

CREDIT OPINION

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Update



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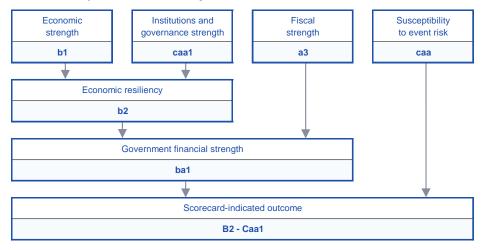
Government of Moldova - B3 negative

Regular update

Summary

Moldova's credit profile is characterized by limited economic resilience, reflecting relatively low income levels and a narrow economic base, weak institutions that limit shock-absorption capacity, unfavourable demographics which drive its very high exposure to social risks and moderate government debt. Susceptibility to geopolitical event risk, driven by the unresolved Transnistria conflict and significant energy dependence on Russia, has been amplified by Russia's invasion of Ukraine (Ca stable). International financial assistance will help mitigate the negative economic and fiscal spillovers from the Russia-Ukraine military conflict. That said, a significant rise in domestic instability, a possible expansion of the conflict to Moldova, or a prolonged disruption in gas supplies would severely weigh on Moldova's economic and fiscal prospects.

Exhibit 1
Moldova's credit profile is determined by four factors



Source: Moody's Investors Service

Credit strengths

- » Government's relatively moderate debt burden;
- » Willingness and ability to absorb technical expertise and financial support from the international community to help strengthen the institutional framework; and
- » Improving resilience of the banking sector on the back of reform progress.

Credit challenges

- » Geopolitical risk driven by the unresolved Transnistria conflict and significant dependence on Russia for its energy needs;
- » Low per-capita income, limited economic diversification and unfavourable demographic trends;
- » Weaknesses in the rule of law and control of corruption; and
- » Volatile domestic political landscape which can hinder reform progress.

Rating outlook

The negative outlook reflects the heightened geopolitical event risks from Russia's ongoing military invasion of Ukraine. While not our base case, Moldova's tensions with Russia, shared border with Ukraine and the unresolved conflict with the Russian-backed separatist region of Transnistria increases risks to domestic stability including the possibility of the military conflict in Ukraine spilling into the country, while Moldova's high dependence on Russian gas exposes the country to energy disruptions amid the heightened geopolitical tensions.

Factors that could lead to an upgrade

The negative outlook suggests an upgrade is unlikely in the near term. The outlook could be changed to stable if geopolitical tensions were to abate – both within the wider region and between Moldova and Transnistria – and in turn reduce the risks to Moldova's credit profile from the military invasion. For example, an end to Russia's invasion of Ukraine or evidence that fighting will be concentrated away from Moldova's border, making it less likely that the military invasion will spill over into Moldova, would be consistent with a stable outlook, as would a further proven diversification in energy imports away from Russia. Evidence of significant and sustained provision of international financial support, helping to mitigate the economic and fiscal effects of the neighbouring military conflict and contain liquidity risks, would be a key factor supporting the stabilization in the outlook.

Factors that could lead to a downgrade

Moldova's ratings could be downgraded if geopolitical risks stemming from Russia's ongoing invasion of Ukraine were to crystallise. For example, if conditions in the Transnistria region were to deteriorate significantly which threatened domestic stability, or evidence of a large mobilization of Russian troops in the region which materially increased the likelihood of the military invasion spilling over into Moldova. Furthermore, a prolonged disruption in Russian gas supplies to Moldova which cannot be mitigated by technical and financial support from the EU would also be negative for the rating. Evidence of increased domestic political risk which jeopardises the large commitments of international financial support and leads to a reversal in the reform progress achieved under the previous IMF programme would also be negative for the rating.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

Moldova	2017	2018	2019	2020	2021	2022E	2023F	2024F
Real GDP (% change)	4.2	4.1	3.6	-8.3	13.9	-1.5	1.5	4.3
Inflation (CPI, % change, Dec/Dec)	7.3	0.9	7.5	0.4	13.9	30.2	8.0	5.0
Gen. gov. financial balance/GDP (%)	-0.6	-0.8	-1.4	-5.3	-2.6	-3.1	-6.2	-4.7
Gen. gov. primary balance/GDP (%)	0.5	0.0	-0.7	-4.5	-1.8	-2.1	-4.3	-3.5
Gen. gov. debt/GDP (%)	32.0	29.5	27.0	35.8	33.5	34.6	37.6	40.1
Gen. gov. debt/revenues (%)	107.3	97.9	90.4	114.1	104.8	104.4	112.5	122.2
Gen. gov. interest payment/revenues (%)	3.7	2.6	2.6	2.7	2.5	3.1	5.4	3.7
Current account balance/GDP (%)	-5.7	-10.6	-9.2	-7.7	-12.4	-13.4	-11.8	-11.5
External debt/CA receipts (%)[1]	129.5	126.5	122.3	148.3	122.7	135.1	136.0	136.4
External vulnerability indicator (EVI) [2][3]	68.5	70.4	79.8	81.3	72.3	74.9	102.9	96.7

^[1] Current Account Receipts

Source: Moody's Investors Service

Detailed credit considerations

Moldova's **economic strength** is assessed as "b1", reflecting the small scale of the economy, low wealth levels and limited diversification. Despite robust GDP growth in the years preceding the pandemic, growth remains volatile given its narrow economic and export base, including its relatively large agricultural sector which is susceptible to climate-related events, and its high dependence on remittances. We expect an economic contraction in 2022 in view of the negative spillovers from Russia's invasion of Ukraine, particularly in light of the disruption to energy supplies and very high inflation, which is weighing on trade, remittances as well as consumer and investor confidence. We expect real GDP growth to remain relatively weak in 2023, expanding by around 1.5%. A marked escalation in the war would lead to a more significant negative impact on economic growth.

The final score is set two notches lower than the initial score of "ba2" to reflect Moldova's exposure to credit-negative demographic trends and limited diversification, which weigh on its economic potential. Moldova's rapidly declining working age population reflects high levels of emigration given a lack of job opportunities and relatively high poverty levels. Together with weak health outcomes and basic services provision, these factors drive Moldova's susceptibility to social risks.

The "caa1" assessment for **institutions and governance strength** is informed by the Worldwide Governance Indicators under which Moldova scores relatively weakly. Our assessment also captures the sovereign's track record of default which is reflected in a one-notch downward adjustment from the initial score of "b3". Given the significant amount of time which has elapsed since the default event in 2002, the negative default adjustment has been lowered to one notch from a previous two notches. That said, some institutional indicators have improved in recent years, reflecting the progress achieved under the last IMF programme to strengthen the monetary policy framework and banking sector's resilience.

Despite a volatile political environment, we expect Moldova will continue to integrate more closely with the European Union (EU, Aaa stable), helping to support Moldova's institutional reforms and, through export and investment opportunities, help to enhance Moldova's institutions and economic profile in the medium term. Following Russia's invasion of Ukraine, Moldova submitted its formal application to join the EU and the country received formal candidacy status on 23 June 2022. While we consider actual membership to be a distant prospect, the formal candidacy status will help facilitate access to additional financial and technical support and the ongoing process of aligning Moldova's laws, standards and governance with EU norms will be credit positive. The willingness and ability demonstrated thus far to absorb technical expertise and financial support from international financial institutions (IFIs), which help strengthen the institutional framework, is also a credit strength.

We assess Moldova's **fiscal strength** as "a3" which reflects that the general government debt-to-GDP ratio is moderate relative to peers. Moldova has no private external debt and its shallow domestic capital markets leave the government heavily reliant on

^{[2] (}Short-Term External Debt + Currently Maturing Long-Term External Debt + Total Nonresident Deposits Over One Year)/Official Foreign Exchange Reserves

^[3] Excludes Nonresident Deposits Over One Year

concessional external financing. As such, we consider that Moldova's interest payments are not an accurate reflection of the sovereign's underlying debt affordability and focus instead on Moldova's moderate debt burden in our assessment of fiscal strength. However, the large share of government debt denominated in foreign currency increases the vulnerability of Moldova's fiscal strength to external shocks, while high levels of state ownership increase contingent liability risks.

The final score is set two notches below the initial score of "a1" given the risks to Moldova's fiscal position from the impact of Russia's invasion of neighbouring Ukraine, including the costs of providing basic services and shelter to the large inflow of refugees, although we expect significant IFI support to help mitigate the impact. The government debt ratio is forecast to rise notably to around 40% of GDP at the end of 2024, up from its pre-pandemic level of 27% in 2019.

Our assessment of Moldova's "caa" **susceptibility to event risk**, is driven by political risk.

We assess Moldova's **political risk** as "caa" given the heightened geopolitical event risks from Russia's ongoing military invasion of Ukraine. While not our base case, a possible expansion of the invasion to Moldova, a rise in domestic instability which threatened Moldova's pro-EU reforms and access to international financial support, or a significant disruption in gas supplies which leads to prolonged power outages, would severely weigh on Moldova's economic and fiscal prospects.

Russia's ongoing military invasion of Ukraine has significantly increased Moldova's exposure to geopolitical risk given its tense relationship with Russia, proximity to the military invasion and the potential for the Russian-backed separatist Transnistria region to be a source of instability, particularly if the region were to intensify efforts to become part of Russia. The region also houses a small Russian military contingent which increases the risk of the military invasion in Ukraine spilling over into Moldova. While the economic relevance of Transnistria has fallen significantly since the Soviet regime, the region plays still an important role in Moldova's energy security given that gas pipelines from Russia cross through the region and it houses the country's main gas-fired power plant.

Moldova also faces notable geopolitical risks given its significant dependence on Russian gas imports prior to the war, with gas used for both heating and electricity. Notably, risks around energy security have risen following the escalation in geopolitical tensions, with Moldova experiencing a disruption to the supply of gas from Russia since October 2022. That said, Moldova has made notable progress in diversifying its sources of energy, most notably with the extension of its gas pipeline to Romania (Baa3 stable) and the recent synchronization of its electricity grid with the EU.

Moldova faces domestic political risks from its historically volatile political environment characterised by frequent changes of government and often unstable coalitions, which can be amplified by Russia's destabilising influence. Weaknesses in the domestic political environment can weigh on reform progress and also entail fiscal risks as seen with the previous suspension and delay of IFI assistance. In the currently heightened geopolitical context, domestic political instability can also weigh on the country's administrative capacity to cope with the large inflow of refugees and energy sector challenges. Very high inflation also threatens to exacerbate social risks and crystallise in protests.

Government liquidity risk is assessed as "baa". This score reflects that, while Moldova has limited external debt repayment needs, domestic rollover needs are high owing to the small size of the domestic market and the short maturity of the domestic debt, which constrains the available financing pool. However, the government's reliance on the domestic market has declined since 2016, when external support resumed after the IMF programme was approved. We expect gross financing needs will rise with the fiscal pressures from Russia's invasion of Ukraine and the high cost of energy imports, which will be covered by a mix of financial support from multilateral institutions and domestic issuances.

Moldova received board approval in January 2023 on the second review of the International Monetary Fund's (IMF) Extended Credit Facility (ECF) and Extended Fund Facility (EFF) arrangements, bringing total disbursements under the blended programme to \$275 million.

Banking sector risk is "baa". The score balances the sector's relatively small size, the notable progress made under the IMF programme to address financial vulnerabilities and to improve regulatory oversight and governance, against the banking system's fundamental credit challenges. Banks are broadly well capitalised, profitable and liquid although dollarisation remains high and asset quality is expected to continue deteriorating after the coronavirus shock.

External vulnerability risk is "baa", balancing the high dependence on remittances to finance its trade deficit and a persistently large current account deficit against an adequate foreign exchange reserves position which is reflected in a moderate external vulnerability indicator, a stronger position than many regional peers. The assessment also reflects our expectation that financial assistance from international partners will help support the external liquidity position, mitigating the adverse impact of Russia's invasion of Ukraine.

ESG considerations

Moldova's ESG Credit Impact Score is Highly Negative CIS-4

Exhibit 3
ESG Credit Impact Score



Source: Moody's Investors Service

Moldova's ESG Credit Impact Score is highly negative (**CIS-4**), reflecting moderate exposure to environmental risk, high exposure to social risks and very weak governance profile, the latter also explaining - along with low wealth levels - the relatively low resilience to shocks despite relatively favorable debt burden and affordability metrics.

Exhibit 4
ESG Issuer Profile Scores



Source: Moody's Investors Service

Environmental

Moldova's credit profile is moderately exposed to environmental risks, reflected in its **E-3** issuer profile score. Moldova's exposure to physical climate risk is exacerbated by the importance of the agricultural sector (both in terms of economic contribution and employment) which makes the country vulnerable to climate change. Historical evidence suggests that droughts can create severe economic, fiscal and social costs. Moldova also faces environmental risks from water scarcity and weak management of natural capital.

Social

Exposure to social risks is high (**S-4** issuer profile score), and it is mainly related to unfavourable demographics, weak health outcomes and impaired access to basic services while education is not a material source of risk. Since Moldova gained independence in 1991, a significant part of the country's population has emigrated, mainly because of a lack of job opportunities and relatively higher poverty levels and the contraction in Moldova's working-age population is likely to accelerate. The shrinking population will be a major constraint on the economy as it weighs on labour input.

Governance

Moldova has a very highly negative governance profile score (**G-5** issuer profile), reflecting weak rule of law and high levels of corruption but also the sovereign default track record. These aspects result in a relatively low resilience due to low institutional capacity to respond to environmental and social risks, only in part mitigated by favorable fiscal metrics.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

All of these considerations are further discussed in the "Detailed credit considerations" section above. Our approach to ESG is explained in our report on how the <u>scores depict varied and largely credit-negative impact of ESG factors</u> and our cross-sector methodology <u>General Principles for Assessing Environmental</u>, <u>Social and Governance Risks Methodology</u>.

Recent developments

Russia's invasion of Ukraine is continuing to exert significant economic and fiscal pressures...

Moldova's economy has been significantly impacted by the ongoing military invasion in neighbouring Ukraine.

Moldova has substantial trade links with Russia, Ukraine and <u>Belarus</u> (Ca negative), which together account for close to 14% of exports and 26% of imports. Remittance income is also an important source of financing for consumption. Furthermore, the invasion has cut access to some of Moldova's important trade routes, including via the port of Odessa, which has pushed up the price of imports and is contributing to very high inflation, dampening real incomes as well as consumer and investor confidence, while very tight monetary policy also weighs on demand.

CPI inflation rose sharply over the course of 2022, reaching a peak of close to 35%, and had moderated to around 30% by the end of December. The National Bank of Moldova rapidly raised its base rate in 2022 to 21.5%, up from 5.5% in October 2021, and the moderating inflationary pressures has supported some easing in the policy rate from December 2022. In February 2023, the central bank further cut the base rate to 17% in order to boost domestic demand and lending as well as to prevent rapid disinflation.

According to the national statistics agency, real GDP fell by 11.8% (y-o-y, seasonally adjusted) in the third quarter of 2022, with most sectors weighing on economic activity and declines in both household consumption and investment. In particular, agricultural production declined by around 30% over the year, while industrial output was 2.8% lower over the first 11 months of 2022 compared to the previous year. The further escalation in geopolitical tensions towards the end of last year, with Russia cutting its gas supply to Moldova, has also likely weighed on economic activity.

As a result, we now estimate a small contraction in real GDP of 1.5% in 2022, although there are notable downside risks to this estimate given the uncertain economic impact of the temporary power outages at the end of last year. We expect growth to remain moderate at 1.5% in 2023 as the economic consequences from Russia's invasion persist, before real activity recovers back closer to its longer term average of around 4% in 2024. An escalation of the military invasion in neighbouring Ukraine would likely lead to a more significant impact on economic growth, although further significant financing and trade support from the EU and other international partners will help to mitigate liquidity pressures.

The fiscal impact of the invasion will also be material as weaker growth weighs on government revenues, while expenditures will face pressure from the sharp rise in energy prices and large inflows of refugees. We expect the fiscal deficit to rise further to around 6% of GDP in 2023, in line with the government's budget plan, and the government debt burden is expected to reach to around 38% of GDP by the end of this year.

In particular, the costs of providing basic needs and shelter to the significant inflows of refugees from the military invasion in neighbouring Ukraine is pushing up on government expenditure. According to the United Nations (UN), over 750,000 people have crossed the border into Moldova as of January 2023 with an estimated 102,000 (around 4% of Moldova's population) expected to permanently settle in the country.

Moldova also faces fiscal risks from Gazprom's claims of unpaid energy debt, which are reported to amount to around \$700 million (5.1% of 2021 GDP) and which has been used by Russia as a reason to cut gas supplies to the country. An audit of the claim is still to

be completed, after multiple delays. The claim constitutes a significant contingent liability for the government, which owns 36.6% of Moldovagaz.

...although increased financial support from IFIs is helping to mitigate credit impact

The pro-EU majority government in place since mid-2021 puts Moldova in a favourable position to continue to leverage additional financial support from the IMF and EU to help mitigate the negative economic and fiscal spillovers from the military invasion, including the sharp spike in energy costs after the disruption to gas flows from Russias and the large inflow of refugees.

Moldova received board approval in January 2023 for the second review of the IMF's Extended Credit Facility (ECF) and Extended Fund Facility (EFF) arrangements which allowed for the release of a further \$27 million for budget support, bringing total disbursements under the blended programme to \$275 million. The IMF agreed in April 2022 to augment Moldova's ECF and EFF arrangements, increasing the financial support by an additional \$267 million, to bring the total financing package to \$815 million (5.9% of GDP).

The European Council (EC) also recently increased its Macro-Financial Assistance (MFA) programme to Moldova by €145 millions, comprising a loan of €100 million and a grant of €45 million, bringing the total amount of MFA support to close to €300 million. Moldova submitted its application to join the EU following Russia's invasion and the country received formal candidacy status on 23 June 2022, which will also help to facilitate additional financial and technical support in the near term. Moldova is also benefitting from significant bilateral aid through a number donor conferences organised by Romania, Germany (Aaa stable) and France (Aa2 stable).

In its annual assessment of Moldova's application, the EC noted in February 2023 that the country has some level of preparation in the areas of intellectual property law, competition policy as well as economic and monetary policy, but is lagging behind in terms of rule of law, public procurement, financial control, free movement of workers and financial services, among others. Moldova is aiming to complete the EU candidate status action plan and begin formal access negotiations by March 2023. In February 2023, it signed three strategic cooperation agreements with the EU in the field of customs, taxation and health care. That said, we expect progress to remain slow, and these timelines are likely to be complicated by the recent change in prime minister (see discussion below).

The sizeable international financial assistance will help to mitigate liquidity risks, particularly for a country without any international bond issuances. The financial commitments by the IMF, EC and bilateral donors will help to finance Moldova's external government debt repayment needs of around an estimated \$288 million in 2023, which stand at more than double its external repayment needs in 2022. The financial support will also help to mitigate external vulnerability risks.

Escalation in geopolitical tensions raises risks around energy security...

The escalation in geopolitical tensions with Russia has significantly heightened risks around Moldova's energy supply and placed Moldova's access to Russian gas at risk. Moldova already had fractious negotiations with Russia's Gazprom and from October 2022 Gazprom significantly cut the daily volume of gas supplied to Moldova. Furthermore, Russian missile strikes on Ukrainian energy infrastructure disrupted the supply of electricity to Moldova. These developments led to temporary power outages in Moldova in late 2022.

That said, Moldova has made significant progress in diversifying its sources of energy, most notably with the opening of the Ungheni gas pipeline with Romania - through which it was able to source emergency gas to stem the risk of further blackouts - and the recent synchronization of its electricity grid with the EU. Moldova has also started importing natural gas via the Trans-Balkan pipeline. The government took steps to switch two of its smaller power plants from gas to heavy oil and is constructing a new, more secure and higher voltage, power line with Romania, expected to take around a year to complete, which will bolster its ability to import electricity from the EU.

Importantly, Moldova has benefitted from very significant multilateral and bilateral support to help mitigate the financial impact of purchasing much more expensive energy from Europe. For example, Moldova received a record €525 million in financing support from the European Bank for Reconstruction and Development (Aaa stable) in 2022, including €300 million to support its diversification away from Russian gas.

Nevertheless, despite the significant efforts to diversify, the security around Moldova's energy supply remains fragile and subject to risk from geopolitical flare-ups. Moldova reached an agreement in December 2022 to continue to receive electricity from the pro-

Russian breakaway province of Transnistria, the location of the country's main gas fired power plant, which has helped to stabilise the country's energy supply. However, while the Transnistrian authorities rely heavily on the proceeds from electricity sales, the renewal of the agreement is not guaranteed. In addition, the main domestic energy supplier's reliance on gas storage in Ukraine further increases risks around energy supply, particularly going into next winter.

...and domestic stability

The heightened tensions with Russia have also increased risks around Moldova's domestic stability, which can threaten its progress on EU integration and the related significant financing support.

Moldova recently accused Russia of trying to destabilise the country by sponsoring protests, conducting cyberattacks and plotting to overthrow the country's pro-EU government by force. On 10 February 2023, Prime Minister Natalia Gavrilita resigned citing a lack of domestic support for her government's EU accession reforms amid Russia's destabilising influence. Moldova had seen an increase in domestic protests last autumn, organised by a pro-Russian political party, in response to the sharp rise in energy prices. Moldova's president moved quickly to nominate her security advisor and former interior minister, Dorin Recean, as the new prime minister to shore up the government, emphasise her focus on security and ensure that domestic political instability does not impede the country's administrative capacity to cope with the large inflow of refugees and energy sector challenges. While not our baseline, a shift away from the country's focus on further integration with the EU would put at risk the ongoing strengthening of Moldova's economy and institutions, supported by significant international financing and the recently expanded IMF support programme.

Moldova was also forced to briefly shut its airspace on 14 February 2023 after an unidentified small flying object similar to a weather balloon was spotted in the sky, while debris from Russian missiles has been found within its territory, reflecting the risks to its domestic stability posed by the country's proximity to the war in Ukraine.

Moody's rating methodology and scorecard factors: Moldova - B3 negative

actor / Sub-Factor	Metric	Indicator Year	Indicator	Initial Factor Score	Final Factor Score	Weights
actor 1: Economic strength				ba2	b 1	50%
Growth dynamics	Average real GDP growth (%)	2017-2026F	3.2	baa1		25%
	MAD Volatility in Real GDP Growth (%)	2012-2021	2.7	b2		10%
Scale of the economy	Nominal GDP (\$ billion)	2021	13.7	caa1		30%
National income	GDP per capita (PPP, Intl\$)	2021	15,114.5	baa3		35%
Adjustment to factor 1	# notches				-2	max ±
actor 2: Institutions and govern				b3	caa1	50%
Quality of institutions	Quality of legislative and executive institutions			b		20%
	Strength of civil society and the judiciary			caa		20%
Policy effectiveness	Fiscal policy effectiveness			b		30%
	Monetary and macroeconomic policy effectiveness			b		30%
Specified adjustment	Government default history and track record of arrears				-1	max -
Other adjustment to factor 2	# notches				0	max ±
1 x F2: Economic resiliency				b1	b2	
actor 3: Fiscal strength				a1	a3	
Debt burden	General government debt/GDP (%)	2021	33.5	aa3		50%
	General government debt/revenue (%)	2021	104.8	aa2		50%
Debt affordability	General government interest payments/revenue (%)	2021	2.5	aa1		0%
	General government interest payments/GDP (%)	2021	0.8	aa1		0%
Specified adjustments	Total of specified adjustment (# notches)			-1	-1	max :
	Debt Trend - Historical Change in Debt Burden	2013-2021	8.5	0	0	
	Debt Trend - Expected Change in Debt Burden	2021-2023F	4.1	0	0	
	General Government Foreign Currency Debt/ GDP	2021	19.1	-1	-1	
	Other non-financial public sector debt/GDP	2021	1.4	0	0	
Other adjustment to factor 2	Government Financial Assets including Sovereign Wealth Funds / GDP	2021	6.0	0	0 -2	20001
Other adjustment to factor 3	# notches			h0		max ±
1 x F2 x F3: Government financial st	-			baa3	ba1	5.41
actor 4: Susceptibility to event r	ISK			caa	caa	Min
Political risk	Demostic political rick and geopolitical rick			caa	aa	
Government liquidity risk	Domestic political risk and geopolitical risk			baa	baa	
Government liquidity risk	Ease of access to funding			baa	Dad	
Specified adjustment	High refinancing risk			Daa	0	max -
Banking sector risk	riigii feiiriarionig fisk			baa	baa	max
Summing Scotter Flori	Risk of banking sector credit event (BSCE)	Latest available		ba3-b3	baa	
	Total domestic bank assets/GDP	2021	49.0	<80		
Adjustment to F4 BSR	# notches	_02.			0	max ±
External vulnerability risk				baa	baa	
•	External vulnerability risk			baa		
Adjustment to F4 EVR	# notches				0	max :
Overall adjustment to F4	# notches				0	max -

Note: While information used to determine the grid mapping is mainly historical, our ratings incorporate expectations around future metrics and risk developments that may differ from the ones implied by the scorecard-indicated outcome. Thus, the rating process is deliberative and not mechanical, meaning that it depends on peer comparisons aboutd leave room for exceptional risk factors to be taken into account that may result in an assigned rating outside the scorecard-indicated outcome. For more information please see our Sovereign Ratings Methodology.

Footnotes: (1) Initial factor score: scorecard indicators combine with the automatic adjustments to produce an initial factor score for every rating factor, as detailed in Moody's Sovereign Ratings Methodology. (2) Final factor

Footnotes: (1) Initial factor score: scorecard indicators combine with the automatic adjustments to produce an initial factor score for every rating factor, as detailed in Moody's Sovereign Ratings Methodology; (2) Final factor score where additional analytical considerations exist, initial factor scores are augmented to produce a final factor score. Guidance on additional factors typically considerated can be found in Moody's research. (3) Scorecard-indicated outcome: Factor 1: Economic Strength, and Factor 2: Institutions and Governance Strength, combine with equal weight into a construct we designate as Economic Resiliency (ER). An aggregation function then combines ER and Factor 3: Fiscal Strength, following a non-linear pattern where Fiscal Strength has higher weight for countries with migh or low ER. As a final step, Factor 4, a country's Susceptibility to Event Risk, is a constraint which can only lower the government financial strength as given by combining the first three factors. (4) There are 20 ranking categories for quantitative sub-factors: aaa, aa1, aa2, aa3, a1, a2, a3, baa1, baa2, baa3, b1, b2, b3, caa1, caa2, caa3, ca and 8 ranking categories for qualitative sub-factors: aaa, aa, aa, baa, ba, b, caa, ca (5) Indicator value: if not explicitly stated otherwise, the indicator value corresponds to the latest data available.

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