

#### **ISSUER IN-DEPTH**

12 September 2023



Foreign

Currency

Α1

Baa2/STA

Local

Currency

Baa2/STA

25

26

27

#### **RATINGS**

#### Hungary

Gov. Bond Rating

Country Ceiling

country century		
TABLE OF CONTENTS OVERVIEW AND OUTLOOK	1	
CREDIT PROFILE	2	
Economic strength score: a3	2	
Institutions and governance s score: baa3	trength 9	)
Fiscal strength score: baa2	1	4
Susceptibility to event risk sc	ore: baa 1	8
ESG considerations	2	4

#### **Analyst Contacts**

Comparatives

Scorecard-indicated outcome

DATA, CHARTS AND REFERENCES

**Heiko Peters** +49.69.70730.799 *VP-Senior Analyst* heiko.peters@moodys.com

Marco Santaniello +44.20.3314.2032
Associate Analyst
marco.santaniello@moodys.com

Dietmar Hornung +49.69.70730.790
Associate Managing Director
dietmar.hornung@moodys.com

Marie Diron +44.20.7772.1968

MD-Global Sovereign Risk
marie.diron@moodys.com

# Government of Hungary - Baa2 stable

Annual credit analysis

#### **OVERVIEW AND OUTLOOK**

The credit profile of <u>Hungary</u> (Baa2 stable) balances its solid medium-term growth outlook with trend growth of 3.0% over 2018-27 and robust fiscal strength, against institutional weaknesses and a contentious relationship with the <u>European Union</u> (Aaa stable). The latter induces uncertainty around the disbursement of significant amounts of EU funds.

That said, we expect Hungary to ultimately receive most of the EU funds in a dragging, step-by-step process. The flow of EU funds worth around 18% of GDP is conditional on the implementation of a broad set of reforms. Hungary enacted key judicial reforms in May 2023, and has implemented a number of additional remedial measures. If the European Commission (EC) assesses in the autumn of 2023 that the reforms have successfully addressed its concerns, the Council will unlock cohesion funds worth almost 7% of GDP.

A rating upgrade would require a significant improvement in Hungary's relationship with the EU, along with the implementation of broad-based reforms that fully address the EC's concerns. In addition, an increase in Hungary's trend growth, coupled with a faster catch-up of its wealth levels with the EU average than we currently expect, would be credit positive, as would a higher-than-expected reduction in the debt burden.

Downward rating pressure would emerge from a further substantial deterioration in Hungary's relationship with the EU, leading to a permanent delay in the flow of EU funds. The crystallization of such a scenario would weaken trend growth and fiscal metrics, as well as weigh on the quality of institutions. More generally, lower trend growth or a reversal of fiscal consolidation would be credit negative, as would a prolonged energy supply disruption from Russia given Hungary's high reliance on Russian energy imports. Moreover, introduction of policy measures that would significantly reduce Hungary's attractiveness to foreign investors would lead to negative rating pressure.

A significant increase in the susceptibility to event risk in the unlikely event of a further escalation of the Russia-Ukraine war with NATO involvement would also be credit negative.

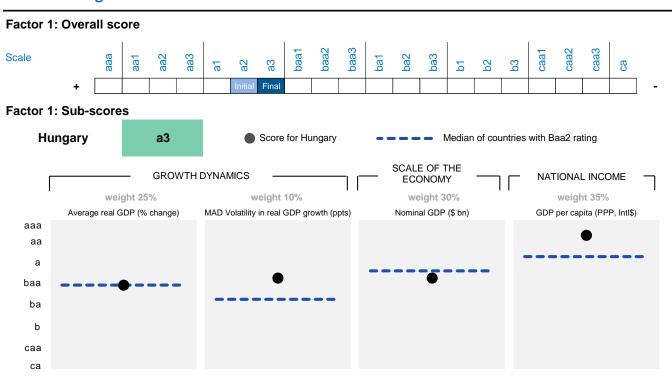
This credit analysis elaborates on Hungary's credit profile in terms of economic strength, institutions and governance strength, fiscal strength and susceptibility to event risk, which are the four main analytic factors in our Rating Methodology: Sovereigns.

This publication provides an update on the sovereign credit profile and may also discuss the likely credit implications of a new development or trend for the sovereign. It does not announce a credit rating action.

#### **CREDIT PROFILE**

Our determination of a sovereign's government bond rating is based on the consideration of four rating factors: economic strength, institutions and governance strength, fiscal strength and susceptibility to event risk. When a direct and imminent threat becomes a constraint, that can only lower the scorecard-indicated outcome. For more information, please see our <a href="Rating Methodology: Sovereigns">Rating Methodology: Sovereigns</a>.

## Economic strength score: a3



Economic strength evaluates the economic structure, primarily reflected in economic growth, the scale of the economy and wealth, as well as in structural factors that point to a country's long-term economic robustness and shock-absorption capacity. Adjustments to the economic strength factor score most often reflect our judgement regarding the economy's flexibility, diversification, productivity and labour supply.

Note: the initial factor score is shown in light blue in the scale above. In case the initial and final factor scores are the same, only the final score will appear in the table above.

Our "a3" assessment of Hungary's economic strength is based on the economy's robust growth dynamics, moderate size and reasonably high wealth levels. While Hungary is among the EU countries that are most dependent on Russian gas, we view the risk of energy supply cuts as relatively low because of Hungary's ties to Russia and the fact that it receives most of its gas through the TurkStream pipeline. In addition, we expect Hungary to ultimately receive most EU funds although the process will likely be long-drawn-out.

However, we adjusted the final score downward from the initial score of "a2" to reflect Hungary's low-to-moderate exposure to the risk of economic scarring from higher-for-longer energy prices than typically seen in the years before the Russia-Ukraine war. The country's energy-intensive industries<sup>1</sup>, which are most vulnerable to high energy prices, represent 3.1% of gross-value-added (GVA) in 2020 — the 10th highest among EU countries and higher than the EU median (2.6%).

The negative adjustment also reflects the risk that potential further material delays in the payments of a sizable part of EU funds or a suspension of parts of EU funds for a longer period would constrain Hungary's economic growth in the near to medium term. Finally, Hungary's adverse demographic profile weighs on its medium- to long-term growth outlook. Other challenges to Hungary's long-term growth outlook include fostering innovation and productivity, and ensuring continued income convergence.

Sovereigns with the same score for economic strength include the <u>Czech Republic</u> (Aa3 negative), <u>Egypt</u> (B3 review for downgrade), <u>Italy</u> (Baa3 negative) and <u>Romania</u> (Baa3 stable).

Exhibit 1

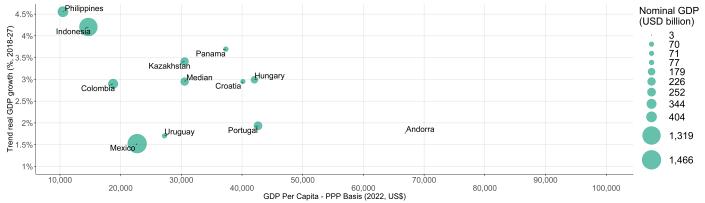
Peer comparison table factor 1: Economic strength	1							
	Hungary	a3 Median	Czech Republic	Egypt	Italy	Romania	India	Thailand
	Baa2/STA		Aa3/NEG	B3/RUR	Baa3/NEG	Baa3/STA	Baa3/STA	Baa1/STA
Final score	a3		a3	a3	а3	a3	a2	baa1
Initial score	a2		a2	а3	a2	a2	a3	baa1
Nominal GDP (\$ billion)	178.8	290.9	290.9	475.2	2,007.6	300.7	3,389.7	495.4
GDP per capita (PPP, Intl\$)	42,044.5	40,382.9	49,421.0	16,080.5	51,847.2	38,721.4	8,329.3	21,152.8
Average real GDP (% change)	3.0	1.9	1.5	4.7	0.8	3.1	5.1	2.1
MAD Volatility in real GDP growth (ppts)	0.9	1.0	0.6	1.0	0.8	1.5	0.8	1.0

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

#### A medium-sized but diversified economy with relatively high and rising wealth levels

With nominal GDP of \$178.8 billion in 2022, Hungary is the fourth-largest economy in Central and Eastern Europe (CEE) and the 17th largest in the EU. Hungary's economic size is smaller than the Baa2-rated median (\$225.5 billion) (see Exhibit 2), but its trend growth of 3.0% is in line with the median. According to IMF estimates, Hungary's GDP per-capita income was \$42,044 on a purchasing power parity (PPP) basis in 2022, above the Baa2-rated median (\$30,544). However, its per capita GDP is the seventh lowest in the EU, but in line with the CEE median.

Exhibit 2
Hungary is growing much faster than most European Baa2-rated peers and is wealthier than non-European ones



Sources: National Statistical Offices, Eurostat, IMF and Moody's Investors Service

Similar to regional peers, Hungary benefits from inflows of EU funds. EU membership also facilitates significant investment and trade links with other EU countries, which are the key source of foreign investment in Hungary and the main destination for Hungarian exports. However, it also exposes the economy to demand fluctuations in key export markets.

### Hungary's economy will probably stagnate in 2023 and recover to 3% GDP growth in 2024

Real GDP growth was robust at 4.6% in 2022 after a 7.2% growth in 2021, driven by a carry-over effect of 3.1% and an average 7.4% year-on-year growth in the first half of 2022. However, the Hungarian economy slowed significantly and fell in a moderate technical recession in the second half of 2022 mainly because of the increased economic uncertainty stemming from the Russia-Ukraine military conflict, the terms-of-trade shock triggered by the surge in energy prices, and very high inflation and interest rates that curtailed domestic demand. External demand also weakened because of the economic slowdown in Hungary's main trading partners. In addition, a severe drought led to a 31% decline in the real output of the agricultural sector in 2022 (which contributed -1.1 percentage point [pp] to real GDP growth).

The Hungarian economy remained in recession in the first half of 2023, and in the second quarter of 2023, GDP growth was down 2.4% year over year (see Exhibit 3). We expect economic growth to improve in the second half of 2023 on both the recovery of the domestic economy and export growth. Private consumption will benefit from real wage growth turning positive as consumer price inflation decelerates on the back of significant base effects, and the realisation of large foreign direct investment (FDI) projects will support investments and expand export capacities. We expect the Hungarian economy to stagnate in 2023, while GDP growth will probably be 3.0% in 2024, driven by a carry-over effect of 1.8%.

These projections are based on our assumption that energy prices, in particular gas prices, will remain significantly below the peak levels of 2022, consumer price inflation will moderate to single digits by year-end 2023, the <u>National Bank of Hungary</u> (Magyar Nemzeti Bank [MNB], Baa2 stable) will continue to lower its policy rates, and external demand will improve.

The risks stemming from Hungary's exposure to Russian energy imports have diminished compared to 2022, although they will likely persist. The country did not need forced energy rationing in the winter of 2022-23 because of authorities' efforts to fill energy storage facilities, sufficient domestic gas production, continued gas flows from Russia, the reduction in subsidies for gas and electricity for households<sup>2</sup> supporting lower demand, and a mild winter. Gas supply for the winter of 2023-24 is also secured for Hungary because of an overall improved energy situation in the EU, uninterrupted deliveries of energy flows to Hungary from Russia and an already sizeable gas storage volume (57% of annual consumption stored as of 30 August 2023; fourth highest in the EU) (see Exhibit 4).

Exhibit 3
Strong domestic economy drove the post-pandemic recovery, but domestic demand substantially weakened in recent quarters
Year-on-year change, percentage points

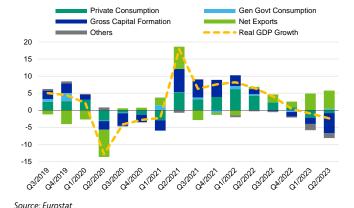
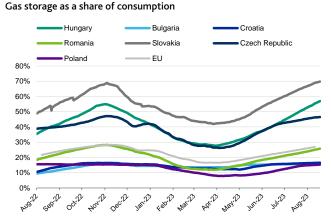


Exhibit 4 Hungary has relatively high gas storage compared with that of regional peers



Sources: GIE (Gas Infrastructure Europe) and AGSI

Nevertheless, Hungary's reliance on Russian gas will remain high in the coming years. We expect gas deliveries to Hungary from Russia to continue (at least the 4.5 billion cubic metres agreed under Hungary's 15-year gas contract with Russia signed in 2021) because of Hungary's ties to Russia and the fact that it receives most of its gas through the TurkStream pipeline, which brings Russian gas to Hungary via Bulgaria (Baa1 stable), Serbia (Ba2 stable) and Turkiye (B3 stable).

Over the medium to long term, the Hungarian authorities plan to diversify gas supplies (for example, by increasing deliveries of liquefied natural gas [LNG] from <u>Croatia</u> (Baa2 stable) and securing energy imports from <u>Azerbaijan</u> (Ba1 stable)), which requires infrastructure investments to increase pipeline capacity. In addition, the government wants to curb the dependence on gas by substituting it with electricity; Hungary wants to achieve a 45% share of electricity in its energy mix, with a significant increase in solar photovoltaic (PV) and nuclear energy<sup>4</sup>, while reducing the share of gas to 15% by 2050. Domestic gas production will likely increase towards 20% in 2023 from typically 15% in recent years.

# Further significant delays in or a suspension of EU funds for a longer period would constrain Hungary's economic growth in the near to medium term

Hungary's relationship with EU institutions remains contentious. We expect Hungary to ultimately receive the vast majority of EU funds in a dragging, step-by-step process, so that the impact from a delayed flow of EU funds on economic growth and public finances

will be limited. In addition, we view that Hungary has the financial means to pre-finance EU-funds related projects, in particular key energy infrastructure projects being required for the implementation of large FDI projects.

That said, a potential further material delay in the payments of a sizable part of EU funds or a suspension of parts of EU funds for a longer period would strain Hungary's near-term and medium-term economic growth. Moreover, it would create a funding gap over the coming years (assuming the implementation of planned projects irrespective of the flow of EU funds) which would translate into a higher debt burden.

As regional peers, Hungary traditionally benefits significantly from EU funds lifting potential growth. The total EU-allocated funds to Hungary amount to almost €50 billion (more than 20% of GDP) for the 2021-27 period.

While Hungary has full access to agriculture funds (about 6% of GDP) and the remaining cohesion policy funding under the 2014-20 Multiannual Financial Framework (MFF) (around 2% of GDP), the flow of cohesion funds under the 2021-27 MFF (about 11% of GDP) and all Recovery and Resilience Fund (RRF, grants and requested loans worth a combined 5% of GDP) is conditional on the implementation of a broad set of reforms. Cohesion funds under the 2021-27 MFF and RRF funds add up to about 1.8% of GDP per year over 2022-2027.

While the EC signed the partnership agreement for cohesion funds with Hungary in December 2022, all cohesion policy payments (€22 billion or 11% of GDP) will be conditional on the fulfilment of enabling conditions, in particular, the implementation of judiciary reforms. Moreover, parts of cohesion funds (€6.3 billion or around 3% of GDP) are currently suspended as a result of the EU's rule of law budget conditionality mechanism. To receive RRF funds, Hungary needs to fulfill 27 so-called super-milestones of institutional reforms to strengthen its judiciary and control of corruption (for more details, see the Institutional and governance strength section). RRF grants amount to €5.8 billion (or almost 3% of GDP). Hungary submitted its request to the European Commission to modify its recovery and resilience plan on 31 August 2023. The modified plan includes the request for €3.9 billion in loans (almost 2% of GDP) and for a €0.7 billion REPowerEU grant allocation. The European Commission has until the end of October to assess Hungary's modified plan.

Any effect on Hungary's credit profile will ultimately depend on the government's willingness to satisfy the EC's demands for reforms. Aside from the financial and economic boost from EU funds, reforms would benefit Hungary's institutional and governance strength, the second factor in our sovereign methodology.

Hungary enacted key judicial reforms in May 2023 and has implemented a number of additional remedial measures (for further details, see the Institutional and governance strength section). The EC will likely decide in autumn this year if these reforms address its concerns, and a positive assessment would lift the first barrier blocking the disbursement of 97% of cohesion funds and address four of the 27 super-milestones related to the RRF funds.

#### Hungary is well integrated into European manufacturing production networks

Hungary's economy has opened up rapidly over the last two decades, with goods and services exports growing to 90.4% of GDP in 2022 from 81.5% in 2019 and 39.2% in 1995. Hungary's central location and developed infrastructure have allowed it to integrate rapidly into European supply chains. The EU accounted for 79% of total exports in 2022, with <u>Germany</u> (Aaa stable) being the largest export destination (see Exhibit 5). However, significant investment and trade links with other EU countries imply that changes in the region's demand patterns can considerably affect Hungary's cyclical growth prospects.

Hungary's economy is relatively diversified, and manufacturing is an important component of its GDP. The country's prominent automotive and machinery sectors, which account for more than a quarter of its exports, have benefited from strong foreign investment inflows, mainly from German companies, and also increasingly from Asian investors. In 2021, the automotive sector's share amounted to 23.6% of the manufacturing industry's output, while its share of GVA was 3.2% (see Exhibit 6).

Manufacturing, and the automotive sector in particular, will probably continue to receive sizeable FDI inflows over the coming years, which will support productivity growth. Announced projects include the expansion of existing production and research and development (R&D) facilities; greenfield investments in car and battery production plants; and a test park for self-driving cars and other forms of autonomous transportation. A Chinese company, Contemporary Amperex Technology Co., Ltd. (CATL, Baa1 positive), will invest \$7.6 billion to build a 100-Gigawatt-hour battery cell plant over the coming years, which is set to be Europe's largest. Hungary's

Investment Promotion Agency reported a record high volume of FDI inflows of €8.1 billion in the first half of 2023, which already surpassed the previous peak of €6.5 billion of foreign investments recorded for full-year 2022, consisting of 92 large FDI projects.

Together with the fact that new production capacity focuses largely on automation and the use of robotics rather than on generating a large number of low-skilled jobs (a wage share of only 5%-10% provides resilience to rising labour costs), these investment projects underscore Hungary's preparedness to face structural changes within the automotive industry. Manufacturing of electric equipment has grown significantly in the last few years, mainly because of the expansion in the manufacturing of electric motors and generators, as well as batteries and accumulators.

Exhibit 5
Most of Hungary's goods and services exports go to EU countries and mainly Germany
As a percentage of total exports, 2022

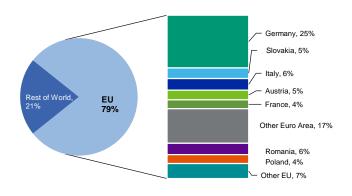
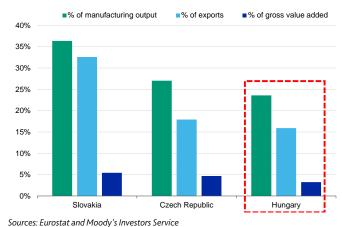


Exhibit 6
The automotive sector plays an important role in Hungary's economy, compared with peers
Share of automotive sector, 2021



Sources: National Bank of Hungary, Eurostat and Moody's Investors Service

#### The government's efforts have strengthened digital competitiveness

Hungary is gaining digital competitiveness compared with other countries, according to the <u>2021 Digital Riser Report</u> by the European Centre for Digital Competitiveness, which ranks the development in 140 countries over 2018-20. Hungary's digital competitiveness development is the second fastest in Europe and North America, behind only that of <u>Lithuania</u> (A2 stable).

In 2016, the Hungarian government initiated the Digital Startup Strategy (DSS) to improve the overall environment for entrepreneurship in the country, focusing, for example, on entrepreneurial competencies, sources of financing and a culture of cooperation. By 2018, every household had the possibility to gain internet access of at least 30 Megabits per second (Mbps) — which represented a goal of the National Infocommunication Strategy (NIS). The current phase of the programme intends to ensure 100 Mbps-plus network coverage to 90% of Hungarian households by 2025. According to a study by McKinsey, a global management consulting firm, a thriving start-up environment in Hungary could generate about 30,000 high-value-adding jobs and up to €1.3 billion in additional direct local spending by 2030.

Hungary's National Digitalisation Strategy encompasses different sub-strategies and aims to promote the information communications technology industry successfully during the 2021-27 EU funding period. A successor to the NIS, this plan comprises initiatives in areas such as digital infrastructure, digital skills, the digital economy and a digital government. Objectives include covering 95% of the households with gigabit networks by 2030 and reducing the share of 16 to 74-year-old Hungarians who do not use the internet to less than 2% by 2030 from 14% in 2019. The government articulated the vision to make Hungary one of the 10 leading EU countries in digitisation by the end of the decade.

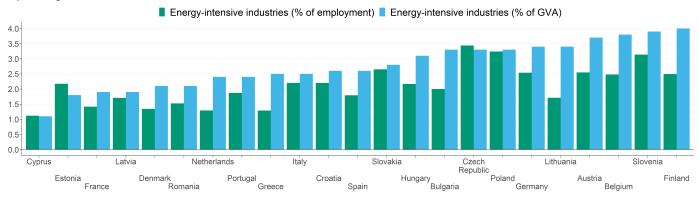
#### Adverse demographics challenge longer-term growth

The automotive sector's importance to the Hungarian economy makes the latter potentially vulnerable to ongoing structural shifts in the sector. However, manufacturing, and the automotive sector in particular, will continue to receive sizeable FDI inflows over the coming years, supporting productivity growth and expanding the supply side of the industrial sector and Hungary's export base.

Together with the fact that new production capacity focuses more on automation and the use of robotics rather than on generating a large number of low-skilled jobs, these investment projects also suggest that Hungary might be reasonably well-prepared to face structural changes within the automotive industry.

However, Hungary has low-to-moderate exposure to the risk of economic scarring from higher-for-longer energy prices than typically seen in the years before the Russia-Ukraine war. The country's energy-intensive industries, which are the most vulnerable to high energy prices, represent 3.1% of GVA in 2020 — the 10th highest among EU countries and higher than the EU median (2.6%) (see Exhibit 7).

Exhibit 7
Hungary's share of energy-intensive industries is 3.1% of GVA, the 10th highest in the EU and above the EU median of 2.6% of GVA In percentage terms, 2020



Energy-intensive industries include manufacturing of paper and paper products (NACE Division C17), printing and reproduction of recorded media (C18), manufacturing of chemicals and chemical products (C20), manufacturing of other nonmetallic mineral products (C23) and manufacturing of basic metals (C24).

Sources: Eurostat and Moody's Investors Service

Hungary's adverse demographics also pose growth challenges. According to Eurostat's 2023 population projection, the country's working-age population will decrease by 0.5% per year over 2023-30, which will increase shortages of skilled labour and likely reduce potential growth from its current 3.0%-3.5% level. The government has tried to address these demographic challenges through its family support programmes, which target an increase in the fertility rate. Although the rate increased to 1.5 in 2022 from 1.2 in 2011, fertility rates are unlikely to rise sufficiently to reverse Hungary's demographic trends.

Current potential growth of 3.0-3.5% is as in the prior years mainly driven by total factor productivity (explaining roughly 45% of potential growth) and capital deepening (about 40%) while labour accounts for about 15%. The implementation of large FDI projects supports both, capital deepening and total factor productivity.

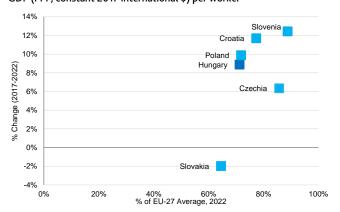
The continued increase in labour supply is driven by an increase in participation rates. The employment rate of the 20-64 age group rose to 80.2% in 2022, above the EU average of 74.6%, from 77.6% in 2019 and 62.2% in 2010. The government aims to boost the employment rate further to 85% by 2030.

Productivity was among the lowest in the CEE region between 2012 and 2016; although it has picked up since 2016 and wider productivity levels have improved moderately, a Hungarian worker produces on average almost 30% lower output than the average worker in the EU (see Exhibit 8). While persistent wage growth in excess of productivity has increased unit labour costs, these costs remain lower than those of most of its peers in the CEE region (see Exhibit 9), resulting in wage-adjusted labour productivity in Hungary being among the highest in the EU.

Exhibit 8

Productivity has risen but remains significantly below the EU average

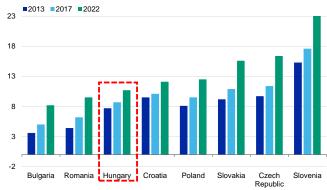
GDP (PPP, constant 2017 international \$) per worker



Sources: ILO and Moody's Investors Service

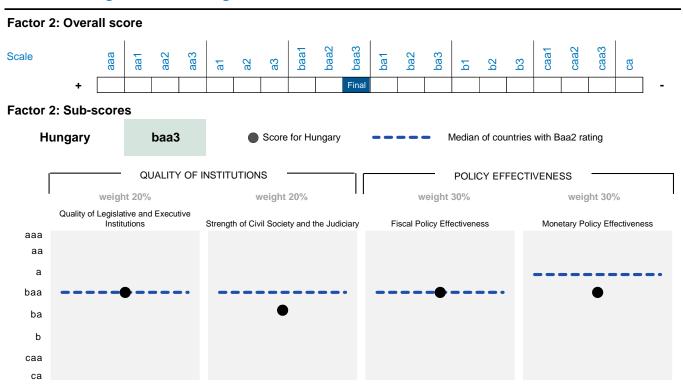
Exhibit 9 Labour costs are rising but remain lower than those of regional peers

Total labour costs, € per hour



Sources: ILO and Moody's Investors Service

# Institutions and governance strength score: baa3



Institutions and governance strength evaluates whether the country's institutional features are conducive to supporting a country's ability and willingness to repay its debt. A related aspect is the government's capacity to conduct sound economic policies that foster economic growth and prosperity. Institutions and governance strength is most often adjusted for the track record of default, which can only lower the final score. Note: the initial factor score is shown in light blue in the scale above. In case the initial and final factor scores are the same, only the final score will appear in the table above.

Our assessment of Hungary's institutions and governance strength is "baa3". The country's moderately strong overall institutional framework has some features that could erode policy credibility. The relationship with EU institutions has become more contentious in recent years, resulting in delayed and partly suspended EU funds.

Constraints relate to control of corruption, rule of law issues and interference with civil society, as well as a history of unpredictable regulatory changes and concerns over central bank independence and monetary financing. However, these concerns have not hampered FDI inflow, and the authorities' commitment to prudent fiscal and monetary policies support our assessment.

Other sovereigns with the same overall score for institutions and governance strength include <u>Armenia</u> (Ba3 stable), <u>Brazil</u> (Ba2 stable), <u>Greece</u> (Ba3 positive), Romania, <u>Panama</u> (Baa2 negative) and <u>South Africa</u> (Ba2 stable).

Exhibit 10

Peer comparison table factor 2: Institutions and go	overnance stren	gth						
	Hungary	baa3 Median	Armenia	Brazil	Greece	Romania	Panama	South Africa
	Baa2/STA		Ba3/STA	Ba2/STA	Ba3/POS	Baa3/STA	Baa2/NEG	Ba2/STA
Final score	baa3		baa3	baa3	baa3	baa3	baa3	baa3
Initial score	baa3		baa3	baa3	baa1	baa3	baa3	baa3
Quality of legislative & executive institutions	baa	baa	ba	baa	а	ba	baa	baa
Strength of civil society & judiciary	ba	ba	ba	baa	baa	ba	ba	baa
Fiscal policy effectiveness	baa	baa	baa	ba	baa	baa	baa	ba
Monetary & macro policy effectiveness	baa	baa	baa	baa	baa	baa	baa	baa
Fiscal balance/GDP (3-year average)	-4.6	-3.6	-2.4	-6.4	-1.8	-5.0	-3.1	-4.9
Average inflation (% change)	6.2	4.4	4.0	4.9	2.3	4.7	1.3	4.8
Volatility of inflation (ppts)	4.5	2.8	3.1	2.5	3.1	3.6	1.7	1.2

Sources: National Authorities, IMF and Moody's Investors Service

#### Persistent EU concerns over rule of law and control of corruption

While Hungary ranks in the upper half of the range of all sovereigns rated Baa1 and Baa2 for most indicators that we look at to assess the strength of the judicial system, its scores and percentile ranks for all Worldwide Governance Indicators (WGIs), except for political stability, have declined since 2009. The decline has been most pronounced for voice and accountability and control of corruption (see Exhibit 41 at the end of the report).

Concerns surrounding rule of law developments and control of corruption have been voiced repeatedly by EU institutions, including the EC and members of the European Parliament. Laws approved under the leadership of Prime Minister Viktor Orbán have raised concerns in the EU over judicial independence, freedom of expression, the rights of minorities and the situation of refugees.

In September 2018, the European Parliament recommended that Article 7 procedures should be launched against Hungary, and a formal hearing was held in Brussels in September 2019. Article 7 of the Treaty on European Union is the harshest punishment procedure available to the EU and its approval would pave the way for sanctions, which could include suspending Hungary's voting rights. However, the procedure has been stalled for years as there is no consensus among EU member states. The EU Council is required to reach a unanimous decision to issue sanctions, and Hungary is likely to receive support from Poland (A2 stable), which itself is facing Article 7 procedures.

In December 2022, the Council of the EU approved Hungary's post-pandemic National Recovery and Resilience Plan (NRRP) and formally adopted its implementing decision on the suspension of €6.3 billion (3.2% of GDP or about 0.5% of GDP per year over 2021-27) under the EU's rule of law budget conditionality regulation. The regulation is designed to safeguard the EU budget and financial interests, and allows the EU to take measures (including suspending payments) to protect its interests.

Because the rule of law conditionality mechanism does not have a direct effect on other EU funds, Hungary can in principle use 88% of its total EU-allocated funds of almost €50 billion<sup>5</sup> (or more than 20% of GDP) for 2021-27 though the flow of a significant part of EU funds is conditional on the implementation of a broad set of reforms.

While the EC signed the partnership agreement for cohesion funds with Hungary (€21.8 billion for 2021-27 or about 11% of GDP) on 22 December 2022, cohesion policy payments will be conditional on the fulfilment of enabling conditions, in particular, the implementation of judiciary reforms.

EU members also indicated that they will hold Hungary to the terms of its NRRP, according to which, Hungary must fulfill 27 so-called super-milestones of institutional reforms to strengthen its judiciary and control of corruption to receive the payments of future grants from the EU's post-pandemic RRF (€5.8 billion or almost 3% of GDP). Hungary submitted its request to the European Commission to modify its recovery and resilience plan on 31 August 2023. The modified plan includes the request for €3.9 billion in loans (almost 2% of GDP) and for a €0.7 billion REPowerEU grant allocation. The European Commission has until the end of October to assess Hungary's modified plan.

Any effect on Hungary's credit profile will ultimately depend on the government's willingness to satisfy the EC's demands for reforms in the area of rule of law. If successful within the next two years, any suspended budget funding tied to the rule of law conditionality regulation would be released without penalty. Aside from the financial and economic boost from EU money, reforms would benefit Hungary's institutional and governance strength, the second factor in our sovereign methodology.

In recent months, Hungary has implemented a number of remedial measures, including the creation of an independent integrity authority with extensive powers and a separate anti-corruption task force, modifications to the criminal code that allow the judicial review of prosecutorial decisions, changes to the public procurement act, and reforms to the asset declaration system for high-profile public officials. Hungary also created a new EU affairs Ministry and enacted key judicial reforms in May 2023, which strengthened the independence of the judiciary by safeguarding the independence of the National Judicial Council, as well as by reforming the Supreme Court and the Constitutional Court to protect them from political interference and to enable the referral of cases to the European Court of Justice for preliminary rulings.

The EU published its annual <u>rule of law report</u> on Hungary in July 2023 where it acknowledged some progress in anti-corruption and judicial reforms, but also emphasised that little to no progress has been accomplished in, for example, asset declaration, lobbying, campaign finance and media independence. It also noted that civil society organisations continue to remain under pressure, and concerns persist with regard to the ineffective implementation of the judgments of European courts by state authorities.

Given the two-thirds supermajority for Hungary's ruling Fidesz-led coalition and the high importance of EU funds for the country's economy, our baseline is that Hungary will enact legislation to implement the reforms it committed to and will ultimately receive most EU funds, although in a dragging step-by-step process.

#### Moderate quality of legislative and executive institutions

Nevertheless, Hungary scores relatively well in the WGIs for government effectiveness and regulatory quality, where it ranks fifth and sixth, respectively, compared with the group of Baa1- and Baa2-rated sovereigns (see Exhibit 11).

It shares a "baa" score for quality of legislative and executive institutions with, for example, Brazil and Panama. Hungary also scores strongly compared with close peers in the fields of corruption control and perception, and is only marginally weaker in the rule of law and press freedom areas (see Exhibit 12).

Overall, policy formulation in Hungary is supported by the generally capable and professional administration. Some challenges are present in certain sectors of the economy related to corruption and unpredictability of policies. However, the overall location quality remains very favourable in the industrial sector as highlighted by large volume of FDIs in this sector. Recent FDI investments include the \$7.6 billion (or 4.3% of 2022 GDP) one by CATL to build one of Europe's largest battery cell plant. Hungary's Investment Promotion Agency reported a record high volume of FDI inflow of €8.1 billion in the first half of 2023, which already surpassed the previous peak of €6.5 billion of foreign investments recorded for full-year 2022, consisting of 92 large FDI projects.

Exhibit 11

Key indicators for quality of legislative and executive institutions are strong

Ranking, Baa2 and Baa1-rated sovereigns, sorted by average rank of all indicators, latest available year

	Government Effectiveness	Regulatory Quality
Andorra	1	1
Portugal	2	3
Spain	3	2
Uruguay	4	4
Croatia	6	5
Hungary	5	6
Indonesia	7	8
Panama	9	10
Thailand	8	11
Bulgaria	13	7
Colombia	12	9
Kazakhstan	11	12
Philippines	10	14
Peru	14	13
Mexico	15	15

Sources: Worldwide Governance Indicators

#### Exhibit 12

Freedom and rule of law indexes are relatively weak, while other indicators surpass the average of similarly rated peers Ranking, Baa2 and Baa1-rated sovereigns, sorted by average rank of all indicators, latest available year

	Control of Corrupion	Rule of Law	Voice and Accountability	World Justice Project Rule of Law Index	Transparency International Corruption Perception Index	Reporters Without Borders Press Freedom Index
Portugal	3	2	2	3	2	1
Andorra	2	1	3			3
Uruguay	1	4	1	2	1	5
Spain	4	3	4	1	3	2
Croatia	5	6	5	4	4	4
Bulgaria	7	8	8	5	5	7
Hungary	6	5	7	9	6	8
Panama	13	10	6	8	9	6
Indonesia	10	9	10	6	12	10
Thailand	11	7	14	10	11	9
Kazakhstan	8	12	15	7	8	14
Colombia	9	11	11	12	7	15
Peru	14	13	9	11	10	11
Philippines	12	14	13	13	13	13
Mexico	15	15	12	14	14	12

Sources: Worldwide Governance Indicators, World Justice Project, Transparency International, Reporters Without Borders and World Bank

#### Moderately strong policy effectiveness

Our "baa" assessment of Hungary's fiscal policy effectiveness is underlined by fiscal consolidation between 2011 and 2019, which has kept the general government's fiscal deficit below the Maastricht threshold of 3% of GDP. Also, helped by strong growth, the government debt burden gradually declined steadily between then and the onset of the pandemic: from a peak of slightly more than 80% of GDP in 2011, rapid nominal GDP growth and — to a lesser degree — the lower fiscal deficits since 2012 supported a significant decline in debt to 65% of GDP by the end of 2019. The structure of debt has also improved (see the sections on Fiscal strength and government liquidity risk for more details).

While the Hungarian authorities resorted to the escape clause of the fiscal rules during the pandemic, allowing for substantial support measures and leading to a 14-pp jump in the debt-to-GDP ratio to 79.3% of GDP in 2020, we see a clear commitment on their part towards fiscal consolidation and further reducing the debt-to-GDP ratio each year amid the significant spending pressures caused by the energy price shock and the considerable weakening of economic growth. According to Hungary's constitutional debt rule that is in effect since 2016, the debt-to-GDP ratio needs to decrease each year until it falls below 50% of GDP.<sup>7</sup>

We assess Hungary's macroeconomic policy effectiveness at "baa". Inflation had accelerated already before the Russia-Ukraine military conflict began, and the Harmonised Consumer Price Index (HICP) inflation surpassed the upper boundary of the Hungarian central bank's tolerance band of 4% in April 2021, driven by a series of temporary factors such as fuel price base effects, increase in excise duties and a depreciating currency. Since the start of the military conflict, inflationary pressures accelerated rapidly and HICP inflation reached a peak of 26.2% in January 2023 because of a significant increase in input costs and corporate profit, a weak forint, as well as a severe drought that pushed food prices up (see Exhibit 13).

Using the Federal Reserve Bank of Atlanta's approach, we differentiate between goods and services in the consumption basket on the basis of the frequency of price changes ("sticky-price" Consumer Price Index [CPI]), assuming a similar pattern of price changes between EU countries and the <u>United States</u> (Aaa stable).<sup>8</sup> An acceleration in sticky-price CPI suggests higher likelihood of price increases becoming permanent. While sticky-price CPI inflation was relatively stable in the past business cycles, it accelerated strongly in 2022, peaked at an all-time high of 21.5% in March 2023 and slowed to 16.4% in July 2023 (see Exhibit 14).

We expect consumer price inflation to continue to decrease, reaching 9.8% at year-end 2023, on tight fiscal and monetary policies, weakening domestic demand, and significant energy and food price-related base effects. On an average, we forecast annual consumer

price inflation of 17.5% in 2023, 5.3% in 2024 and 3.4% as of year-end 2024, which will come within the MNB's 2%-4% tolerance band. The MNB's inflation target is 3%.

While there have been discussions and concerns in the past about central bank independence, MNB is focused on its mandate under which its primary objective is to achieve and maintain price stability.

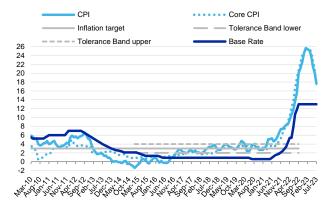
In light of the surge in inflation, the MNB significantly tightened monetary policy in the second half of 2021 and 2022. As a consequence of decelerating inflation (although still high), improving terms of trade and lower macroeconomic risks for the Hungarian economy, the MNB lowered its effective rate (overnight deposit rate) by 100 basis points (bps) each in May, June, July and August to currently 14%.

The Hungarian forint has shown signs of strengthening since the end of 2022 as a result of a more favourable situation in energy markets and the year-end agreement with the EU through which Hungary avoided losing a substantial amount of EU funds. This follows a marked depreciation of the forint by up to around 14% against the euro between the end of 2021 and October 2022 caused by international factors including the Russia-Ukraine military conflict, the energy situation, the country's strained relationship with the EU and the potential reduction in EU funding.

Exhibit 13

Consumer price inflation started to decelerate from peak of 26% in January 2023

Annual change in percentage terms



Sources: National Bank of Hungary and Moody's Investors Service

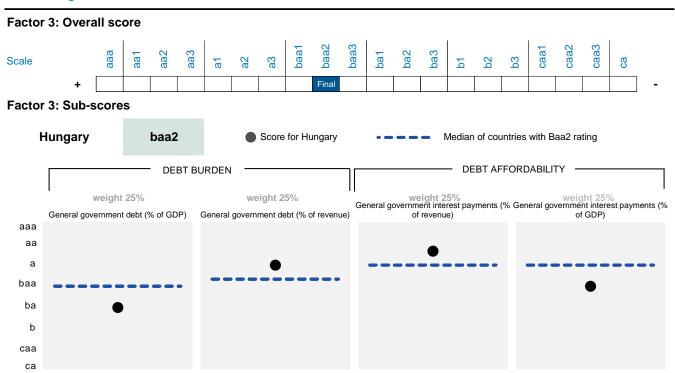
# Exhibit 14 Acceleration of sticky-price inflation indicates more persistent inflationary pressures in Hungary Year-on-year percentage change



Sticky-price CPI: HICP items with less frequent price adjustments; flexible-price CPI: HICP items with frequent price adjustments; calculations based on the item classification of the Atlanta Fed's sticky-price CPI.

Sources: Eurostat and Moody's Investors Service

# Fiscal strength score: baa2



Fiscal strength captures the overall health of government finances, incorporating the assessment of relative debt burdens and debt affordability as well as the structure of government debt. Some governments have a greater ability to carry a higher debt burden at affordable rates than others. Fiscal strength is adjusted for the debt trend, the share of foreign currency debt in government debt, other public sector debt and for cases in which public sector financial assets or sovereign wealth funds are present. Depending on the adjustment factor, the overall score of fiscal strength can be lowered or increased.

Note: the initial factor score is shown in light blue in the scale above. In case the initial and final factor scores are the same, only the final score will appear in the table above.

We assess Hungary's fiscal strength at "baa2", reflecting a moderately high debt burden and relatively strong debt affordability. The expected 5.5-pp decrease in the debt-to-GDP ratio between 2022 and 2024 results in a positive one-notch adjustment to its fiscal strength score. In addition, we make a negative one-notch adjustment to incorporate the impact of a further deterioration in debt affordability metrics in 2023-24 on the overall fiscal strength score. Moreover, we lower the negative adjustment for the general government foreign-currency debt-to-GDP ratio to one notch from two notches previously because we expect the ratio to decrease below the 20% of GDP threshold in 2023. In addition, Hungary's debt management agency's (AKK, Államadósság Kezelő KözpontZártkörűen Működő Részvénytársaság) hedging of non-euro debt — all non-euro issuances are swapped into euro — reduces foreign-currency risks.

Sovereigns that share Hungary's fiscal strength score include Montenegro (B1 stable), Morocco (Ba1 stable), Philippines (Baa2 stable) and Uruguay (Baa2 positive).

Exhibit 15

Peer comparison table factor 3: Fiscal strength								
	Hungary	baa2 Median	Montenegro	Morocco	Philippines	Uruguay	Spain	Mauritius
	Baa2/STA		B1/STA	Ba1/STA	Baa2/STA	Baa2/POS	Baa1/STA	Baa3/STA
Final score	baa2		baa2	baa2	baa2	baa2	baa3	baa3
Initial score	baa2		a2	baa2	baa2	baa2	baa3	baa3
Gen. gov. debt (% of GDP)	73.3	48.4	70.8	63.3	54.5	55.9	113.2	75.8
Gen. gov. debt (% of revenue)	176.2	220.2	176.6	244.3	255.0	214.9	263.4	296.8
Gen. gov. interest payments (% of GDP)	2.8	2.2	1.6	2.1	2.1	2.3	2.4	2.7
Gen. gov. int. payments (% of revenue)	6.7	8.9	4.1	8.1	9.7	8.8	5.5	9.9

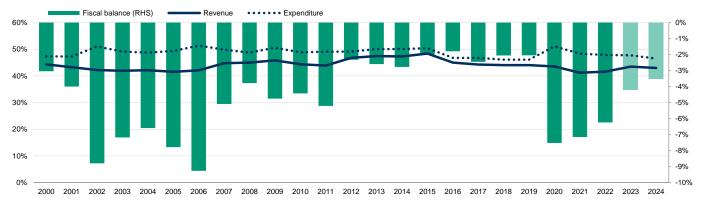
Sources: National authorities, IMF, Moody's Investors Service

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

#### Fiscal policy will tighten in 2023-24

The fiscal deficit of the general government narrowed to 6.2% of GDP in 2022 (4.9% of GDP when excluding the costs of the additional gas purchases ahead of the winter in 2022-23) from 7.2% in 2021 and 7.5% in 2020 (see Exhibit 16). It remained significantly above the pre-pandemic average of 2.2% during 2014-19, as well as the Baa2-rated median (an average of -2.5% in 2023-24).

Exhibit 16
Fiscal deficit remained high in 2022 and will only gradually narrow in the coming years
General government's revenue, expenditure and fiscal balance (as a percentage of GDP)



Sources: Hungarian Central Statistical Office and Moody's Investors Service

Spending pressures have remained high because of the elevated inflation and the government's measures to shield households and companies from the energy crisis. The government introduced price caps on, for example, fuels (which ended in December 2022) and selected food items (which ended in August 2023), and an interest rate cap on variable rate mortgages and small business loans. As the flat tariff on gas and electricity prices for households could not be sustained because of the jump in gas and electricity prices, the authorities launched a two-tier energy tariff in August 2022. The government also introduced a temporary windfall profit, carried out untargeted operational spending cuts and postponed investment projects to meet its deficit targets.

The government also provides support to companies that are exposed to the energy crisis via different programmes (including the Baross Gábor Reindustrialization Loan Program and Equity program, Factory Rescue Program, and Energy Cost and Investment Support Program for Manufacturing SMEs), with an overall volume of up to around 4% of GDP.

We expect the fiscal deficit to narrow to 4.2% of GDP in 2023 and 3.5% of GDP in 2024 (compared with the authorities' objective of -3.9% in 2023 and -2.9% in 2024). This projection is based on our assumption of robust revenue growth, related to high inflation and tax measures (such as extra profit taxes for the energy sector, banks, retail trade, insurance companies, pharmaceuticals industry and telecommunications), overcompensating expenditure growth driven by high inflation, the utilities protection fund<sup>9</sup> (about 3.5% of GDP) and additional defense expenditure that will likely push overall defense spending above 2% of GDP in 2023 (from 1.6% in 2021).

#### Government debt burden will continue to decline gradually, mainly driven by strong nominal growth

The high fiscal deficit, in combination with the economic contraction triggered by the pandemic, caused the debt burden to increase to 79.3% of GDP in 2020, after it declined by 15.0 pps between 2011 and 2019 (see Exhibit 17). The increase in the debt burden was slightly lower than that experienced by the Baa2-rated median, which resulted in a small narrowing of the difference between Hungary's debt burden and the Baa2-rated median to 20.6 pps in 2020 from 20.8 pps in 2019.

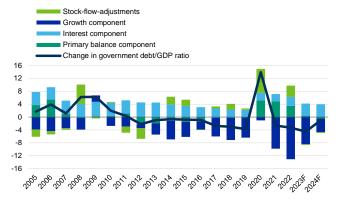
Helped by the strong nominal economic growth, the debt burden fell by 2.7 pp in 2021 and 3.3 pp in 2022, reaching 73.3% of GDP in 2022.

We forecast strong nominal GDP growth and a narrowing fiscal deficit to help reduce the debt burden to 67.8% of GDP in 2024, which is more than 10 pps lower than the 2020 peak level but still higher than the 2019 level of 65%. As a result, the difference in the debt burden of Hungary from that of the Baa2-rated median will narrow to 13 pps (see Exhibit 18). According to Hungary's constitutional debt rule, the debt-to-GDP ratio needs to decrease each year as long as it is above 50%.

Exhibit 17

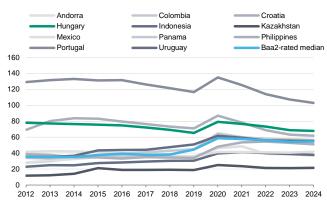
Debt will further decrease in 2023-24 mainly on nominal growth

Contribution to changes in the government's debt-to-GDP ratio (in
percentage points)



Source: Moody's Investors Service

# Exhibit 18 The government debt burden has stabilised around 70% of GDP General government debt, as a percentage of GDP



Sources: National authorities and Moody's Investors Service

#### Hungary's debt affordability metrics continue to weaken in 2023-24 after the low in 2019

Apart from the overall reduction in the public debt ratio, the structure of Hungary's general government debt has significantly improved since 2011-12. AKK's prudent asset-liability management has reduced both the share of foreign-currency-denominated debt to 13.4% of GDP in 2019 from a peak of 42.3% in 2011 and non-resident holdings of general government debt to slightly more than 30% of total debt in 2022 from 61.1% in 2012 (see Exhibit 19). The significant increase in funding needs since 2019 resulted in the share of foreign-currency debt again rising to reach 20.9% of GDP in 2022. AKK keeps the share of foreign-currency debt below 30% of total debt, and we expect it to decline below the 20% threshold in 2023 because of solid nominal growth and strong demand from domestic investors.

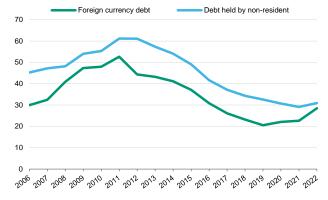
AKK's hedging of non-euro debt — all non-euro issuances are swapped into euro — further mitigates exchange-rate risk. Together, these measures have significantly reduced Hungary's exposure to the global financial market volatility.

At the same time, the average maturity of Hungary's outstanding debt has been relatively low compared with that of peers, leading to comparatively high refinancing needs in most years. Hungary's average term to maturity of government debt securities was 6.0 years in August 2023, slightly lower than the 6.1 years as of end 2022 and significantly above the 3.8 years as of end 2018.

Hungary's debt affordability metrics improved between 2012 and 2019; interest payments fell to a low of 5.1% of total revenue in 2019 from 9.7% in 2012, but increased slightly to 5.3% in 2020 and 5.5% in 2021 as a result of larger interest payments related to higher borrowings.

However, the substantial increase in interest rates caused by monetary policy tightening as a response to high consumer price inflation materially increased funding costs. Comparatively high gross borrowing requirements and the second-highest share of government debt securities with a floating rate (22.9% in July 2023 versus 19.8% at year-end 2022 and 12.8% at year-end 2021) among EU countries<sup>10</sup> resulted in a significant increase in the ratio of interest payments to revenue to 6.7% in 2022, and we expect the ratio to further increase to 8.7% in 2023 and reach the peak level at 9.2% in 2024. Average interest payments as a percentage of revenue will be slightly lower than the Baa2-rated median in 2023-24 (see Exhibit 20).

# Exhibit 19 Hungary's share of foreign-currency debt in total debt increased towards the upper limit of 30% since 2019 but remains significantly below the 2011 peak As a percentage of government debt

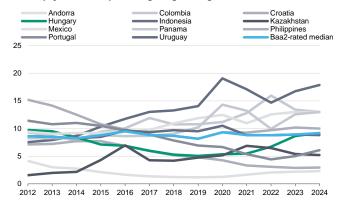


Sources: National sources and Moody's Investors Service

#### Exhibit 20

Interest payments-to-revenue ratio will continue to increase, peaking at 9.2% in 2024, remaining in line with the Baa2-rated median

Interest payments as a percentage of general government revenue



Sources: Eurostat and Moody's Investors Service

# Susceptibility to event risk score: baa



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. Susceptibility to event risk is a constraint which can only lower the scorecard-indicated outcome.

Note: the initial factor score is shown in light blue in the scale above. In case the initial and final factor scores are the same, only the final score will appear in the table above.

We score Hungary's susceptibility to event risk at "baa", driven by political risk and banking sector risk.

#### Susceptibility to political risk is "baa"

Exposure to political event risks is "baa" based on domestic political and geopolitical risks. The Fidesz-led government coalition has a supermajority in Parliament, ensuring broad policy continuity and continued focus on overall business-friendly policies. Our assessment also accounts for Hungary's strained relationship with the EU, as well as a history of unorthodox policies implemented under the Fidesz government. WGIs reveal that Hungary scores higher than the median of countries with a "baa" score, but Hungary's scoring in voice and accountability has been declining since the early 2000s.

Other countries with a "baa" score for political risk include Croatia, Bulgaria and the Czech Republic.

Exhibit 21

Peer comparison table factor 4a: Political risk								
	Hungary	baa Median	Bulgaria	Croatia	Czech Republic	Philippines	Botswana	Romania
	Baa2/STA		Baa1/STA	Baa2/STA	Aa3/NEG	Baa2/STA	A3/STA	Baa3/STA
Final score	baa		baa	baa	baa	baa	а	ba
Voice & accountability, score[1]	0.4	0.3	0.3	0.6	1.0	-0.2	0.5	0.6
Political stability, score[1]	0.9	0.4	0.5	0.7	1.0	-0.9	1.0	0.5

[1] Composite index with values from about -2.50 to 2.50; higher values correspond to better governance. Sources: Worldwide Governance Indicators and Moody's Investors Service

On 3 April 2022, parliamentary elections in Hungary resulted in a renewed two-thirds supermajority for the ruling coalition of Fidesz and its smaller coalition partner, the Christian Democratic People's Party (Kereszténydemokrata Néppárt, KDNP). Viktor Orbán won his fourth consecutive four-year term as the prime minister. Fidesz-KDNP's victory points to the continuation of the status quo, implying some predictability, including a business-friendly growth model and a "Hungary first" approach to policies.

The government has used its powerful position to extend its control over national media, limit the opposition's ability to form parliamentary groups, and further restrict migrants and asylum-seekers from entering the country. During the pandemic, the government passed a set of measures to control infection rates that let the government rule by decree, and included prison sentences for those spreading misinformation and violating quarantine measures. The state of emergency was reinstated in May 2022 because of the Russian invasion of Ukraine and it remains in force to this day.

With respect to EU funds, our baseline is that Hungary will ultimately reach an agreement with the EC in a dragging, step-by-step process, which will result in only a small or no suspension of EU funds (see more in the Institutional and governance strength section).

With respect to geopolitical risks, although Hungary's NATO membership is ultimately a guarantor of national security, the country also faces contagion risks from the Russia-Ukraine military conflict as it is bound by NATO's Article 5 collective defence clause, which treats an attack on any NATO member as an attack on all treaty signatories. The EU's Mutual Defence Clause (Article 42.7 of the Lisbon Treaty) would also apply if the conflict involved an EU country. While this is not our base case because of the deterrent effect of these clauses, there is a heightened risk that these treaty obligations could ultimately result in Hungary needing to use armed force to restore and maintain stability in Europe. The probability of such risks materialising has increased in light of the ongoing military conflict between Russia and Ukraine.

#### Susceptibility to government liquidity risk is "a"

Our "a" assessment of Hungary's government liquidity risk is constrained by its comparatively high government gross borrowing needs than peers. Government liquidity risks are mitigated by domestic funding sources and effective public debt management.

Other sovereigns with the same score for government liquidity risk include Romania, Spain (Baa1 stable) and Lithuania.

Exhibit 22

Peer comparison table factor 4b: Government liqu	idity risk							
	Hungary	a Median	Lithuania	Romania	Spain	Uruguay	Malaysia	Italy
	Baa2/STA		A2/STA	Baa3/STA	Baa1/STA	Baa2/POS	A3/STA	Baa3/NEG
Final score	а		а	а	а	а	aa	baa
Initial score	а		а	а	aa	а	aa	а
Ease of access to funding	а	а	а	а	aa	а	aa	а
Gross borrowing requirements (% of GDP)	14.5	8.0	5.8	11.8	17.3	5.4	11.6	23.3

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

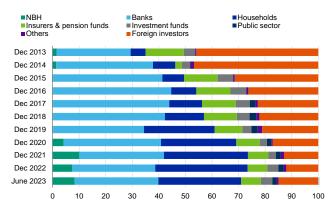
The share of maturing debt securities over the next year is 10.0% of GDP (short-term debt with a maturity of up to 1 year of 4.6% of GDP and long-term debt securities maturing over the next 12 months of 5.4% of GDP) as of July 2023, the eight highest in the EU and lower than those of, for example, Italy (20.9%), France (14.7%), Spain (14.7%) and Belgium (11.6%). Gross borrowing requirements of Hungary are likely to amount to 14.5% of GDP in 2023, higher than the median of sovereigns having an "a" score for government liquidity risks (8.0%). The Hungarian government debt management agency already completed 73% of its 2023 financing plan as of end August 2023. Because of the reduction in the fiscal deficit, we expect gross borrowing requirements to decrease to 13.0% of GDP in 2024.

Hungary tends to borrow more than its CEE peers because of the relatively short duration of government debt and the higher share of short-term securities (4.6% of GDP in July 2023 versus the CEE median of 1.1% of GDP). Hungary's average term to maturity of government debt securities was 6.0 years in August 2023. However, it remains low compared with that of regional peers such as Slovenia (A3 stable) (9.9 years in July 2023), Slovakia (A2 negative) (8.7 years), Romania (7.1 years) and Bulgaria (7.4 years).

AKK has increased the domestic retail financing of government securities. As a result, nonresident investors play a still important but declining role in the domestic government debt market. The share of foreign investors holding Hungarian forint-denominated

government securities decreased to 14.9% as of June 2023 from more than 40% at year-end 2012 (see Exhibit 23). Although nonresident investors in domestic debt do not pose a currency risk in and of themselves, they are more prone to leave during periods of tightening global liquidity.

Exhibit 23
Foreign ownership of local-currency debt has declined ...
Ownership structure of Hungarian forint-denominated central government debt, as a percentage of total

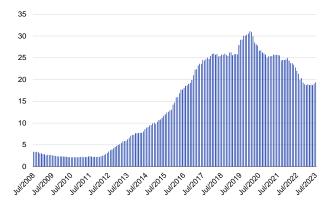


Sources: AKK and Moody's Investors Service

#### Exhibit 24

 $\dots$  while the participation of retail investors has increased sharply since 2011

Share of retail investors in total central government debt, in percentage terms



Sources: AKK and Moody's Investors Service

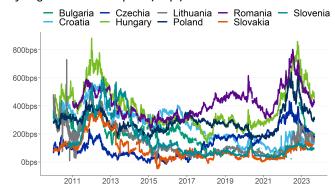
The 10-year government bond yield of Hungary peaked at 10.9% on 14 October 2022, marking a sharp widening of yield spreads against German bonds, and then started declining to reach 7.0% on 31 August 2023 (see Exhibit 25). The yield spreads against German bonds reached 859 bps at its peak on 14 October 2022, compared with an average of 337 bps in 2021, reflecting the uncertain environment and the sharp policy rate hike by the Hungarian central bank over the course of 2022. The spread against German bonds narrowed to 458 bps as of 31 August 2023 (see Exhibit 26).

Exhibit 25
Hungary's funding costs are falling after a steep rise ...
10-year government bond yield (in percentage terms)



Source: Haver Analytics

Exhibit 26 ... and the yield spreads against German bonds are narrowing 10-year government bond spread (in bps)



Source: Haver Analytics

#### Susceptibility to banking sector risk is "baa"

We set Hungary's susceptibility to banking sector risk score at "baa". The score reflects the intrinsic strength of Hungary's banking sector<sup>12</sup>, marked by a "ba1-ba2" risk of a banking sector credit event; and the size of the sector, which, at 93% of GDP, is in line with the Baa2-rated median. While banks have strengthened their capitalisation and reduced their high levels of nonperforming loans (NPLs) following the 2008-09 financial crisis, the system's domestic ownership is high and increased further to 63% of total banking assets by the end of December 2022. From a sovereign credit perspective, high domestic ownership of banks increases the potential amount of contingent liabilities that may crystallise on the government's balance sheet.

Exhibit 27

Peer comparison table factor 4c: Banking sector r	isk							
	Hungary	baa Median	Bulgaria	India	Kazakhstan	Mauritius	Malaysia	Italy
	Baa2/STA		Baa1/STA	Baa3/STA	Baa2/STA	Baa3/STA	A3/STA	Baa3/NEG
Final score	baa		baa	baa	baa	baa	а	ba
Initial score	baa		baa	а	baa	ba	а	ba
BCA[1]	ba1	ba3	b3	ba1	ba3	ba1	baa1	ba1
BSCE[2]	ba1-ba2	ba3-b3	ba1-ba2	ba1-ba2	ba3-b3	ba1-ba2	baa1	ba1-ba2
Total domestic bank assets (% of GDP)	93.1	77.1	94.0	74.1	43.3	387.9	187.0	207.8

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

Hungarian banks' asset quality has been broadly resilient to the pandemic and the energy crisis as low private-sector debt, combined with Hungarian banks' high share of fixed-rate loans, tight underwriting standards and a sizeable share of loans backed by government schemes, prevented a deterioration in loan quality. The banking system's ratio of NPLs to gross loans was 2.8% in the second quarter of 2023, below that as of year-end 2022 (3.2%). Banks have ample loan-loss reserves, which accounted for around 101.03% of NPLs as of December 2022 for rated banks.

However, various measures introduced by the government increase asset risk for banks and create moral hazard. Following the lengthiest moratoriums in EU as a response to the pandemic, which expired at the end of 2022, the government introduced on 1 September 2022 a moratorium for agricultural loans until 31 December 2023 as the sector was hard-hit by a drought. Further, a cap on variable rate mortgages and small business loans, which was initially due to expire at the end of June 2022, has been subsequently extended a few times and is now likely to be phased out when the central bank's key rate reaches single digits in early 2024. These measures understate the banks' true asset quality, and the impact of the higher interest rates will be visible only when these measures expire.

The banking system's capitalisation metrics are good, and rated banks have significant buffers above their minimum requirements. However, banks' large investments in Hungarian government bonds weigh on their Moody's-adjusted capital measures. Further, the banking system's excess buffers above the regulatory minimum will be reduced by the phased reinstatement of the capital buffer for Other Systemically Important Institutions (O-SII), which must be fully phased in by 1 January 2024, and the introduction of a countercyclical capital buffer of 0.5% as of July 2024 to address rising risks in the property market. As of June 2023, the system's total capital adequacy ratio was 18.7% (up from 18.2% a year earlier) and the Common Equity Tier 1 ratio 16.5% (unchanged compared to a year earlier). Besides OTP Bank NyRt's (Baa1/Baa3 stable, ba1)<sup>13</sup> operations in Russia and Ukraine, and the operations of Raiffeisen Bank International AG (A1/A1, baa3), the parent bank of Raiffeisen Bank Zrt, the banking system has limited direct exposure to Russia or Ukraine.

The slowdown in consumer price inflation and pickup in growth in the second half of 2023 and in 2024, should gradually improve the currently limited business opportunities for Hungarian banks. Although the sharp rise in interest rates boosted banks' interest income, the reversing interest rate environment and continued pressure on banks' funding costs, higher credit and operational costs, as well as government measures, including those aimed at directing households' savings towards government bonds (which further increases banks' funding costs), will reduce the profit benefit for banks. The windfall tax was extended to 2024 but the banks may reduce it up to half by investing in government bonds.

<sup>[2]</sup> 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 and Moody's Investors Service

Hungarian banks remain mainly funded by domestic deposits. The system's loan-to-deposit ratio was 85% as of June 2023. However, the reliance of the rated banks on market funding has increased because of the substantial volumes of debt that they have issued to satisfy their requirements for minimum own funds and eligible liabilities (MREL), which will become a binding regulatory requirement as of 1 January 2024 for most banks. The banks' foreign liabilities accounted for 17.5% of total assets as of July 2023, while foreign-currency deposits accounted for 11% of total assets. The high reliance on foreign-currency funding could create risks for the banking system at times of significant pressure on the local currency, constraining banks' ability to refinance foreign-currency liabilities and increasing the cost of wholesale funds. It also exposes banks to the tail risk of significant outflows of foreign-currency deposits from residents in case of a balance-of-payment crisis driving a sharp depreciation of the currency.

Over 2010-15, the authorities took a number of measures that have had largely negative effects on banks. Although since February 2015, the government has softened its approach and announced a number of policy measures to support the financial sector, Hungary has taken a number of credit-negative measures for banks since the onset of the pandemic.

The banking system is moderately concentrated, with the six largest banks accounting for almost 80% of the system's total assets.

### External vulnerability risk is "a"

Hungary's economic growth model in the period before the 2008 financial crisis was characterised by excessive lending growth and rapid growth in external debt, which resulted in an economic rebalancing in the post-crisis period. However, its external vulnerabilities have since decreased markedly and Hungary's external vulnerability risk score is "a".

Exhibit 28

	Hungary	a Median	Czech Republic	Kazakhstan	Poland	Senegal	Slovakia	Uruguay
	Baa2/STA		Aa3/NEG	Baa2/STA	A2/STA	Ba3/STA	A2/NEG	Baa2/POS
Final score	а		а	а	а	а	а	а
Initial score	а		а	а	а	а	а	а
Current account balance (% of GDP)	-8.2	-2.9	-6.1	3.5	-3.0	-15.6	-8.2	-3.2
Net IIP (% of GDP)[1]	-48.0	-34.5	-20.4	-27.6	-34.1	-83.9	-61.0	-22.6
External debt (% of current account receipts)	92.6	95.2	83.6	162.6	80.8	287.5		225.9
External vulnerability indicator (EVI)[2]	155.3	59.9		183.7	76.8	69.5		131.3

<sup>[1]</sup> Net international investment position (as a percentage 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 and Moody's Investors Service

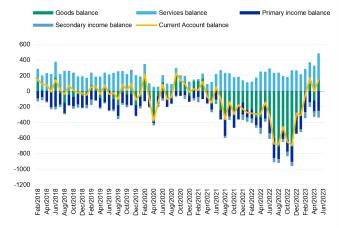
The current-account deficit widened to 8.2% of GDP in 2022 because of the terms-of-trade shock related to the jump in energy prices, which significantly increased the energy import bill and widened the goods trade deficit. The substantial improvement in the terms of trade also subdued import growth because weak domestic demand resulted in the current account balance turning into a slight surplus of about HUF150 billion (or 0.2% of GDP) in the first half of 2023 (see Exhibit 29). For the full-year 2023, we forecast a current account deficit of 2.8% as the recovery in domestic demand will result in stronger import growth in the second half of 2023. For 2024, we forecast the current account deficit will further narrow to 2.3% of GDP.

Hungary's net international investment position has continued to improve, reaching a net liability position of -48% of GDP in 2022 from -48.7% in 2021 and significantly below the -121.8% in 2009. While the pandemic and energy crisis resulted in an increase in total external debt (excluding special purpose entities [SPEs]) to 90.2% of GDP in 2022 from 74.3% in 2020, it remains much below the past peak of 147% of GDP in 2011.

Foreign-currency reserves as a share of short-term external debt were in the range of 123 to 125% over January-August 2023, and we expect the ratio to remain substantially above 100% in the reminder of 2023 and in 2024. The IMF's ratio of reserves to Assessing Reserve Adequacy (ARA) metric was 1.1 in 2022, which we consider an adequate level of reserves.

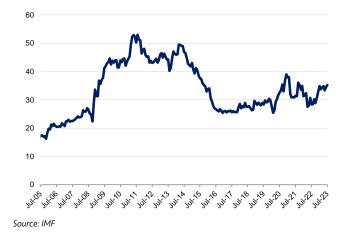
The MNB has a €4 billion repo line (the current expiry date is 15 January 2024) with the European Central Bank (ECB) under the ECB's framework for swap and repo lines.

Exhibit 29
The current-account deficit widened sharply in 2022 as the terms of trade moved against Hungary
HUF billion, current account excluding SPEs



Sources: MNB and Moody's Investors Service

Exhibit 30
Foreign-currency reserves have remained broadly stable since 2016
\$ billion (excluding gold)



#### **ESG** considerations

Hungary's ESG Credit Impact Score is Moderately Negative CIS-3

Exhibit 31

**ESG Credit Impact Score** 



Source: Moody's Investors Service

Hungary's ESG Credit Impact Score is moderately negative (CIS-3), reflecting moderately negative exposure to social risks, the credit impact of which is only partially mitigated by robust financial capacity and governance.

Exhibit 32
ESG Issuer Profile Scores



Source: Moody's Investors Service

#### **Environmental**

Hungary's exposure to environmental risks is neutral to low across all categories, and we therefore set its overall E issuer profile score at neutral to low (E-2).

#### **Social**

Hungary's **S-3** social risk stems from highly negative demographic pressures, reflected in a declining working-age population (and shrinking total population). Together with comparatively restrictive immigration policies this could significantly weigh on potential growth over the longer term and increase risks to fiscal sustainability. Hungary shows moderately negative exposure in the education system. While attainment rates are high, the quality of education is often cited as a factor behind significant skills mismatches, which could in the future also lead to challenges related to labour and income.

#### Governance

Hungary's **G-2** G issuer profile score is based on moderate quality of institutions and broadly effective policies, balanced against weaknesses in civil society and judiciary. The Hungarian government is committed to maintaining fiscal prudence; the authorities regularly publish comprehensive and reliable data.

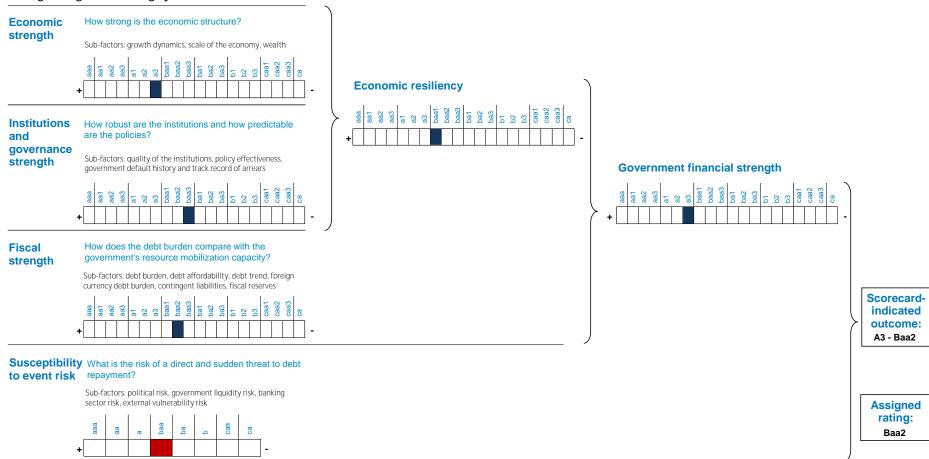
All of these considerations are further discussed in the "Credit profile" section above. Our approach to ESG is explained in our report on how the <u>scores depict varied and largely credit-negative impact of ESG factors</u> and our cross-sector methodology <u>General Principles for Assessing Environmental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

#### Scorecard-indicated outcome

Combining the scores for individual factors provides the scorecard-indicated outcome. While the 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 and should leave room for exceptional risk factors that may result in an assigned rating outside the scorecard-indicated outcome. For more information, please see our <a href="Rating Methodology: Sovereigns">Rating Methodology: Sovereigns</a>.

Exhibit 33

Sovereign rating metrics: Hungary



Source: Moody's Investors Service

# **Comparatives**

This section compares relevant credit information regarding the Government of Hungary with other sovereigns that we rate. It focuses on a comparison with sovereigns within the same scorecard-indicated outcome, and shows the relevant credit metrics and factor scores.

Exhibit 34 **Hungary's key peers** 

	Year	Hungary	Romania	Indonesia	Colombia	Philippines	Spain	Baa2 Median	Central & Eastern Europe and CIS Median
Rating/outlook		Baa2/STA	Baa3/STA	Baa2/STA	Baa2/STA	Baa2/STA	Baa1/STA	Baa2	Ba1
Scorecard-indicated outcome		A3 - Baa2	Baa1 - Baa3	Baa1 - Baa3	Baa1 - Baa3	A3 - Baa2	A2 - Baa1	Baa1 - Baa3	Baa3 - Ba2
Factor 1		a3	a3	a2	baa1	baa1	a2	baa1	baa3
Nominal GDP (\$ bn)	2022	178.8	300.7	1319.1	343.6	404.3	1395.5	223.6	70.2
GDP per capita (PPP, Intl\$)	2022	42,044	38,721	14,687	18,762	10,497	47,111	30,544	30,216
Avg. real GDP (% change)	2018 - 2027F	3.0	3.1	4.2	2.9	4.6	1.3	2.9	2.9
MAD Volatility in real GDP growth (ppts)	2013 - 2022	0.9	1.5	0.1	1.6	0.5	1.2	1.4	1.2
Factor 2		baa3	baa3	baa3	baa2	baa1	a2	baa2	baa3
Quality of legislative & executive institutions	Latest available	baa	ba	baa	baa	baa	aa	baa	ba
Strength of civil society & judiciary	Latest available	ba	ba	ba	ba	b	aa	ba	ba
Fiscal policy effectiveness	Latest available	baa	baa	ba	baa	а	baa	baa	baa
Monetary & macro policy effectiveness	Latest available	baa	baa	a	а	а	а	а	baa
Gen. gov. fiscal balance (% of GDP)	2022 - 2024F	-4.6	-5.0	-2.2	-4.0	-3.1	-4.0	-2.9	-3.2
Average inflation (% change)	2018 - 2027F	6.2	4.7	2.8	5.2	3.8	2.6	3.8	5.2
Volatility of inflation (ppts)	2013 - 2022	4.5	3.6	1.8	2.5	1.6	2.7	2.1	4.1
Factor 3		baa2	a3	ba1	ba3	baa2	baa3	baa2	a3
Gen. gov. debt (% of GDP)	2022	73.3	47.3	40.1	57.2	54.5	113.2	55.9	44.1
Gen. gov. debt (% of revenue)	2022	176.2	141.1	298.3	206.6	255.0	263.4	214.9	138.9
Gen. gov. interest payments (% of revenue)	2022	6.7	3.6	14.7	15.9	9.7	5.5	8.8	3.5
Gen. gov. interest payments (% of GDP)	2022	2.8	1.2	2.0	4.4	2.1	2.4	2.0	1.2
Factor 4		baa	ba	а	baa	baa	baa	baa	ba
Political risk	Latest available	baa	ba	a	baa	baa	baa	baa	ba
Government liquidity risk	Latest available	а	а	a	а	aa	a	а	а
Gross borrowing requirements (% of GDP)	2023F	14.5	11.8		7.8	9.8	17.3	7.9	8.3
Banking sector risk	Latest available	baa	a	a	а	а	а	а	baa
BSCE[1]	Latest available	ba1-ba2	ba1-ba2	baa3	ba1-ba2	baa3	baa2	ba1-ba2	ba3-b3
Total domestic bank assets (% of GDP)	2022	93.1	54.1	57.7	63.2	93.0	224.1	93.0	87.9
External vulnerability risk	Latest available	а	baa	а	а	aa	а	а	а
Current account balance (% of GDP)	2022	-8.2	-9.3	1.0	-6.2	-4.4	0.5	-1.8	-4.5
External vulnerability indicator (EVI)	2024F	155.3	143.1	56.6	86.2	31.6		86.2	82.0
External debt (% of current account receipts)	2022	92.6	107.5	118.7	195.7	77.7	369.0	116.2	104.2
Net international investment position (% of GDP)	2022	-48.0	-41.5	-19.2	-51.9	-9.9	-60.5	-27.6	-31.9

<sup>[1]</sup> 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.

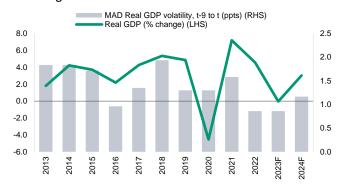
Sources: National authorities, IMF and Moody's Investors Service

## **DATA, CHARTS AND REFERENCES**

#### **Chart pack: Hungary**

Exhibit 35

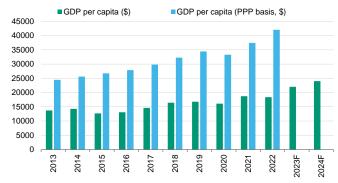
#### **Economic growth**



Source: Moody's Investors Service

Exhibit 37

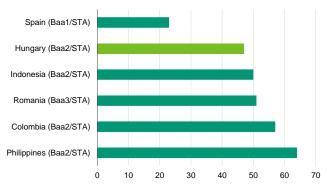
## National income



Source: Moody's Investors Service

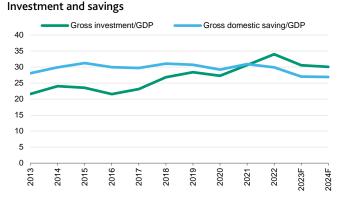
Exhibit 39

# Global Competitiveness Index Rank 47 out of 141 countries



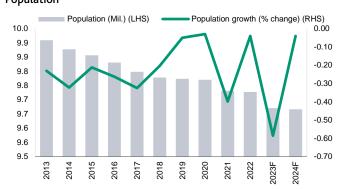
Source: World Economic Forum

Exhibit 36



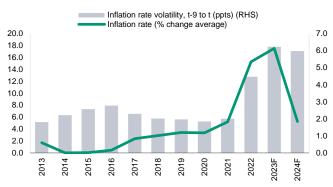
Source: Moody's Investors Service

Exhibit 38 **Population** 



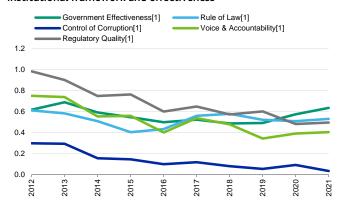
Source: Moody's Investors Service

Exhibit 40
Inflation and inflation volatility



Source: Moody's Investors Service

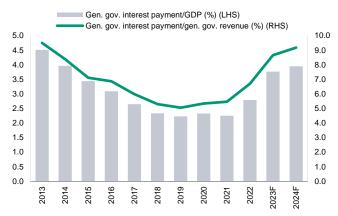
Exhibit 41
Institutional framework and effectiveness



[1] Composite index with values from about -2.50 to 2.50: higher values suggest greater maturity and responsiveness of government institutions.

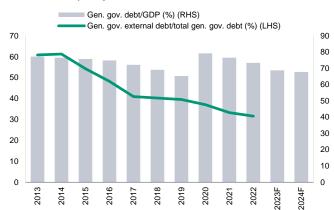
Source: Worldwide Governance Indicators

Exhibit 43 **Debt affordability** 



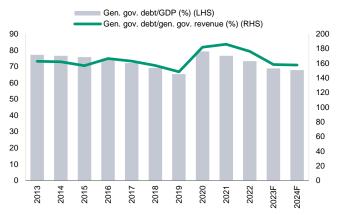
Source: Moody's Investors Service

Exhibit 45 **Government liquidity risk** 



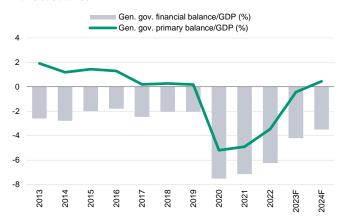
Source: Moody's Investors Service

Exhibit 42 **Debt burden** 



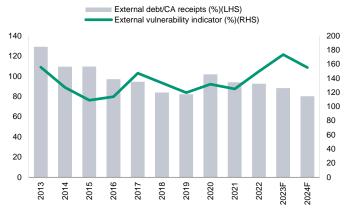
Source: Moody's Investors Service

Exhibit 44
Financial balance



Source: Moody's Investors Service

Exhibit 46
External vulnerability risk



Source: Moody's Investors Service

## **Rating history**

Exhibit 47 **Hungary**<sup>[1]</sup>

Long Term Ratings		Outlook		Review Action	Short Te	Short Term Ratings		
Foreign Currency	Local Currency		Foreign C	Local Currency Currency	Foreign Currency	Local Currency	_	
Baa2	Baa2	STA	-	-	-	-	Sep-21	
Baa3	Baa3	POS	-		-	-	Sep-20	
Baa3	Baa3	STA	-	-	-	-	Nov-16	
Ba1	Ba1	POS	-	-	-	-	Nov-15	
Ba1	Ba1	STA	-	-	-	-	Nov-14	
Ba1	Ba1	NEG	-	-	-	-	Nov-11	
Baa3	Baa3	NEG	-	-	-	-	Dec-10	
Baa1	Baa1	RUR	Review for Dowr	ngrade Review for Downgrade	-	-	Jul-10	
Baa1	Baa1	NEG	-	-	-	=	Mar-09	
А3	A3	NEG	-	-	-	-	Nov-08	
A2	A2	STA	-	-	-	-	Dec-06	
A1	A1	RUR	Review for Dowr	ngrade Review for Downgrade	-	-	Sep-06	
A1	A1	NEG	-	-	-	-	Feb-06	
A1	A1	STA	-	-	-	-	Nov-03	
A1	A1	-	-	-	-	-	Nov-01	
А3	A1	-	-	-	-	-	Nov-00	
Baa1	A1	-	Review for Upg	grade -	-	-	Sep-00	
Baa2	A1	-			-	-	Jun-98	
Baa2	-	-	-	-	-	-	May-98	
Baa3	-	-	Review for Upg	rade -		-	Mar-98	
Ba1	-		Review for Upg	grade -		-	Oct-96	
Baa2	-	-	-	-	-	-	Jul-89	

<sup>[1]</sup> Table excludes rating affirmations and ceilings. Please visit the issuer page for <u>Hungary</u> for the full rating history. Source: Moody's Investors Service

# **Annual statistics**

Exhibit 48 **Hungary** 

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023F	2024F
Economic structure and performance												
Nominal GDP (US\$ bil.)	135.7	141.0	125.2	128.6	143.1	160.6	164.0	157.2	182.3	178.8	212.9	232.1
Population (Mil.)	9.9	9.9	9.9	9.8	9.8	9.8	9.8	9.8	9.7	9.7	9.7	9.7
GDP per capita (US\$)	13,693	14,279	12,700	13,083	14,606	16,421	16,783	16,093	18,731	18,381	22,012	24,011
GDP per capita (PPP basis, US\$)	24,509	25,664	26,771	27,894	29,833	32,254	34,445	33,320	37,443	42,044		
Nominal GDP (% change, local currency)	4.7	8.1	6.6	3.6	8.5	10.5	9.9	1.6	14.1	20.6	13.0	6.5
Real GDP (% change)	1.8	4.2	3.7	2.2	4.3	5.4	4.9	-4.5	7.2	4.6	0.0	3.0
Inflation rate (% change average)[1]	1.7	0.0	0.1	0.4	2.4	2.9	3.4	3.4	5.2	15.3	17.5	5.3
Gross investment/GDP	21.6	24.1	23.5	21.5	23.1	26.8	28.4	27.3	30.6	34.0	30.5	30.0
Gross domestic saving/GDP	28.1	29.9	31.2	30.0	29.7	31.1	30.7	29.2	30.9	29.9	27.0	26.9
Nominal exports of G & S (% change, US\$ basis)	4.8	6.0	-10.8	1.4	10.7	9.4	-0.6	-7.5	18.2	10.5	12.9	8.1
Nominal imports of G & S (% change, US\$ basis)	4.2	7.0	-12.9	0.4	13.1	12.5	1.8	-7.1	20.7	15.9	6.9	7.3
Openness of the economy[2]	164.3	168.4	167.3	164.4	165.2	163.3	160.8	155.5	160.2	184.8	170.5	168.4
Government Effectiveness[3]	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6			
Government finance												
Gen. gov. revenue/GDP	47.5	47.3	48.4	45.0	44.3	44.0	44.0	43.6	41.2	41.6	43.5	43.0
Gen. gov. expenditures/GDP	50.1	50.0	50.4	46.8	46.7	46.1	46.1	51.1	48.3	47.8	47.7	46.5
Gen. gov. financial balance/GDP	-2.6	-2.8	-2.0	-1.8	-2.5	-2.1	-2.0	-7.5	-7.1	-6.2	-4.2	-3.5
Gen. gov. primary balance/GDP	1.9	1.2	1.4	1.3	0.2	0.3	0.2	-5.2	-4.9	-3.5	-0.4	0.4
Gen. gov. debt (US\$ bil.)	108.6	96.9	92.4	92.3	109.4	106.7	105.7	129.1	129.9	130.0	147.9	160.2
Gen. gov. debt/GDP	77.2	76.5	75.8	74.9	72.1	69.1	65.3	79.3	76.6	73.3	68.8	67.8
Gen. gov. debt/gen. gov. revenue	162.6	161.9	156.6	166.3	162.9	156.9	148.4	182.0	185.9	176.2	158.2	157.6
Gen. gov. interest payments/gen. gov. revenue	9.5	8.4	7.1	6.9	6.0	5.3	5.1	5.3	5.5	6.7	8.7	9.2
Gen. gov. FC & FC-indexed debt/gen. gov. debt	43.2	41.1	37.1	30.8	26.2	23.2	20.5	22.1	22.7	28.5	0.0	0.0
External payments and debt												
Nominal exchange rate (local currency per US\$, Dec)	215.7	259.1	286.6	293.7	258.8	280.9	294.7	297.4	325.7	375.7	350.0	339.3
Real eff. exchange rate (% change)	-0.2	-2.3	-1.8	0.9	1.1	0.3	-1.5	-0.1	-0.8	-6.5		
Current account balance (US\$ bil.)	4.8	1.7	2.9	5.8	2.9	0.2	-1.3	-1.8	-7.4	-14.6	-5.9	-5.4
Current account balance/GDP	3.5	1.2	2.3	4.5	2.0	0.1	-0.8	-1.1	-4.1	-8.2	-2.8	-2.3
External debt (US\$ bil.)	165.0	147.0	130.4	117.5	126.4	123.2	120.1	137.2	147.9	159.9	171.4	168.0
Public external debt/total external debt	40.1	40.4	38.5	37.9	35.4	34.8	34.8	34.8	29.2	25.7	28.3	33.6
Short-term external debt/total external debt	13.9	13.3	12.2	11.9	11.3	11.5	12.1	15.6	18.4	19.7	16.7	14.9
External debt/GDP	121.6	104.2	104.1	91.4	88.4	76.8	73.2	87.3	81.1	89.5	80.5	72.4
External debt/CA receipts[4]	129.2	109.5	109.6	97.0	94.6	84.0	82.1	101.9	94.0	92.6	88.3	80.3
Interest paid on external debt (US\$ bil.)[5]	2.6	2.5	1.9	1.6	1.5	1.4	1.3	1.1	0.9	1.2	1.6	1.6
Amortization paid on external debt (US\$ bil.)[5]	27.9	24.1	17.6	14.6	14.8	15.4	12.7	15.7	15.7	17.8	18.8	18.3
Net foreign direct investment/GDP	0.2	2.7	2.3	2.3	1.7	2.2	0.2	1.9	1.9	2.0	1.2	1.2
Net international investment position/GDP	-85.1	-71.9	-65.8	-56.6	-57.7	-48.7	-49.0	-53.9	-48.7	-48.0		
Official forex reserves (US\$ bil.)	46.3	41.8	32.9	25.4	27.4	29.6	29.9	39.0	34.9	32.8	34.6	36.0
Net foreign assets of domestic banks (US\$ bil.)	-11.0	-8.4	-2.0	6.1	6.5	8.0	7.0	10.6	10.8	9.4		

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023F	2024F
Monetary, external vulnerability and liquidity indicators												
M2 (% change Dec/Dec)	4.4	9.0	7.5	9.9	9.9	12.5	9.5	21.3	16.0	5.9		
Monetary policy rate (% per annum, Dec 31)	3.0	2.1	1.4	0.9	0.9	0.9	0.9	0.6	2.4	13.0		
Domestic credit (% change Dec/Dec)	0.4	0.0	1.6	2.3	8.9	4.5	11.3	17.2	24.3	0.0		
Domestic credit/GDP	64.9	60.1	57.3	56.6	56.8	53.7	54.4	62.8	68.4	56.7		
M2/official forex reserves (X)	1.6	1.6	2.0	2.7	3.2	3.0	3.1	2.9	3.4	3.3		
Total external debt/official forex reserves	356.7	351.9	396.3	462.4	460.9	415.7	402.1	351.9	423.4	487.0	496.0	466.7
Debt service ratio[6]	23.9	19.8	16.3	13.4	12.2	11.5	9.5	12.4	10.6	11.0	10.5	9.5
External vulnerability indicator (EVI)[7]	155.7	127.0	108.9	113.9	147.1	133.4	119.7	131.7	124.8	149.7	173.5	155.3
Liquidity ratio[8]	149.8	115.9	73.1	47.7	53.8	41.4	53.0	51.8	59.5	78.7		
Total liabilities due BIS banks/total assets held in BIS banks	358.4	330.4	244.6	181.2	203.2	181.3	192.1	204.6	230.6	191.8		
"Dollarization" ratio[9]	22.5	20.3	19.5	22.7	21.0	20.1	20.5	22.6	21.9	28.4		
"Dollarization" vulnerability indicator[10]	27.2	24.7	25.0	32.2	31.3	29.4	30.6	37.0	39.4	51.3		

<sup>[1]</sup> Harmonized Index of Consumer Prices (HICP).

<sup>[2]</sup> Sum of Exports and Imports of Goods and Services/GDP.

<sup>[3]</sup> Composite index with values from about -2.50 to 2.50: higher values suggest greater maturity and responsiveness of government institutions.

<sup>[4]</sup> Current Account Receipts.

<sup>[5]</sup> Foreign currency debt only.

<sup>[6] (</sup>Interest + Current-Year Repayment of Principal)/Current Account Receipts.

<sup>[7] (</sup>Short-Term External Debt + Currently Maturing Long-Term External Debt + Total Nonresident Deposits Over One Year)/Official Foreign Exchange Reserves.

<sup>[8]</sup> Liabilities to BIS Banks Falling Due Within One Year/Total Assets Held in BIS Banks.

<sup>[9]</sup> Total Foreign Currency Deposits in the Domestic Banking System/Total Deposits in the Domestic Banking System.

<sup>[10]</sup> Total Foreign Currency Deposits in the Domestic Banking System/(Official Foreign Exchange Reserves + Foreign Assets of Domestic Banks). Source: Moody's Investors Service

#### Related websites and information sources

- » Sovereign risk group webpage
- » Sovereign ratings list

MOODY'S has provided links or references to third party World Wide Websites or URLs ("Links or References") solely for your convenience in locating related information and services. The websites reached through these Links or References have not necessarily been reviewed by MOODY'S, and are maintained by a third party over which MOODY'S exercises no control. Accordingly, MOODY'S expressly disclaims any responsibility or liability for the content, the accuracy of the information, and/or quality of products or services provided by or advertised on any third party web site accessed via a Link or Reference. Moreover, a Link or Reference does not imply an endorsement of any third party, any website, or the products or services provided by any third party.

#### **Endnotes**

- 1 Energy-intensive industries include manufacturing of paper and paper products (NACE Division C17), printing and reproduction of recorded media (C18), manufacturing of chemicals and chemical products (C20), manufacturing of other nonmetallic mineral products (C23) and manufacturing of basic metals (C24).
- 2 The authorities introduced a <u>two-tier price system</u> in August 2022, replacing prior flat tariffs. Under the new system, the government will subsidise gas and electricity prices for up to average consumption, and above-average consumption will be subject to a higher tariff.
- 3 The Hungarian energy mix is dominated by natural gas (34.1% of total energy supply in 2021; fourth highest in the EU) and oil and petroleum products (29.2%), followed by nuclear heat (14.8%) and renewables and biofuels (11.9%). Traditionally, about 15% of gas consumption was produced domestically, which is the seventh-highest share among EU countries, and roughly 85% of gas consumption is imported, with the majority coming from Russia. Hungary plans to increase domestic production to about 20% over 2023. The import dependency on Russia for oil and petroleum products is also high, at roughly 50%.
- 4 The new Russian-built nuclear plant PAKS II is likely to be completed in the early 2030s. In December 2022, the Hungarian Parliament approved the additional extension of the life span of the existing four units of the PAKS nuclear power plant until the 2050s.
- 5 Including cohesion policy allocations, agriculture sector allocation, and financing under the EU's post-pandemic recovery fund and the RRF, as well as remaining cohesion policy funding under the 2014-20 MFF worth €5.4 billion.
- 6 Following Eurostat's methodological approach, we include Eximbank's debt in general government debt, which increases Hungary's general government debt burden by around 2%.
- 7 The debt rule is part of Hungary's fiscal rules, including the budget balance rule and debt rule. The debt rule (in effect since 2016) mandates that government debt as a share of GDP should decline each year as long as it is above 50%. Any deviation from the provisions is permitted only during a special legal order (state of national crisis, state of emergency, state of preventive defence, state of terrorist threat, unexpected attack and state of danger) or in the event of a significant and lasting national economic recession.
- 8 Sovereigns Europe: Credit-negative stagflation scenario now more likely in the EU, but country-specific exposures vary, 2 August 2022.
- 9 The utilities protection fund compensates utilities for losses stemming from caps on energy prices; provides subsidies for budgetary, local governmental and civil institutions; and supports private companies affected by high energy prices.
- 10 Only Poland had a higher share of 32.5% in July 2023.
- 11 According to European Central Bank, Statistical Data Warehouse, Debt securities issuance and service by EU governments
- 12 Banking System Outlook Hungary: Lower profitability and deteriorating asset quality underpin our negative outlook, 2 November 2022
- 13 The bank ratings shown are the bank's deposit / senior unsecured rating and Baseline Credit Assessment.

© 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 ARE NOT AND 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 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 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

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 <a href="https://www.moodys.com">www.moodys.com</a> 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 657AFSL 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.

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.

REPORT NUMBER

1371689

### **CLIENT SERVICES**

 Americas
 1-212-553-1653

 Asia Pacific
 852-3551-3077

 Japan
 81-3-5408-4100

 EMEA
 44-20-7772-5454

