underscores the integration of investment fund management within Liechtenstein's broader financial system, where the sector acts as a complement to the banking sector.

Crypto-asset service providers

Liechtenstein's fintech sector is shaped by two complementary legal frameworks: the Markets in Crypto-Assets Regulation (MiCAR), effective since February 2025, and the Liechtenstein Token and Trusted Technology Service Provider Act (TVTG), in force since January 2020. MiCAR establishes a harmonised regulatory environment across the European Economic Area (EEA) for crypto-assets, including passporting rights and licensing for service providers. MiCAR covers asset-referenced tokens (ARTs), e-money tokens (EMTs), and other crypto-assets, but excludes tokenised financial instruments and non-fungible tokens (NFTs), which remain outside its scope.

MiCAR has established a harmonised legal framework across the EEA, including passporting rights for crypto-asset service providers. It will coexist with Liechtenstein's TVTG, which has already laid a solid foundation for the local crypto market and supported the growth of smaller players. Although MiCAR's stricter regulatory requirements and enhanced supervision may temporarily slow market activity, they are expected to drive long-term sector

maturity and increase demand for skilled professionals. Some service providers may shift to areas outside MiCAR's scope or exit the market due to increased regulatory barriers, infrastructure challenges and reduced location advantages. Nevertheless, Liechtenstein's strong regulatory expertise, particularly the FMA's nearly five years of registering experience, and its continued leadership in blockchain and crypto innovation are likely to keep attracting companies and start-ups, further diversifying the financial sector.

Fiduciary sector

The fiduciary sector continues to play an important, albeit declining role in Liechtenstein's financial sector, as it faces ongoing regulatory and structural challenges. The number of Trust or Company Service Providers (TCSPs) continued to decline during 2024 to a total number of 541, likely due to the increase in regulatory requirements and the continued downward trend in the number of trusts and foundations. The total number of foundations and trusts (the main product of the fiduciary sector) in Liechtenstein has seen a further significant decline, dropping from more than 53,000 in 2009 to about 15,000 in 2017, and further to approx. 11,000 in 2024. Still, the sector plays a significant role in the financial sector, with Liechtenstein's company law offering a secure and stable legal framework for dedicating assets to specific purposes, enabling clients to find customised, internationally-oriented solutions. In this context, the significance of non-profit / public benefit foundations has increased substantially in recent years.

MACROPRUDENTIAL POLICY FRAMEWORK

The responsibilities for macroprudential policy and supervision in Liechtenstein are divided among the FMA, the Financial Stability Council (FSC) and the government. In accordance with the recommendation of the European Systemic Risk Board³³, the primary aim of macroprudential supervision in Liechtenstein is to actively contribute to the overall stability of the financial system. Only a stable financial system can efficiently fulfil its macroeconomic functions and thus contribute sustainably to the economic development in Liechtenstein. Acting as the central body for macroprudential policy and supervision in Liechtenstein, the FSC is comprised of members from the Ministry of General Government Affairs and Finance (MPF) and the FMA. Quarterly meetings are held since its establishment in 2019 to discuss financial stability issues and to take necessary actions to safeguard the stability of the country's financial system. The FSC primarily aims to enhance collaboration on macroprudential issues among the institutions and regularly discusses matters crucial for financial stability. The macroprudential strategy outlines essential aspects in implementing macroprudential supervision in Liechtenstein, serving to promote the decision-making process, communication, and accountability to the public. According to the ESRB, this strategy should be reviewed and updated at least every 3 years. In line with this recommendation, the strategy was evaluated and slightly revised recently.

The FMA, as the competent authority for macroprudential supervision, is legally mandated to ensure financial stability according to Article 4 of the FMA Act. The FMA can apply various macroprudential instruments for this purpose. Additionally, the FMA serves as the Secretariat to the FSC and provides financial stability analyses to support its work. Based

on these assessments, the FSC proposes macroprudential measures by issuing recommendations and warnings to the government, the FMA or other domestic authorities. Decisions on implementing macroprudential instruments are made by the government or the FMA within the existing legislative framework.

On the European level, both the FMA and the MPF are represented in the European Systemic Risk Board (ESRB). Since 2017, Liechtenstein has been an active member of the ESRB. While both the MPF and the FMA are members of the General Board, the decision-making body of the ESRB, the technical work in its committees is carried out by FMA staff, in line with its role as the competent authority for macroprudential supervision in Liechtenstein. The ESRB can issue warnings and recommendations to member states or national supervisory authorities if significant risks to the financial system are identified. In this context, Liechtenstein's macroprudential authorities are diligently working on implementing the list of macroprudential recommendations and warnings to contribute to the financial system's stability both at the domestic and the European level.

In 2024, Liechtenstein joined the International Monetary Fund (IMF) to further strengthen its financial stability. This step helps addressing the absence of a domestic "lender of last resort" by strengthening Liechtenstein's financial safety net and also provides access to knowledge transfer and technical support, while also enhancing global visibility and reinforcing the country's international reputation. Membership improves the data basis for policymaking and ensures inclusion in IMF publications, supports closer bilateral relations with Switzerland, and contributes to the diversification of public financial assets and an increase in foreign currency reserves. Collectively, these measures provide a solid foundation for a resilient and forward-looking macroprudential policy framework.

33 ESRB recommendation ESRB / 2011 / 3

Banking sector (consolidated level)	2020	2021	2022	2023	2024	Q1 2025	Q2 2025
Total assets (CHF m)	94 501	100 255	106 834	102 640	107 908	108 821	105 826
Assets under management (CHF m)	338 251	423 791	411 349	439 372	503 714	510 250	500 145
Net new money inflows / outflows (CHF m)	17 653	37 455	38 216	31 393	17 626	9 344	7 754
CET1 ratio	21.8 %	21.6 %	19.7 %	20.4 %	19.0 %	19.3 %	19.4 %
Leverage ratio	7.8 %	8.1 %	7.1 %	7.6 %	7.3 %	7.5 %	7.6 %
Liquidity coverage ratio (LCR)	193.5 %	165.7 %	210.4 %	217.3 %	190.5 %	189.3 %	173.3 %
Net stable funding ratio (NSFR)			176.4 %	172.6 %	163.8 %	161.7 %	158.3 %
Cost-to-income ratio	77.5 %	75.0 %	76.7 %	76.1 %	79.4 %	75.3 %	76.2 %
Non-performing loans ratio	0.9 %	0.9 %	0.9 %	0.9 %	1.0 %	1.1 %	1.0 %

Insurance sector	2020	2021	2022	2023	2024
Total gross written premiums (CHF m)	5 540	5 608	5 523	5 735	5 681
Gross written premiums – life sector (CHF m)	2 281	1 900	1 784	2 340	2 362
Gross written premiums – non-life sector (CHF m)	3 183	3 637	3 678	3 374	3 292
Gross written premiums – reinsurance (CHF m)	76	72	60	22	27
Solvency Capital Requirement ratio (SCR ratio)	223.2 %	210.3 %	212.9 %	205.7 %	216.8 %
Return on equity	1.1 %	6.1 %	3.9 %	2.9 %	3.4 %
Net combined ratio	77.3 %	66.1 %	57.9 %	87.0 %	92.0 %
Total assets (CHF m)	35 495	35 702	31 339	29 297	27 287

Occupational pension system	2020	2021	2022	2023	2024
Retirement capital and technical provisions (CHF m)	6 926	7 318	7 622	7 882	8 083
Conversion rates (median)	5.8 %	5.7 %	5.6 %	5.7 %	5.6 %
Investment return (median)	3.7 %	6.6 %	– 12.5 %	5.9 %	7.5 %
Coverage ratio (median)	114.0 %	119.9 %	105.1 %	109.0 %	113.1 %

Funds sector	2020	2021	2022	2023	2024	Q1 2025	Q2 2025
Assets under management (total)	59 540	70 280	69 090	105 061	122 408	117 583	117 544
Assets under management UCITS	30 940	34 020	31 180	29 906	32 564	31 899	31 372
Assets under management IU	470	480	450	358	385	380	358
Assets under management AIF	28 130	35 780	37 470	74 797	89 458	90 264	85 853
Number of sub-funds	763	812	847	836	840	831	818

RRE = residential real estate

CRE = commercial real estate

LTV = loan-to-value

ETP = exception-to-policy loans

FTE = full-time equivalents

a = mortgages granted by O-SIs secured by properties in LI and CH

b = mortgages granted by all Liechtenstein banks secured by properties in Liechtenstein

c = average over the past 12 month

d = data will be revised as new information becomes available.

Real estate and mortgage sector	2023	2024	Q1 2025	Q2 2025
RRE and CRE – outstanding volumes (CHF m) ^a	12 432	13 216	13 416	13 152
Total RRE – outstanding volumes (CHF m) ^a	7 532	7 464	7 504	7 533
Total CRE – outstanding volumes (CHF m) ^a	4 900	5 752	5 913	5 620
New lending – CRE (CHF m) ^a	1 217	1 589	281	156
New lending – RRE (CHF m) ^a	625	665	172	132
Current LTV (RRE) ^a	55.4 %	55.0 %	54.7 %	54.6 %
Current LTV (CRE) ^a	59.8 %	60.2 %	59.6 %	59.7 %
ETP affordability – new lending ^b		27.0 %	31.7 %	29.2 %
ETP affordability amortisation – new lending ^b		1.2 %	1.9 %	2.3 %
ETP LTV – new lending ^b		1.2 %	1.0 %	0.6 %
ETP LTV amortisation – new lending ^b		0.3 %	0.7 %	0.1 %

Domestic economy	2020	2021	2022	2023	2024	Q1 2025	Q2 2025
Unemployment ratio ^{c*}	1.9 %	1.6 %	1.3 %	1.4 %	1.6 %	1.8 %	1.8 %
Number of employed people (FTE) [*]	34 292	35 077	36 096	36 471	36 433		
Real GDP growth (latest available estimates) ^{**}	– 5.3 %	18.0 %	– 5.5 %	4.7 %	0.3 %		
Credit-to-GDP gap (percentage points) ^d	– 10.3	– 11.7	– 12.2	– 10.1	– 10.8		
Private household indebtedness (% of trend GDP) ^d	112.6 %	109.8 %	107.6 %	108.2 %	105.5 %		
Budget surplus / deficit (% of GDP) [*]		2.5 %	3.3 %	4.4 %			
Gross public debt (in % of GDP) [*]	0.5 %	0.5 %	0.5 %	0.5 %			

RRE = residential real estate

CRE = commercial real estate

LTV = loan-to-value

ETP = exception-to-policy loans

FTE = full-time equivalents

a = mortgages granted by O-SiIs secured by properties in LI and CH

b = mortgages granted by all Liechtenstein banks secured by properties in Liechtenstein

c = average over the past 12 month

d = data will be revised as new information becomes available.

* Office of Statistics

** Liechtenstein Institute

LIST OF ABBREVIATIONS

ADC	Acquisition, development and construction	CRE	Commercial real estate
AHV	Public pension system	CRR	Capital Requirements Regulation
AI	Artificial intelligence	DDoS	Distributed denial of service
AIF	Alternative Investment Fund	DORA	Digital Operational Resilience Act
AIFMD	Alternative Investment Fund Managers Directive	DSCR	Debt-service-coverage-ratio
AMC	Asset management company	EBA	European Banking Authority
AML	Anti-money laundering	EBT	Earnings before taxes
AMLA	Anti-Money Laundering Authority	ECB	European Central Bank
ART	Asset-referenced tokens	EEA	European Economic Area
AuM	Assets under management	EIOPA	European Insurance and Occupational Pensions Authority
BCBS	Basel Committee on Banking Supervision	EMT	E-money token
BIS	Bank for International Settlements	ESA	European Supervisory Authority
BOP	Balance of Payments	EPU	Economic policy uncertainty
BPVG	Occupational Pension Act	ESG	Environmental, social and governance
CCyB	Countercyclical capital buffer	ESRB	European Systemic Risk Board
CET1	Common equity Tier 1	ETP	Exception-to-policy
CFT	Combating the financing of terrorism	ETV	Exposure-to-value
CHF	Swiss franc	EU	European Union
CIR	Cost-income-ratio	FINREPL	Local FINREP reporting framework
CRD	Capital Requirements Directive	FMA	Financial Market Authority
		FSC	Financial Stability Council

GDP	Gross domestic product	MPF	Ministry for General Government Affairs and Finance
GFI	Geopolitical fragmentation index	MREL	Minimum requirements of own funds and eligible liabilities
GWP	Gross written premium	NCA	National competent authority
ICT	Information and communication technology	NGFS	Network for Greening the Financial System
IIP	International investment position	NPL	Non-performing loans
IMF	International Monetary Fund	NSFR	Net stable funding ratio
IRB	Internal ratings-based	OECD	Organisation for Economic Co-operation and Development
IU	"Investmentunternehmen"	OFAC	US Treasury's Office of Foreign Assets Control
LAA	Loss absorption amount	O-SII	Other systemically important institution
LCR	Liquidity coverage ratio	q-o-q	Quarter-on-quarter
LSTI (-O)	Loan-service-to-income (at origination)	R&D	Research and development
LTI	Loan-to-income	RCA	Recapitalisation amount
LTV	Loan-to-value	RoA	Return on assets
ManCos	Management companies	RoE	Return on equity
MiCAR	Markets in Crypto-Assets Regulation	RRE	Residential real estate
MiFID	Markets in Financial Instruments Directive	SA	Standardised approach
MONEYVAL	Committee of experts on the evaluation of anti-money laundering measures and the financing of terrorism	SBPVG	State Occupational Pensions Act

SCR	Solvency capital requirement
SNB	Swiss National Bank
SREP	Supervisory review and evaluation process
SyRB	Systemic risk buffer
TCSP	Trust and company service providers
TrHG	Professional Trustees Act
TVTG	Tokens and Trusted Technologies Act
UCITS	Undertakings for collective investments in transferable securities
WEO	World Economic Outlook
WTO	World Trade Organization
y-o-y	year-on-year
3m-o-3m	3-months-on-3-months

Publisher and Editor

Financial Market Authority Liechtenstein
Landstrasse 109
PO Box 279
9490 Vaduz
Liechtenstein

Telephone + 423 236 73 73

Fax + 423 236 73 74

info@fma-li.li

www.fma-li.li

Editorial board

Mario Gassner, Martin Gächter, Sophia Döme

Main authors

Sophia Döme, Martin Gächter, Elias Hasler, Martin Meier

Contributions

Andreas Brunhart, Martin Geiger, Peter Jedlicka,
Julia Harrer, Julia Klingler, Zora Walch

Editing

Lukas Müller

Concept and Design

Leone Ming Est. and digicube AG

© Liechtenstein Financial Market Authority, 2025.

All rights reserved.