



The role of public finances in sovereign ratings

An application to Latvia (A3 stable)

Access is everything™



Expertise

A comprehensive view of the global markets through our ratings and research.



Credibility

Over 100 years of experience delivering forward-looking, independent, stable and transparent opinions.



Engagement

Meaningful interactions across multiple channels between our analysts and market participants.



Agenda

1. Moody's Methodology & Rating Process
2. Economy, institutions and event risk
3. Public finances
4. Latvia's Credit Rating – History and peer comparison
5. Appendix

1

Moody's Methodology &
Rating Process

Ratings Measure Credit Risk

- » **Ratings** are forward-looking opinions of expected loss for private sector investors
- » **Outlooks** are opinions regarding the likely rating direction over the medium term
 - **Positive** (POS), **Negative** (NEG), Stable (STA), Review for Upgrade/Downgrade (RUR+/RUR-) and Developing (DEV)
- » We use **clearly defined symbols** that provide a common language globally
- » Opinions rely on **both quantitative and qualitative analysis**
- » Main vehicle of communication: Press Releases, Credit Opinions and Credit Analysis publications



Moody's Sovereign Methodology

Sovereign Rating Methodology is Based on Four Analytical Factors

Economic Strength

How strong is the economic structure?

Reflects a **country's shock-absorption capacity**. The capacity of the sovereign to generate revenue and service debt over the medium term relies upon fostering economic growth and prosperity.

INDICATORS / SCORES

- 1) **growth dynamics** (average real GDP growth, MAD volatility)
- 2) **scale of the economy** (nominal GDP)
- 3) **wealth** (GDP per capita, PPP)

Institutions and Governance Strength

How robust are the institutions and how predictable are the policies?

Considers whether the country's institutional features are **conducive to supporting the sovereign's ability and willingness to repay its debt**.

INDICATORS / SCORES

- 1) **quality of institutions** (qualitative assessment)
- 2) **policy effectiveness** (qualitative assessment)

Fiscal Strength

How does the debt burden compare with the government's resource mobilization capacity?

Captures the overall health of government finances. Assesses a sovereign's ability to deploy resources to face current and expected liabilities.

INDICATORS / SCORES

- 1) **debt burden** (debt-to-GDP, debt-to-revenues)
- 2) **debt affordability** (interest payments-to-GDP, interest payments-to-revenue)

Susceptibility to Event Risk

What is the risk of a direct and sudden threat to the fundamental credit profile?

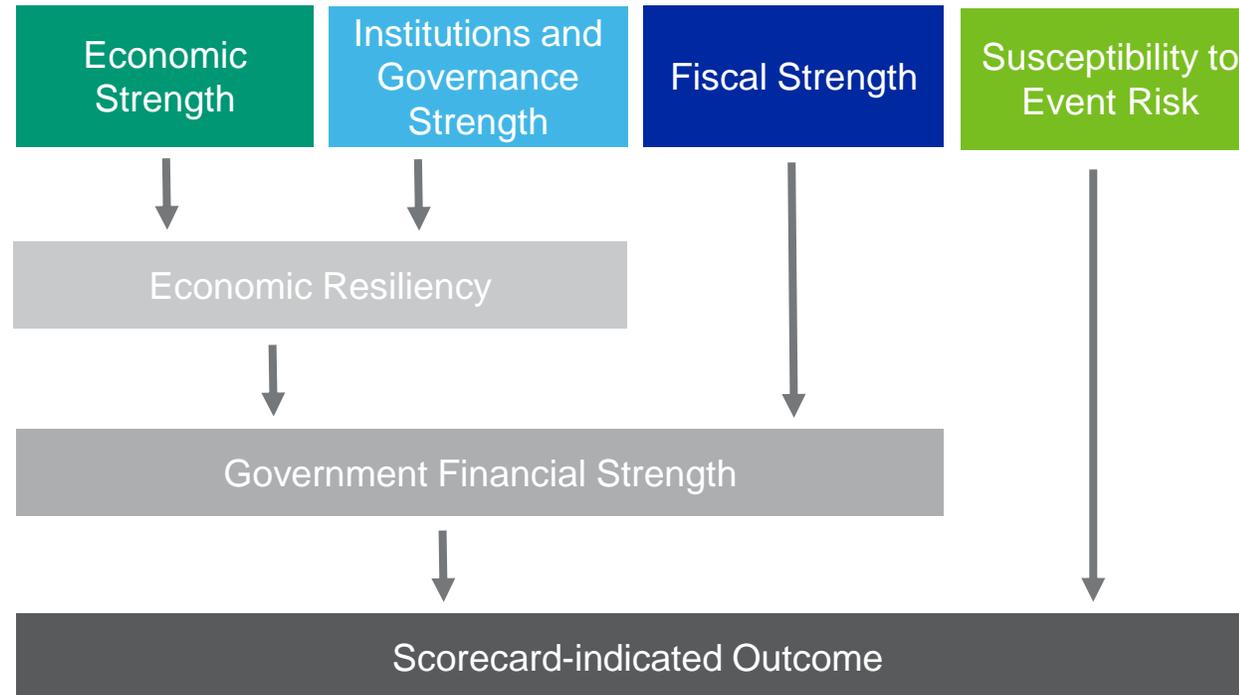
Denotes **the risk that sudden, extreme, events may severely strain public finances**, thus sharply increasing the sovereign's probability of default.

INDICATORS / SCORES

- 1) **political risk** (qual.)
- 2) **government liquidity risk** (qual.)
- 3) **banking sector risk** (banking sector size, average bca)
- 4) **external vulnerability risk** (qual.)

Approach to Assessing Sovereign Credit Quality

Scorecard Outcome is Only a Starting Point for Rating Assignment



2

Economy, institutions and
event risk

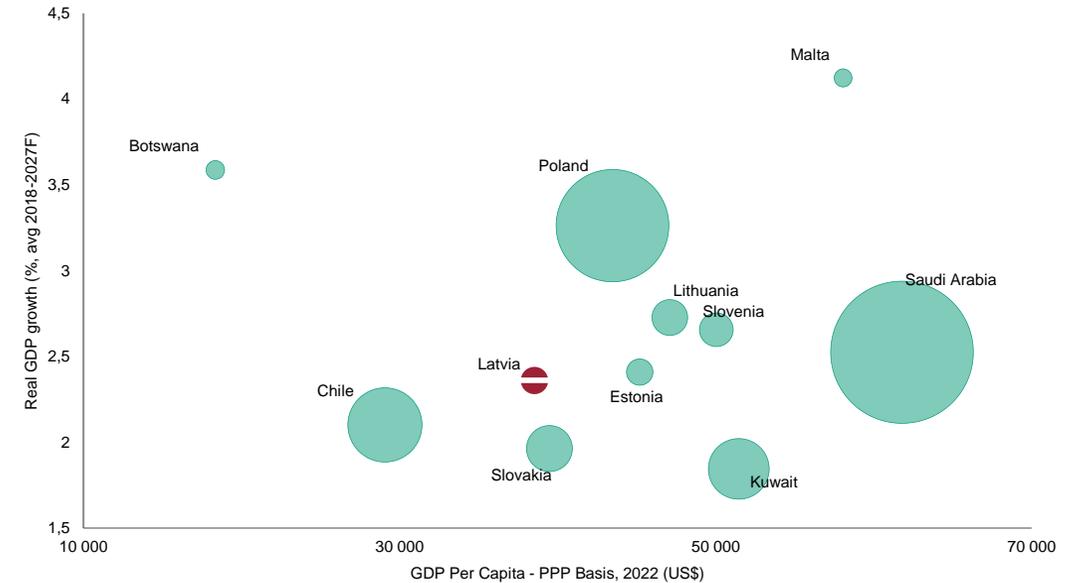
Economic Strength: “baa2”

Latvia is a small open economy mainly reliant on goods exports

- » With nominal GDP of around \$41 billion in 2022, Latvia's economy is the **4th smallest in the EU**.
- » The country's small size and the economy's very open nature make Latvia **vulnerable to economic shocks**. Record-high inflation has hit the economy in 2022, ongoing challenge despite some easing as energy prices decline.
- » Moreover, **population decline** remain a significant long-term challenge for the labour market and the economy.
- » However, these risks are balanced by the economy's demonstrated **flexibility** and **adaptability**.

Latvia's GDP trend growth is in line with global peers

Bubble size represents the size of nominal GDP



Note: Size of the bubble = Nominal GDP (US\$ billion) in 2022
Sources: National authorities, Moody's Investors Service

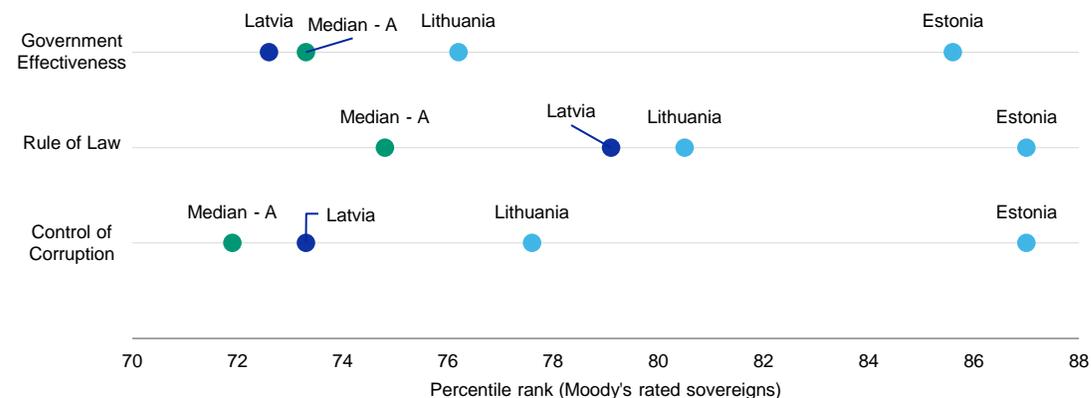
Institutions and Governance Strength: “a2”

Integration into Western institutional structures continues to support institutional environment

- » Latvia’s “a2” institutions and governance strength score reflects the country’s **membership of the EU and the euro area** as well as the government’s track record of effectively reacting to **major policy challenges**.
- » The strength of Latvia’s institutions is also reflected in its comparatively **high scores** on the **World Bank’s Worldwide Governance Indicators** for government effectiveness and rule of law.

Latvia scores broadly in line with rated peers on government effectiveness and rule of law

WGI scores, percentile rank



Sources: Worldwide Governance Indicators, Moody's Investors Service

Susceptibility to Event Risk: “ba”

The Russian invasion of Ukraine has increased geopolitical risks for Latvia

- » Susceptibility to event risk evaluates a country’s vulnerability to the risk that sudden events may severely strain public finances, thus increasing the country’s probability of default.
- » Such risks include political, government liquidity, banking sector and external vulnerability risks.
- » Latvia’s susceptibility to event risk reflects the **political risk** driven by the Russian invasion in Ukraine (Ca stable) that marks a paradigm shift in the post-Cold War European security order.

3

Public finances

Fiscal Strength: the “third pillar”

Economic resiliency and fiscal strength determine a government’s financial strength

Exhibit 10

Government financial strength

		Fiscal Strength																					
		aaa	aa1	aa2	aa3	a1	a2	a3	baa1	baa2	baa3	ba1	ba2	ba3	b1	b2	b3	caa1	caa2	caa3	ca		
Economic Resiliency	aaa	aaa	aa1	aa2	aa3	a1	a2	a3	baa1	baa2	baa3	ba1	ba2	ba3	b1	b2	b3	caa1	caa2	caa3	ca		
	aa1	aa1	aa1	aa1	aa1	aa1	aa1	aa1	aa2	aa3													
	aa2	aa1	aa1	aa2	aa3	a1	a1	a1	a1	a1													
	aa3	aa2	aa2	aa2	aa2	aa3	a1	a2	a2														
	a1	aa2	aa2	aa3	aa3	aa3	aa3	a1	a1	a1	a1	a2	a2	a2	a2	a3	a3	a3	a3	a3	baa1	baa1	
	a2	aa3	aa3	aa3	a1	a1	a1	a1	a2	a2	a2	a2	a3	a3	a3	a3	baa1	baa1	baa1	baa1	baa1	baa2	
	a3	aa3	a1	a1	a1	a1	a2	a2	a2	a2	a3	a3	a3	a3	baa1	baa1	baa1	baa1	baa2	baa2	baa2	baa2	
	baa1	a1	a1	a2	a2	a2	a2	a3	a3	a3	a3	baa1	baa1	baa1	baa1	baa2	baa2	baa2	baa2	baa2	baa3	baa3	
	baa2	a1	a1	a2	a2	a2	a3	a3	a3	baa1	baa1	baa1	baa2	baa2	baa2	baa3	baa3	baa3	baa3	baa3	ba1	ba1	ba1
	baa3	a1	a2	a2	a2	a3	a3	a3	baa1	baa1	baa1	baa2	baa2	baa3	ba1	ba1	ba1						
	ba1	a2	a2	a3	a3	a3	baa1	baa1	baa1	baa2	baa2	baa2	baa3	ba2	ba2	ba2							
	ba2	a2	a3	a3	a3	baa1	baa1	baa1	baa2	baa2	baa2	baa3	ba2	ba2	ba2								
	ba3	baa1	baa1	baa2	baa2	baa2	baa2	baa3	baa3	baa3	baa3	ba1	ba1	ba1	ba1	ba2	ba2	ba2	ba2	ba2	ba3	ba3	ba3
b1	baa2	baa2	baa2	baa2	baa3	baa3	baa3	baa3	baa3	ba1	ba1	ba1	ba1	ba2	ba2	ba2	ba2	ba3	ba3	ba3	ba3	ba3	
b2	baa2	baa2	baa3	baa3	baa3	baa3	baa3	baa3	ba1	ba1	ba1	ba1	ba2	ba2	ba2	ba2	ba3	ba3	ba3	ba3	b1	b1	
b3	baa3	baa3	baa3	ba1	ba1	ba1	ba1	ba2	ba2	ba2	ba2	ba2	ba3	ba3	ba3	ba3	ba3	b1	b1	b1	b1	b2	
caa1	ba2	ba2	ba2	ba2	ba3	ba3	ba3	ba3	ba3	ba3	b1	b2	b2	b2									
caa2	ba3	ba3	ba3	ba3	ba3	ba3	b1	b2	b3														
caa3	ba3	b1	b1	b1	b1	b1	b1	b1	b1	b2	b2	b2	b2	b2	b2	b3							
ca	b1	b1	b1	b2	b3	b3	b3	b3	b3	b3	caa1	caa1	caa1	caa1	caa1								

Source: Moody's Investors Service

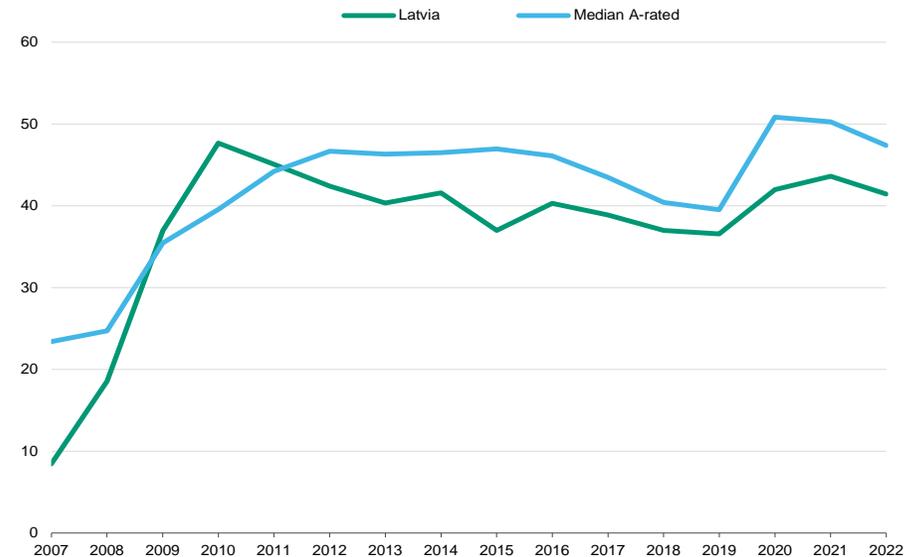
Fiscal Strength: “aa3”

Debt-to-GDP ratio to remain below the median of single-A rated peers.

- » Latvia’s “aa3” score for fiscal strength reflects the government's **moderate debt burden** and very strong **debt affordability metrics**.
- » Latvia’s ability to issue in an international currency is a key credit strength.
- » That said, affordability ratios are expected to weaken as monetary policy continues to normalize.

Debt burden is below A-rated peers

General government debt as % of GDP



Sources: Eurostat, IMF, Moody's Investors Service

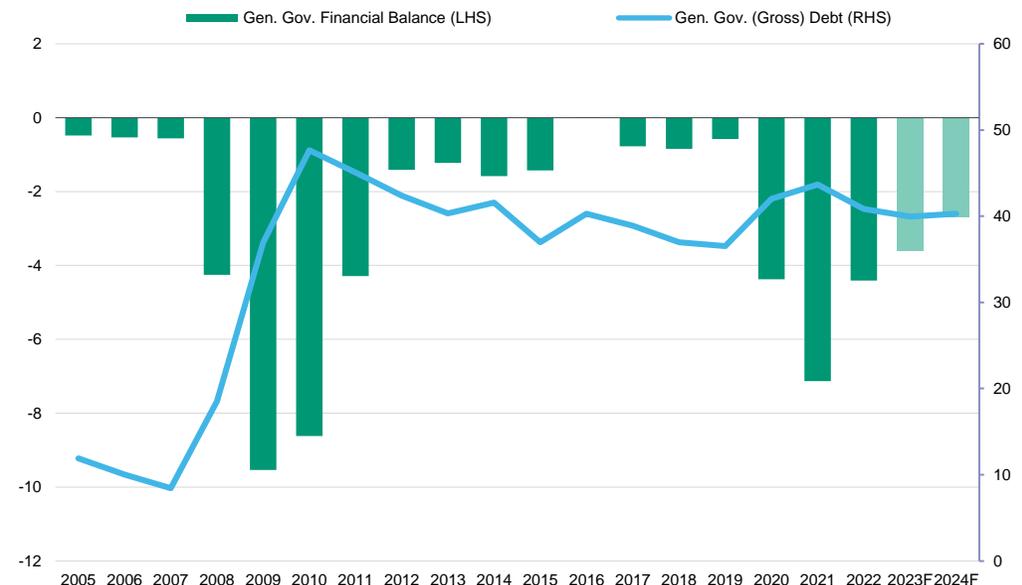
Fiscal Strength: “aa3”

Limited scarring from the pandemic and the energy crisis.

- » Following almost a decade of very low deficits, large shock from pandemic and energy crisis on the general government balance.
- » However, relatively limited impact on the debt burden due to high nominal GDP growth.
- » Contrary to the Great recession, the pandemic and the energy crisis have left limited scarring on Latvia’s public finances.

Debt burden is returning to pre-pandemic levels

General government balance debt as % of GDP



Sources: Eurostat, Moody's Investors Service

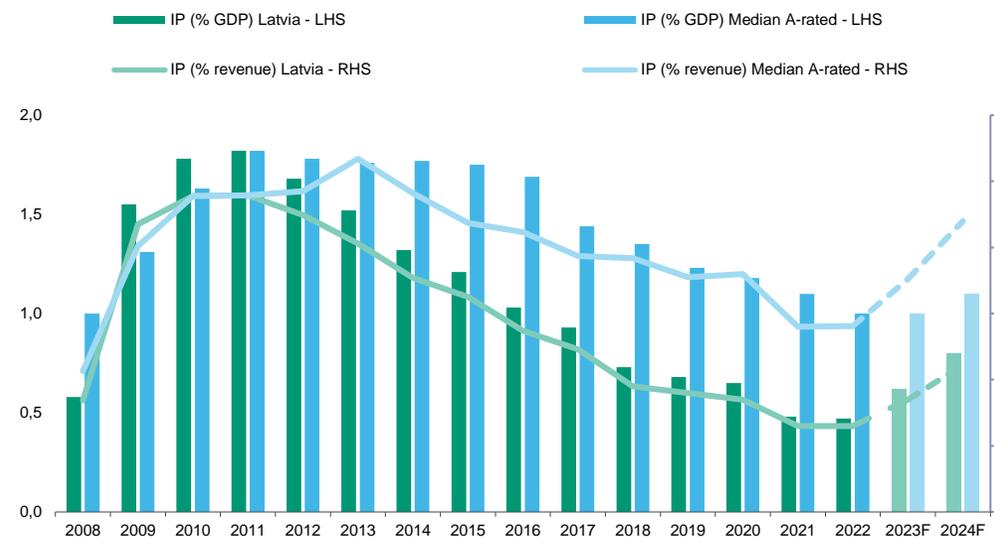
Fiscal Strength: “aa3”

Tightening financial conditions to only gradually weaken debt affordability.

- » Cost of debt has declined substantially since 2012, and significantly more in Latvia compared to rating peers.
- » Turn in the monetary policy cycle has already led to a tightening in financing conditions, which we expect to continue in the coming years.
- » However, we expect Latvia’s debt affordability to remain strong given the long average maturity (>7 years).

Cost of debt is rising after a decade of decline

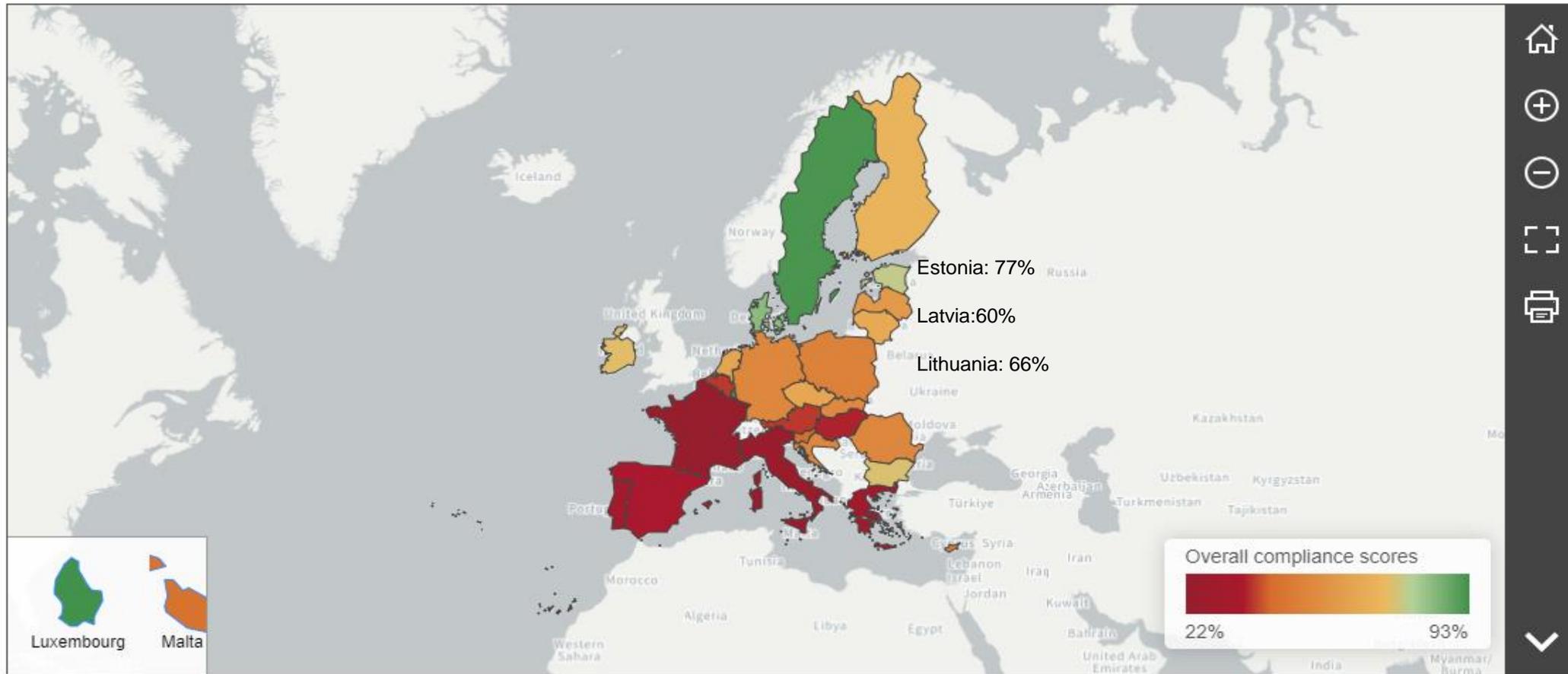
Interest payments as % of GDP and revenues



Sources: Eurostat, Moody's Investors Service

Fiscal Strength: “aa3”

Strong fiscal effectiveness puts compliance above the EU’s average (50%).



Sources: European Fiscal Board Compliance Tracker

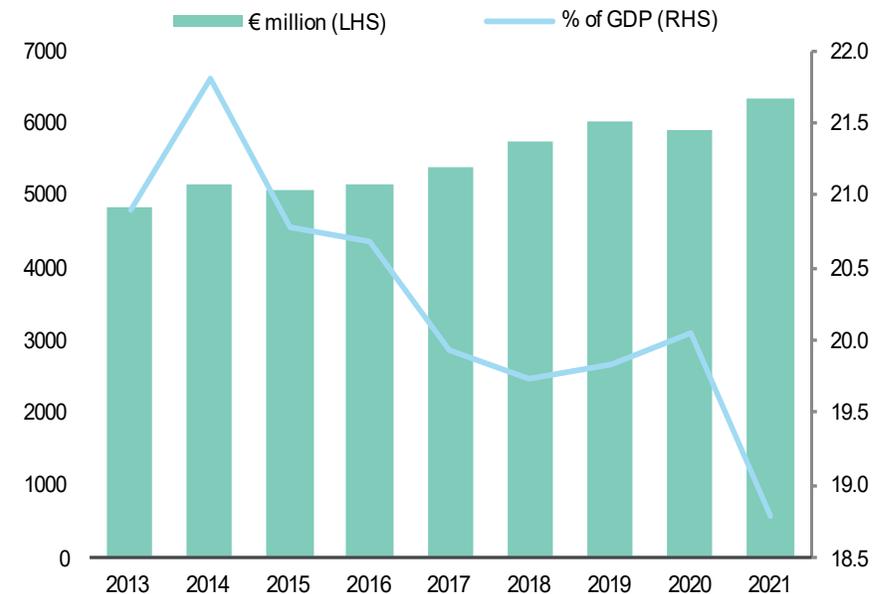
Fiscal Strength: “aa3”

Relatively high debt of State-owned enterprises are a constraint.

- » SOE debt amounted to 18.8% of GDP in 2021, down from a peak of 21.8% of GDP in 2014.
- » This relates primarily to public utilities (Latvenergo) and transport company (Latvian Railways). There are also around 300 companies, mostly local utilities, with low debt (less than €50 million each).
- » For this reason, we apply a -1 adjustment.

SOE debt is falling in relative terms, but remains elevated

Liabilities of government-controlled entities outside general government as % of GDP, non-financial activities



Sources: Eurostat, Moody's Investors Service

Fiscal Strength: “aa3”

Peer Comparison

Peer comparison table factor 3: Fiscal strength

	Latvia	aa3 Median	Korea	Bulgaria	Czech Republic	Lithuania	Sweden	Slovakia
	A3/STA		Aa2/STA	Baa1/STA	Aa3/NEG	A2/STA	Aaa/STA	A2/NEG
Final score	aa3		aa3	aa3	aa3	aa2	aa2	a1
Initial score	aa2		aa3	aa2	aa3	aa2	aa2	a1
Gen. gov. debt (% of GDP)	40.8	40.8	49.4	22.9	44.1	38.4	33.0	57.8
Gen. gov. debt (% of revenue)	114.0	114.0	172.8	59.4	107.7	107.2	67.5	143.6
Gen. gov. interest payments (% of GDP)	0.5	0.5	1.0	0.5	1.2	0.4	0.5	1.0
Gen. gov. int. payments (% of revenue)	1.3	2.8	3.5	1.2	2.8	1.0	1.0	2.6

Sources: National authorities, IMF, Moody's Investors Service

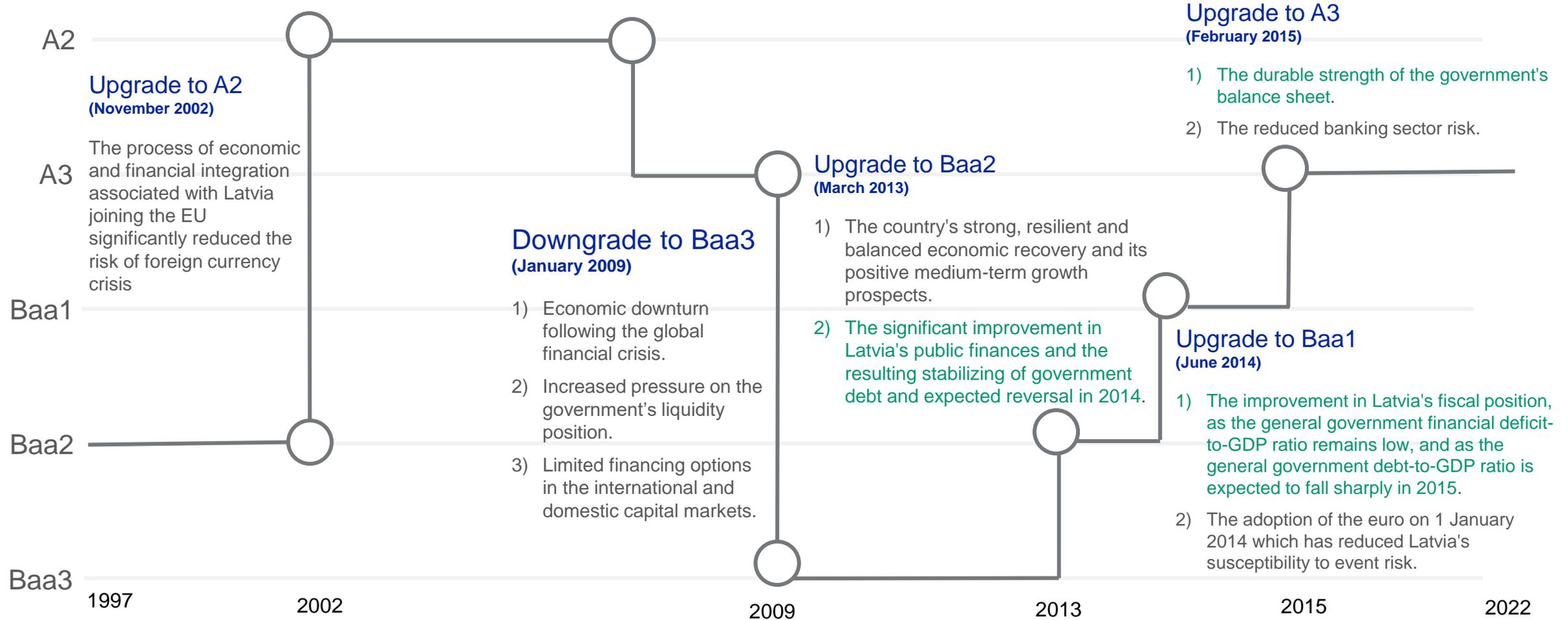
- » Although the pandemic led to a rise in debt from 2019 to 2021, we expect Latvia's debt-to-GDP ratio to remain broadly in line with the median of single-A rated peers.
- » The country's comparatively high level of debt related to state owned enterprises (SOEs) weighs on our assessment of fiscal strength, explaining the one-notch gap difference with the scorecard-indicated outcome of “aa2”.
- » Latvia's fiscal strength is in line with Australia (Aaa stable) and Bulgaria (Baa1 stable).

4

Latvia's Credit Rating – History and peer Comparison

Bringing it all together

Latvia's rating has been raised by three notches since 2009



Latvia's peer group

Ratings Provide a Relative Rank-ordering

- » Peer comparisons are important in rating committees, ratings provide a relative rank-ordering
- » Latvia's closest peers are sovereigns with similar credit profiles in the region but also globally
- » Relative to global peers, Latvia has stronger institutions, but higher geopolitical risk.

Regional Peers	Global Peers
<ul style="list-style-type: none">» Lithuania (A2 stable)» Poland (A2 stable)» Slovenia (A3 stable)» Spain (Baa1 stable)» Bulgaria (Baa1 stable)	<ul style="list-style-type: none">» Bermuda (A2 stable)» Botswana (A3 stable)» Malaysia (A3 stable)» Peru (Baa1 negative)» Thailand (Baa1 stable)

Peer Comparison with Similarly-rated Sovereigns

Detailed Peer Comparison

	Year	Latvia	Lithuania	Slovenia	Malta	Poland	Bulgaria	A3 Median	Central & Eastern Europe and CIS Median
Rating/outlook		A3/STA	A2/STA	A3/STA	A2/STA	A2/STA	Baa1/STA	A3	Ba1
Scorecard-indicated outcome		A1- A3	Aa3 - A2	A1- A3	A1- A3	A1- A3	A2 - Baa1	A2 - Baa1	Baa3 - Ba2
Factor 1		baa2	baa1	baa1	baa1	a1	baa3	baa1	baa3
Nominal GDP (\$ bn)	2022	41.1	70.2	62.0	17.7	690.7	88.9	51.6	70.2
GDP per capita (PPP, Intl\$)	2022	38,545	47,107	50,059	58,072	43,480	30,216	36,468	30,216
Avg. real GDP (% change)	2018 - 2027F	2.4	2.7	2.7	4.1	3.3	2.8	3.1	2.9
MAD Volatility in real GDP growth (ppts)	2013 - 2022	0.7	1.1	1.3	2.1	1.1	0.8	1.0	1.2
Factor 2		a2	a1	a2	a3	a3	baa1	a2	baa3
Quality of legislative & executive institutions	Latest available	a	a	a	baa	a	baa	a	ba
Strength of civil society & judiciary	Latest available	a	a	a	baa	ba	ba	a	ba
Fiscal policy effectiveness	Latest available	a	aa	a	a	a	a	a	baa
Monetary & macro policy effectiveness	Latest available	a	a	a	a	a	a	a	baa
Gen. gov. fiscal balance (% of GDP)	2022 - 2024F	-3.6	-1.8	-3.3	-5.2	-4.2	-2.9	-3.5	-3.2
Average inflation (% change)	2018 - 2027F	4.6	5.0	3.3	2.5	5.2	4.5	3.9	5.2
Volatility of inflation (ppts)	2013 - 2022	5.2	5.6	2.7	1.6	4.1	4.2	2.9	4.1
Factor 3		aa3	aa2	a1	a1	a2	aa3	aa3	a3
Gen. gov. debt (% of GDP)	2022	40.8	38.4	69.9	53.4	49.1	22.9	50.5	44.1
Gen. gov. debt (% of revenue)	2022	114.0	107.2	164.7	152.2	123.4	59.4	139.3	138.9
Gen. gov. interest payments (% of revenue)	2022	1.3	1.0	2.5	2.8	3.9	1.2	2.7	3.5
Gen. gov. interest payments (% of GDP)	2022	0.5	0.4	1.1	1.0	1.6	0.5	1.0	1.2
Factor 4		ba	ba	baa	baa	ba	baa	baa	ba
Political risk	Latest available	ba	ba	baa	a	ba	baa	baa	ba
Government liquidity risk	Latest available	a	a	aa	aa	aa	aa	aa	a
Gross borrowing requirements (% of GDP)	2023F	8.1	5.8	11.0	11.6	13.7	4.6	9.5	8.3
Banking sector risk	Latest available	a	a	baa	baa	a	baa	a	baa
BSCF[1]	Latest available	ba1-ba2	baa3	ba1-ba2	baa3	baa3	ba1-ba2	baa3	ba3-b3
Total domestic bank assets (% of GDP)	2022	70.7	85.4	87.9	189.1	92.4	94.0	79.3	87.9
External vulnerability risk	Latest available	a	aa	a	aa	a	a	a	a
Current account balance (% of GDP)	2022	-6.4	-5.1	-0.4	-5.8	-3.0	-0.7	1.3	-4.5
External vulnerability indicator (EVI)	2024F	--	--	--	--	76.8	41.1	73.3	81.9
External debt (% of current account receipts)	2022	128.9	71.9	92.3	285.5	80.8	71.4	84.5	104.2
Net international investment position (% of GDP)	2022	-27.0	-6.6	-0.6	52.3	-34.1	-12.7	1.2	-31.9

[1] BSCE is our estimate of the risk of a Banking Sector Credit Event (BSCE), which we use for sovereigns where we have no or very limited rating coverage of a system. Otherwise, we use the Baseline Credit Assessment (BCA) for rated domestic banks, weighted by bank assets.

Sources: National authorities, IMF, Moody's Investors Service

Thank you for your attention!

Olivier Chemla
VP – Senior Analyst
Olivier.Chemla@moodys.com
+49.69.70730.956

Max Dietz
Associate Analyst
Max.Dietz@moodys.com
+49.69.70730.890

5

Appendix

Economic Strength: “baa2”

Peer Comparison

Peer comparison table factor 1: Economic strength

	Latvia	baa2 Median	Greece	Costa Rica	Estonia	Lithuania	Bulgaria	Croatia
	A3/STA		Ba3/POS	B2/STA	A1/STA	A2/STA	Baa1/STA	Baa2/STA
Final score	baa2		baa2	baa2	baa1	baa1	baa3	baa3
Initial score	baa1		a3	baa1	baa1	a3	baa1	baa1
Nominal GDP (\$ billion)	41.1	143.6	218.8	68.4	38.0	70.2	88.9	70.4
GDP per capita (PPP, Int\$)	38,544.5	33,726.4	36,909.0	25,005.1	45,480.1	47,107.3	30,216.0	40,143.5
Average real GDP (% change)	2.4	2.7	1.9	3.0	2.4	2.7	2.8	2.9
MAD Volatility in real GDP growth (ppts)	0.7	0.9	1.2	0.9	1.4	1.1	0.8	1.8

Sources: National authorities, IMF, Moody's Investors Service

- » We assess Latvia’s economic strength as “baa2” reflecting the country's **robust post-pandemic growth potential** and **income levels**, which are high by global standards but relatively low in the region.
- » Latvia shares its “baa2” economic strength score with Greece (Ba3 positive).

Institutions and Governance Strength: “a2”

Peer Comparison

Peer comparison table factor 2: Institutions and governance strength

	Latvia A3/STA	a2 Median	Croatia Baa2/STA	Italy Baa3/NEG	Slovakia A2/NEG	Estonia A1/STA	Lithuania A2/STA	Malta A2/STA
Final score	a2		a2	a2	a2	aa3	a1	a3
Initial score	a2		a2	a2	a2	aa3	a1	a3
Quality of legislative & executive institutions	a	a	a	a	a	aa	a	baa
Strength of civil society & judiciary	a	a	a	a	a	a	a	baa
Fiscal policy effectiveness	a	a	a	a	a	aaa	aa	a
Monetary & macro policy effectiveness	a	a	a	a	a	a	a	a
Fiscal balance/GDP (3-year average)	-3.6	-2.1	-0.9	-5.4	-4.4	-2.5	-1.8	-5.2
Average inflation (% change)	4.6	2.5	3.0	2.9	5.4	4.9	5.0	2.5
Volatility of inflation (ppts)	5.2	2.6	3.3	2.6	3.6	5.8	5.6	1.6

Sources: National authorities, IMF, Moody's Investors Service

- » Although the government has made progress in tackling high-level corruption, this still weighs on our assessment of judicial strength and remains a key institutional challenge.
- » Latvia's institutions and governance strength is in line with Croatia (Baa2 stable), Italy (Baa3 negative) and Slovakia (A2 negative).

Political risk: “ba”

Peer Comparison

Peer comparison table factor 4a: Political risk

	Latvia A3/STA	ba Median	Lithuania A2/STA	Estonia A1/STA	Poland A2/STA	Bulgaria Baa1/STA	Croatia Baa2/STA	Georgia Ba2/NEG
Final score	ba		ba	ba	ba	baa	baa	b
Voice & accountability, score[1]	0.9	-0.6	1.0	1.2	0.6	0.3	0.6	0.0
Political stability, score[1]	0.7	-0.2	0.8	0.8	0.5	0.5	0.7	-0.4

[1] Composite index with values from about -2.50 to 2.50; higher values correspond to better governance

Sources: Worldwide Governance Indicators, Moody's Investors Service

- » On account of this, we changed Latvia's score for political risk to “ba” from “baa”, which indicates that the escalation of geopolitical tensions has the potential to negatively impact economic activity, fiscal outcomes and funding conditions for Latvia.
- » Although geopolitical risks and the uncertainty around such risks have increased, we deem the likelihood of the military conflict in Ukraine spilling over into a conventional military conflict with a direct and material impact on Latvia to be low.
- » Peers with a similar political risk assessment include Estonia (A1 stable), Lithuania (A2 stable) and Poland (A2 stable).

Government liquidity risk: “a”

Peer Comparison

Peer comparison table factor 4b: Government liquidity risk

	Latvia A3/STA	a Median	Lithuania A2/STA	Romania Baa3/STA	Slovakia A2/NEG	Slovenia A3/STA	Serbia Ba2/STA	Kuwait A1/STA
Final score	a		a	a	aa	aa	baa	baa
Initial score	a		a	a	aa	aa	a	baa
Ease of access to funding	a	a	a	a	aa	aa	a	baa
Gross borrowing requirements (% of GDP)	8.1	8.0	5.8	11.8	12.2	11.0	10.6	1.0

Sources: National authorities, IMF, Moody's Investors Service

- » Our “a” assessment of government liquidity risk reflects its typically moderate gross borrowing requirements, low borrowing costs and ability to issue debt in a reserve currency.
- » Peers with a similar government liquidity assessment include Lithuania (A2 stable) and Romania (Baa3 stable).

Banking sector risk: “a”

Peer Comparison

Peer comparison table factor 4c: Banking sector risk

	Latvia A3/STA	a Median	Lithuania A2/STA	Poland A2/STA	Slovakia A2/NEG	Slovenia A3/STA	Hungary Baa2/STA	Mexico Baa2/STA
Final score	a		a	a	a	baa	baa	aa
Initial score	a		a	a	a	baa	baa	aa
BCA[1]	ba1	baa2	baa3	baa3	baa2	ba1	ba1	baa2
BSCE[2]	ba1-ba2	baa2	baa3	baa3	baa2	ba1-ba2	ba1-ba2	baa2
Total domestic bank assets (% of GDP)	70.7	170.6	85.4	92.4	104.0	87.9	93.1	44.0

[1] BCA is an average of Baseline Credit Assessments (BCAs) for rated domestic banks, weighted by bank assets

[2] Where we have no or small rating coverage in a system, we estimate the risk of Banking Sector Credit Event (BSCE) based on available data for aggregate banking system

Sources: National authorities, IMF, Moody's Investors Service

- » Latvia's score for banking sector risk is “a”, in line with that of Lithuania (A2 stable) and Poland (A2 stable).
- » As the weighted average Baseline Credit Assessment (BCA) of ba1 is based on limited rating coverage of the country's banking sector, the score also reflects the significant presence of foreign-owned banks, which have historically shown a high propensity to support their Latvian subsidiaries.

External vulnerability risk: “a”

Peer Comparison

Peer comparison table factor 4d: External vulnerability risk

	Latvia A3/STA	a Median	Estonia A1/STA	Slovenia A3/STA	Slovakia A2/NEG	Lithuania A2/STA	Finland Aa1/STA	Chile A2/STA
Final score	a		a	a	a	aa	aa	baa
Initial score	a		a	a	a	aa	aa	baa
Current account balance (% of GDP)	-6.4	-2.6	-2.2	-0.4	-8.2	-5.1	-3.6	-9.0
Net IIP (% of GDP)[1]	-27.0	-34.5	-20.5	-0.6	-61.0	-6.6	-3.5	-18.4
External debt (% of current account receipts)	128.9	95.2	91.5	92.3	--	71.9	94.8	191.5
External vulnerability indicator (EVI)[2]	--	59.9	--	--	--	--	--	194.4

[1] Net international investment position (% of GDP)

[2] (Short-term external debt + currently maturing long-term debt + total nonresident deposits over one year)/official foreign exchange reserves

Sources: National authorities, IMF, Moody's Investors Service

- » Our “a” assessment of Latvia’s external vulnerability risk reflects its pre-pandemic track record of broadly balanced current account position, moderately negative net international investment position (NIIP) and euro area membership.
- » Other sovereigns with an “a” assessment for external vulnerability include Estonia (A1 stable), Slovenia (A3 stable) and Slovakia (A2 negative).

© 2023 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Investor Relations — Corporate Governance — Charter Documents - Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.