Sovereign & Public Sector

24 May 2024



Grand Duchy of Luxembourg

Rating report

Rating rationale

Wealthy economy with solid fundamentals: Luxembourg benefits from its high wealth levels and competitive economy, supported by strong labour productivity and high value-added sectors such as financial services and information and communication technology. These factors, combined with forceful policy support, contribute to Luxembourg's economic resilience as demonstrated throughout recent crises and its robust medium-term growth outlook.

Sound public finances and ample fiscal buffers: Luxembourg's public finances benefit from very low public debt and substantial fiscal space, providing ample buffers to face future shocks driven by consistent fiscal surpluses before the pandemic. Comprehensive fiscal support resulted in a mild weakening of the budget balance, while permanent budgetary adjustments and ambitious public investment commitments are set to weigh on the medium-term fiscal outlook.

Strong external position: Euro area membership, consistent current account surpluses and large external creditor position mitigate risks linked to Luxembourg's small, open economy and volatile net international position.

Rating challenges include: i) a small, open economy that is exposed to developments in global taxation frameworks and international financial markets; ii) heightened financial vulnerabilities linked to the evolution of the real estate sector and elevated private debt levels amid tighter monetary policy; and iii) long-term fiscal pressures linked to population ageing and generous social security systems.

Figure 1: Luxembourg's sovereign-rating drivers

Risk pillars		Quantitative		Reserve Political currency* risk**		Qualitative***	Final	
		Weight	Weight Indicative rating Notches Notches		Notches	rating		
Dome risk	stic economic	35%	aa-			0		
Public finance risk		20%	aa+		Luxembourg	0		
Exterr	External economic risk		aa+	EUR		0		
Financ	Financial stability risk		aaa	EUR		- 1/3		
	Environmental factors	5%	bbb+	[+1] [-0]	[-0]	0	AAA	
ESG risk	Social factors	7.5%	a-			0		
Hok	Governance factors	12.5%	aaa			0		
Sovereign Quantitative Model		aaa			0			
Additi	ional consideration					0		

^{*}The reserve-currency quantitative adjustment applies to currencies in the IMF's Special Drawing Rights (SDR) basket.

Foreign currency

Long-term issuer rating/Outlook

AAA/Stable

Senior unsecured debt

AAA/Stable

Short-term issuer rating/Outlook

S-1+/Stable

Local currency

Long-term issuer rating/Outlook

AAA/Stable

Senior unsecured debt

AAA/Stable

Short-term issuer rating/Outlook

S-1+/Stable

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^{**}The political-risk quantitative adjustment is based on the World Bank's Political Stability & Absence of Violence/Terrorism index.

^{***}The qualitative scorecard analyst adjustments, capped at one notch per rating pillar, are weighted equally with an aggregate adjustment rounded to the nearest integer. For details, please see Scope's Sovereign Rating Methodology. Source: Scope Ratings.



Credit strengths and challenges

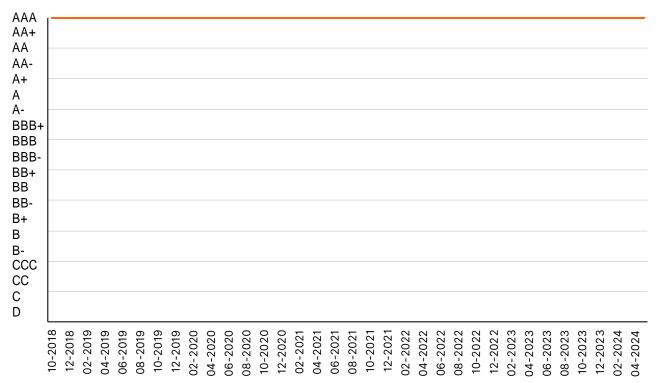
Credit strengths	Credit challenges
Wealthy economy with solid fundamentals	Exposure to developments in global taxation and financial markets
Sound public finances and robust fiscal framework	Heightened vulnerabilities in the real estate sector
Strong external position	Long-term fiscal pressures from an ageing population
Very strong institutional and political stability	

Outlook and rating triggers

The Stable Outlook reflects Scope's view that risks to the ratings are balanced.

Positive rating-change drivers	Negative rating-change drivers
• N/A	Growth outlook deteriorates substantially
	Fiscal fundamentals weaken significantly
	 Vulnerabilities in the financial system threaten macro-economic stability

Figure 2: Rating history¹



Foreign-currency long-term issuer rating. Positive/Negative Outlooks are treated with a +/-0.33-notch adjustment. Credit Watch positive/negative with a +/-0.67-notch adjustment. Source: Scope Ratings.

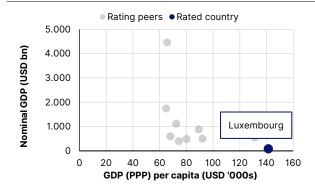


Domestic economic risk

Overview of Scope's assessments of Luxembourg's Domestic Economic Risk

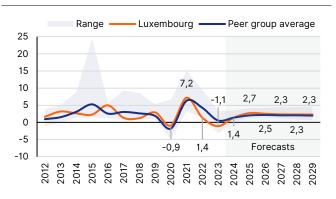
SQM* indicative rating	Analytical component	Assessment	Notch adjustment	Rationale
	Growth potential and outlook	Strong	+1/3	High growth potential, supported by sound economic policies and high value-added sectors
aa-	Monetary policy framework	Neutral	0	ECB is a highly credible and effective central bank
	Macroeconomic stability and sustainability Weak		-1/3	Small, open economy that is subject to volatility; exposed to changes in global tax environment

Figure 3: Nominal GDP and GDP per capita



Source: IMF World Economic Outlook (WEO), Scope Ratings

Figure 4: Real GDP growth, %



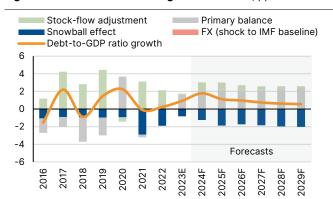
Source: IMF WEO, Scope Ratings forecasts

Public finance risk

Overview of Scope's assessments of Luxembourg's Public Finance Risk

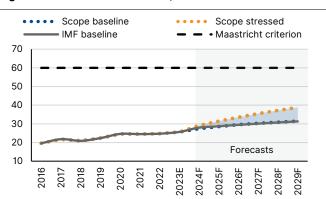
SQM indicative rating	Analytical component	Assessment	Notch adjustment	Rationale
aa+	Fiscal policy framework	Neutral	0	Effective fiscal policy framework with track record of conservative budgetary management
	Long-term debt trajectory	Neutral	0	Very low debt levels; moderately rising debt trajectory over the forecast horizon
	Debt profile and market access	Neutral	0	Favourable debt profile with a low interest payment burden

Figure 5: Contributions to change in debt levels, pps of GDP



Source: IMF WEO, Scope Ratings forecasts

Figure 6: Debt-to-GDP forecasts, % of GDP



Source: IMF WEO, Scope Ratings forecasts

^{*}Sovereign Quantitative Model.

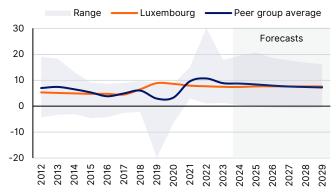


External economic risk

Overview of Scope's assessments of Luxembourg's External Economic Risk

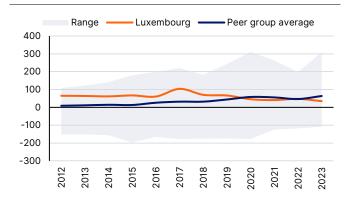
SQM indicative rating	Analytical component	Assessment	Notch adjustment	Rationale
aa+	Current account resilience	Neutral	0	Strong current account surpluses; reliance on financial service exports; sensitive to dividend policies vis-à-vis foreign investors
	External debt structure	Neutral	0	High external debt levels offset by external assets with a net international creditor position
	Resilience to short-term external shocks		0	Euro-area membership mitigates risks from strong integration with global financial markets

Figure 7: Current-account balance, % of GDP



Source: IMF WEO forecasts, Scope Ratings

Figure 8: Net international investment position (NIIP), % GDP



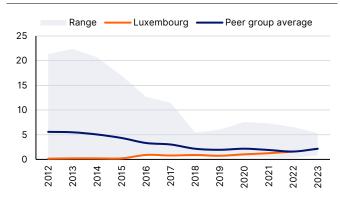
Source: IMF, Scope Ratings

Financial stability risk

Overview of Scope's assessments of Luxembourg's Financial Stability Risk

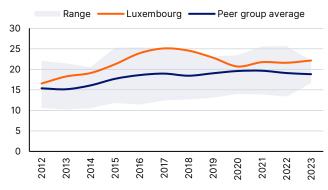
SQM indicative rating	Analytical component	Assessment	Notch adjustment	Rationale
aaa	Banking sector performance	Neutral	0	Efficient banking sector with large capital buffers and strong asset quality but some profitability pressures
	Financial sector oversight and governance	Neutral	0	Efficient, credible oversight frameworks under the Commission de Surveillance du Secteur Financier, the Central Bank of Luxembourg and the ECB
	Financial imbalances Weak		-1/3	Imbalances in the housing sector due to demand and supply mismatches; high private debt levels mitigated by high net household wealth

Figure 9: Non-performing loans (NPLs), % of total loans



Source: World Bank (WB), Scope Ratings

Figure 10: Tier 1 capital, % of risk-weighted assets



Source: IMF, Scope Ratings

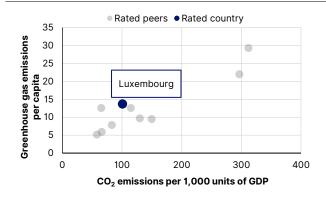


Environmental, Social and Governance (ESG) risk

Overview of Scope's assessments of Luxembourg's ESG Risk

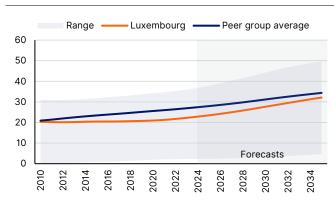
SQM indicative rating	Analytical component	Assessment	Notch adjustment	Rationale
aaa	Environmental factors	Neutral	0	Ambitious climate goals with accelerating climate policy momentum; limited share of renewables; rapid population growth poses challenges
	Social factors	Neutral	0	Strong social outcomes, supported by generous social systems; increasing women participation rates; poverty and inequalities are increasing
	Governance factors	Neutral	0	Strong democratic institutions and stable political landscape; policy continuity expected following recent elections

Figure 11: CO₂ emissions per GDP, mtCO₂e



Source: European Commission (EC), Scope Ratings

Figure 12: Old-age dependency ratio, %



Source: United Nations (UN), Scope Ratings

Reserve-currency adjustment

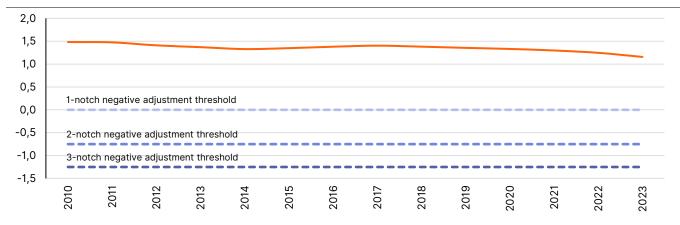
Figure 13: IMF SDR basket and Scope reserve-currency adjustment

Currency	U.S. dollar	Euro	Chinese yuan	Japanese yen	Pound sterling	Other
IMF SDR basket weights, %	43.4	29.3	12.3	7.6	7.4	0.0
Positive adjustment, notches	3	1	1	1	1	0

Source: IMF, Scope Ratings

Political-risk adjustment

Figure 14: WB Political Stability & Absence of Violence/Terrorism index, Luxembourg, 3-year moving average



Source: WB, Scope Ratings

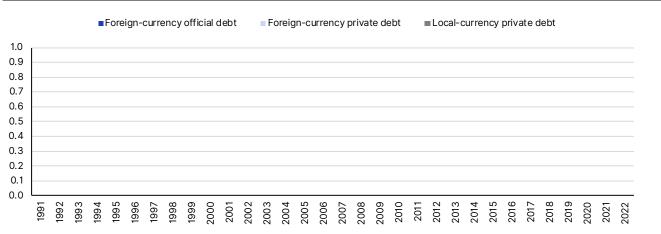


Additional considerations

No adjustment was applied to the rating from additional considerations.

Appendix I. Sovereign default history

Figure 15: Sovereign default history, USD m



Depicted private-debt defaults may not always constitute a credit event under <u>Scope's credit-rating definitions</u>. Source: Bank of Canada–Bank of England Sovereign Default Database, Scope Ratings.

Appendix II. Rating peers

Rating peers are related to sovereigns with an indicative rating in the same rating category or adjacent categories, as assigned by Scope's sovereign quantitative model after accounting for methodological reserve-currency and political-risk adjustments.



^{*}Select publicly-rated sovereigns only; the full sample of sovereign-rating peers may be larger.

Appendix III. Economic development and default indicators

IMF Development Classification Advanced economy

5y USD CDS spread (bp) N/A



Appendix IV. Statistical table for selected SQM indicators

This table presents a selection of the indicators (24 out of 30 – with the governance indicator reflecting a composite of five indicators) used in Scope's quantitative model, in line with Scope's Sovereign Rating Methodology. The metrics and sources for the data presented here ensure comparability across global country peers and may therefore differ from data from national and other select international statistical series.

Pillar	Core variable	Source	2018	2019	2020	2021	2022	2023
ліс	GDP per capita (PPP), USD '000s	IMF	118.5	121.6	119.7	132.3	141.2	141.4
onor	Nominal GDP, USD bn	IMF	71	70	74	86	82	86
Public Domestic Economic	Real growth, %	IMF	1.2	2.9	-0.9	7.2	1.4	-1.1
	CPI inflation, %	IMF	2.0	1.7	0.0	3.5	8.2	2.9
Dor	Unemployment rate, %	WB	5.6	5.6	6.8	5.3	4.6	5.3
, φ	Public debt, % of GDP	IMF	20.9	22.4	24.6	24.5	24.7	25.7
ublic	Net interest payment, % of government revenue	IMF	-0.5	-0.5	-0.5	-0.6	-0.7	-0.6
₾ 這	Primary balance, % of GDP	IMF	2.8	2.0	-3.7	0.3	-0.6	-1.7
le je	Current-account balance, % of GDP	IMF	6.5	8.9	8.6	7.9	7.7	7.4
External Economic	Total reserves, months of imports	WB	0.0	0.0	0.0	0.1	0.1	-
ШÜ	NIIP, % of GDP	IMF	70.2	66.4	45.6	40.8	47.6	-
.E ≥	NPL ratio, % of total loans	IMF	0.9	0.7	1.0	1.3	1.6	-
Financial Stability	Tier 1 ratio, % of risk-weighted assets	IMF	24.6	22.8	20.7	21.8	21.6	22.2
ij ty	Credit to the private sector, % of GDP	WB	105.6	109.0	110.2	104.0	101.5	-
	CO. per EUR 1,000 of GDP, mtCO.e	EC	136.8	136.2	114.7	116.5	100.9	-
	Income share of bottom 50%, %	WID	19.2	19.9	19.5	20.6	20.7	-
ပ္	Labour-force participation rate, %	WB	71.8	72.8	72.9	74.1	74.1	-
ESG	Old-age dependency ratio, %	UN	20.6	20.8	21.0	21.3	21.7	22.3
	Composite governance indicators*	WB	1.8	1.7	1.8	1.7	1.8	-
	Political stability, index	WB	1.3	1.3	1.2	1.2	1.1	-

^{*}Average of the following five World Bank Worldwide Governance Indicators: Control of Corruption, Voice and Accountability, Rule of Law, Government Effectiveness, Regulatory Quality.

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