News Release



Japan Credit Rating Agency, Ltd.

23-I-0100 March 5, 2024

Japan Credit Rating Agency, Ltd. (JCR) announces the following credit ratings.

Hungary

<Affirmation>

Foreign Currency Long-term Issuer Rating: AOutlook: Stable
Local Currency Long-term Issuer Rating: A
Outlook: Stable
Bonds: A-

National Bank of Hungary (security code: -)

<Affirmation>

Foreign Currency Long-term Issuer Rating: A-Outlook: Stable Local Currency Long-term Issuer Rating: A Outlook: Stable

Rationale

- (1) The ratings on Hungary are mainly supported by the country's well developed and export-led economic structure, and resilient banking system. On the other hand, they remain constrained by its susceptibility to external factors such as energy prices. Hungary's real GDP is seen to have contracted in 2023 as prices and interest rates rose sharply. However, JCR expects the economy to return to a stable growth path in the medium term as inflation is rapidly subsiding. The government is expected to continue to promote fiscal consolidation as it is seen to have kept the amount of its budget deficit in FY 2023 broadly in line with the previous year, despite sluggish tax revenues due to negative growth and higher expenditures due to inflation. Based on the above, JCR has affirmed the ratings with a Stable outlook. The ratings on the National Bank of Hungary (NBH) reflect the ratings on Hungary as it is the country's central bank, its shares are entirely held by the government, and the government has strong ties with the bank including the payment obligation to restore the bank's equity to at least the level of its subscribed capital within a reasonable period of time if it falls below its subscribed capital for a long period of time.
- (2) Hungary is a relatively well developed and medium-sized Central and Eastern Europe country in terms of economy and population, with its nominal GDP of approximately USD 177 billion, per capita GDP (in ppp terms) of about USD 42,000 in 2022 and a population of 9.6 million. Its income level is high among the sovereigns rated in the Arange by JCR. Manufacturing industries, such as automobile, constitute 20% of its GDP and other European countries are its major export partners. Its economy, which had once slumped due to the pandemic, recovered high growth rates between 2021 and 2022. In 2023, real GDP is seen to have shrunk 0.8% as consumption and investment declined due to sharp price rises and the subsequent tightening of fiscal and monetary policies, while net exports improved as a result of the fall in prices of energy, which is highly dependent on imports. Inflation has been rapidly subsiding since the second half of 2023, with the CPI falling from 25.7% in January 2023 to 3.8% in January 2024. JCR expects the growth rate to return to around 3% in the medium term, backed by the stabilizing prices and continued strong inward direct investments such as those related to electric vehicles.
- (3) The government's debt structure has been improving through increased forint-denominated funding and a significantly reduced proportion of non-resident and foreign currency funding. While the upper limit on foreign currency funding has been raised from 25% to 30%, the new limit is still lower than the previous levels that exceeded 40% in FY2013. The general government fiscal deficit had been kept below 3% of GDP and the general government debt had been reduced in GDP terms from FY2012 to FY2019. The deficit widened to 7.6% in FY2020 due to massive anti-pandemic expenditures, but the government has been working hard for fiscal consolidation since FY2021. The amount of budget deficit in FY2023 is expected to be broadly in line with the previous year, despite sluggish tax revenues due to negative growth and higher expenditures due to inflation. In terms of



- ratio to GDP, the government expects the budget deficit to be around 6.5-6.7% of GDP (6.2% in FY 2022) and the public debt around 73.5% (74% in FY 2022) of GDP in FY2023 due to the negative economic growth. The fiscal deficit is projected to be reduced to around 4.5% of GDP in FY2024 and 3.7% in FY2025. Given the government's strong commitment, including its legal obligation to curb the debt, and its track record, JCR believes that fiscal consolidation will make further gradual progress from FY2024 onward.
- (4) Hungary's financial system has been kept stable and the banking sector stays fully resilient to risks in terms of both capital and liquidity. The NPL ratio remained low at 2.7% in September 2023 despite the phasing out of the general moratorium that supported vulnerable households and companies affected by the pandemic. The capital adequacy ratio also stood good, with Tier 1 capital ratio of 17%. The current account balance returned to surplus in the first three quarters of 2023 on a significant improvement in the trade balance brought by a fall in energy prices. Foreign direct investment remains strong. As regards the receipt of EU funds, while there is still uncertainty about the timing and amount, some progress has been made. EUR 10.2 billion in Cohesion Policy funding has been unlocked as the European Commission concluded that Hungary fulfilled the required condition as regards the judicial independence. EUR 445 million from the Cohesion Funds and EUR 920 million as REPowerEU pre-financing has been disbursed since December 2023. The country's resilience to external shocks has improved as its foreign exchange reserves stay stable. However, as it still remains vulnerable to external factors such as economic trends in Europe, which accounts for around 90% of exports, and energy prices, JCR will continue to monitor their future developments.

Atsushi Masuda, Masato Hotta

Rating

Issuer: Hungary

Affirmation> Foreign Currency Long-term Issuer Rating: A- Outlook: Stable Local Currency Long-term Issuer Rating: A Outlook: Stable				
Amount (bn)	Issue Date	Due Date	Coupon	Rating
JPY 20.0	September 18, 2020	September 18, 2025	0.74%	A-
JPY 16.0	February 25, 2022	February 25, 2025	0.45%	A-
JPY 15.5	September 18, 2020	September 17, 2027	1.03%	A-
JPY 4.5	September 18, 2020	September 18, 2030	1.29%	A-
JPY 46.8	February 25, 2022	February 25, 2027	0.73%	A-
JPY 4.7	February 25, 2022	February 22, 2029	0.91%	A-
JPY 7.8	February 25, 2022	February 25, 2032	1.15%	A-
	Amount (bn) JPY 20.0 JPY 16.0 JPY 15.5 JPY 4.5 JPY 4.7	Amount (bn) Issue Date JPY 20.0 September 18, 2020 JPY 16.0 February 25, 2022 JPY 15.5 September 18, 2020 JPY 4.5 September 18, 2020 JPY 4.5 February 25, 2022 JPY 46.8 February 25, 2022	Amount (bn) Issue Date Due Date JPY 20.0 September 18, 2020 September 18, 2025 JPY 16.0 February 25, 2022 February 25, 2025 JPY 15.5 September 18, 2020 September 17, 2027 JPY 4.5 September 18, 2020 September 18, 2030 JPY 46.8 February 25, 2022 February 25, 2027 JPY 4.7 February 25, 2022 February 22, 2029	Amount (bn) Issue Date Due Date Coupon JPY 20.0 September 18, 2020 September 18, 2025 0.74% JPY 16.0 February 25, 2022 February 25, 2025 0.45% JPY 15.5 September 18, 2020 September 17, 2027 1.03% JPY 4.5 September 18, 2020 September 18, 2030 1.29% JPY 46.8 February 25, 2022 February 25, 2027 0.73% JPY 4.7 February 25, 2022 February 22, 2029 0.91%

Issuer: National Bank of Hungary

<Affirmation>

Foreign Currency Long-term Issuer Rating: A- Outlook: Stable Local Currency Long-term Issuer Rating: A Outlook: Stable

Rating Assignment Date: February 28, 2024

The assumptions for the credit ratings and the definitions of the rating symbols are published as "Types of Credit Ratings and Definitions of Rating Symbols" (January 6, 2014) in Information about JCR Ratings on JCR's website (https://www.jcr.co.jp/en/).

Outline of the rating methodology is shown as "Sovereign and Public Sector Entities" (October 1, 2021) in Information about JCR Ratings on JCR's website (https://www.jcr.co.jp/en/).

The rating stakeholder participated in the rating process of the aforementioned credit ratings.



Japan Credit Rating Agency, Ltd.

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JCR publishes its press releases regarding the rating actions both in Japanese and in English on the same day. In case that it takes time to translate rating rationale, JCR may publicize the summary version, which will be replaced by the full translated version within three business days. (Regarding Structured Finance products, JCR only publicize the summary version in English.)



INFORMATION DISCLOSURE FORM

Japan Credit Rating Agency, Ltd.

Disclosure Required by Paragraph (a)(1)(ii) of Rule 17g-7

lssuer:	Hungary National Bank of Hungary
Rating Publication Date:	March 5, 2024

- The Symbol, Number, or Score in the Rating Scale used to Denote Credit Rating Categories and Notches and, the Identity of the Obligor or the Identity and a Description of the Security or Money Market Instrument as Required by Paragraph (a)(1)(ii)(A) of Rule 17g-7
 - Please see the news release. If the credit rating is a private rating, please see the report for private rating.
- The version of the procedure or methodology used to determine the credit rating; as Required by Paragraph (a)(1)(ii)(B) of Rule 17g-7
 - Please see the news release. If the credit rating is a private rating, please see the report for private rating.
- The Main Assumptions and Principles used in Constructing the Procedures and Methodologies used to Determine the Credit Rating as Required by Paragraph (a)(1)(ii)(C) of Rule 17g-7
 - The credit rating methodology assumes, in principle, to be applied to assess the likelihood of a given debt payment in light of its issuer's condition and business environment, etc. in the relevant future. There is certain limitation, however, in the time horizon that the rating foresees.
 - The credit rating methodology assumes, in principle, that the factors posted in the below are particularly important for such likelihood to be determined, and that the rating determination is made by evaluating each of them not only quantitatively but also employing qualitative analyses.

A) Economic Base

The likelihood of a given debt payment is highly conditional to the issuing government's ability to maintain/expand the economic base into the future with maintaining soundness of financial systems.

B) Fiscal Base

The likelihood of a given debt payment is highly correlated to fiscal balance, public debt and other factors of the issuing government's fiscal condition.

C) External Positions

The likelihood of a given debt payment is highly correlated to the liquidity positions which change along with the international balance of payments and the international investment position.



- D) Social and Political Bases and Economic Policy
 - The likelihood of a given debt payment is highly conditional to the social and political stability, effectiveness of economic and monetary policies as well as international economics.
- E) Related Parties' Stance of Support/ Assistance for the Government

 The likelihood of a given debt payment is affected by the stance of the credit enhancement provider and other related parties with regard to their stance of support/ assistance for the issuing government.
- F) Order of Seniority in Debt Payment

The likelihood of debt payment can be different between given debts of the same issuer. The likelihood of debt payment for an individual debt is dependent on the issuing government's will, and/ or its rank relative to other debts of the same government in the order of seniority in principal/ interest payment which is determined by design as financial product or by international practice, etc.

4

The Potential Limitations of the Credit Rating as Required by Paragraph (a)(1)(ii)(D) of Rule 17g-7

- The credit rating herewith presented by JCR is its summary opinion with regard to the likelihood of given debt payment and hence not necessarily a perfect representation of such likelihood. The credit rating is not intended to estimate the probability of default or the loss on given default, either.
- The objective of the credit rating herewith presented does not include any concerns other than the likelihood of debt payment, such as risks of price changes, market liquidity, etc.
- The credit rating herewith presented is necessary to be reviewed along with possible changes of the issuer of rated objects in its business performance and/ or circumstances which include regulatory environment, and hence subject to possible alteration.

Information on the Uncertainty of the Credit Rating as Required by Paragraph (a)(1)(ii)(E) of Rule $\frac{17g-7}{}$

- The information used for the determination of credit rating as herewith presented is obtained by JCR from the issuer of rated objects and other sources that JCR trusts in terms of accuracy and reliability but possibly contains errors due to human, non-human or other causes. Consequently, the credit rating determined on the grounds of such information does not constitute, explicitly or implicitly, any representation or warrant of JCR on the information itself or any consequences of its use in terms of accuracy, relevance, timeliness, wholeness, market value, or usefulness for any specific purposes.
- 6 Use of Due Diligence Services of a Third Party in Taking the Rating Action as Required by Paragraph (a)(1)(ii)(F) of Rule 17g-7
 - There is no use of any third-party due diligence service in the determination of the credit rating herewith presented.
- Use of Servicer or Remittance Reports to Conduct Surveillance of the Credit Rating Required by Paragraph (a)(1)(ii)(G) of Rule 17g-7
 - There is no use of any servicer or remittance report to conduct surveillance of the credit rating herewith presented.

8

The Types of Data Relied Upon for the Purpose of Determining the Credit Rating as Required by Paragraph (a)(1)(ii)(H) of Rule17g-7

- The information posted in the below, which includes data, is used for the determination of the credit rating herewith presented.
 - A) Audited financial statements presented by the rating stakeholders
 - B) Explanations of business performance, management plans, etc. presented by the rating stakeholders
 - C) Informational and explanatory materials presented by the rating stakeholders with regard to the economy and fiscal management policy, etc. of the issuing government
 - D) Statistics and reports published by an independent organization with regard to the economy and fiscal status, etc. of the issuing government

9

Overall assessment of the Quality of Information Available and Considered in Determining the Credit Rating as Required by Paragraph (a)(1)(ii)(l) of Rule 17g-7

- JCR holds its basic policies for securing the quality of information as a base of due diligence for the determination of credit ratings. The information used as a base for the determination of credit rating herewith presented satisfies such policies, which include the audit by an independent auditor, the publication by the issuer, some independent media or, otherwise, JCR analyst's scrutiny, etc.
- JCR sees no particular weakness in the quality of information used for the determination of the credit rating herewith presented as compared to the information used in other cases of the credit rating for comparable issuers or ratable objects.
- · If the credit rating is an Indication, please see the report for Indication.

10

Information Relating to Conflicts of Interest as Required by Paragraph (a)(1)(ii)(J) of Rule 17g-7

- JCR receives payment of compensation for the determination of the credit rating herewith presented from either one of those parties who are issuer, underwriter, depositor or sponsor.
- JCR did not receive in the last fiscal year in the past payment of compensation from the same party for any kind of JCR's service other than the determination of public or private credit rating, such as one in the ancillary business.

11

Explanation or Measure of the Potential Volatility of the Credit Rating as Required by Paragraph (a)(1)(ii)(K) of Rule 17g-7

A) Economic Base

The credit rating is subject to alteration if there is an improvement or deterioration of the issuer's economy or financial systems, etc. The resultant alteration of the credit rating is usually by a notch, with possibility of a few notches if and when the change is large.

B) Fiscal Base

The credit rating is subject to alteration if the issuer increases/ decreases its fiscal deficit/ surplus and its public debt and thereby makes given debt payment liability less/ more bearable. The resultant alteration of the credit rating is usually by a notch, with possibility of a few notches if and when the change is large.

C) External Positions

The credit rating is subject to alteration if there is a change in the issuer's international balance of payments and international investment position and thereby an improvement/ deterioration of its



liquidity positions. The resultant alteration of the credit rating is usually by a notch, with possibility of a few notches if and when the change is large.

D) Social and Political Bases and Economic Policy

The credit rating is subject to alteration if there is a change in the issuer's social and political conditions or economic/ monetary policies, etc. and thereby an improvement/ deterioration of its economy and fiscal positions. The resultant alteration of the credit rating is usually by a notch, with possibility of a few notches if and when the change is large.

E) Related Parties' Stance of Support/ Assistance for the Issuer

The credit rating is subject to alteration if there is a change in the credit enhancement provider or other related parties with regard to their stance of support/assistance for the issuing government and thereby an improvement/ deterioration of its economy, fiscal positions and liquidity positions. The resultant alteration of the credit rating is usually a notch, with possibility of a few notches if and when the change is large.

F) Order of Seniority in Debt Payment

The credit rating is subject to alteration if there is a change in the rated debt's status in the order of seniority relative to other debts, due to improvement/ deterioration of the issuer's fiscal condition and/or will. The resultant alteration of the credit rating is usually a notch, with possibility of a few notches if and when the change is large.

G) International Economies

The credit rating is subject to alteration if there is a change in the international economies, commodity or foreign exchange markets, etc. and thereby, through international balance of payments, an improvement/ deterioration in the issuer's fiscal balance or debt payment capacity. The resultant alteration of the credit rating is usually by a notch, with possibility of a few notches if and when the change is exceptionally large.

H) Various Events

The credit rating is subject to alteration on occurrence of various events, such as domestic unrest, war, natural disaster, etc. which are unforeseeable at the time when the credit rating is determined, causing a significant change on the issuer's economy, fiscal positions, etc. The resultant alteration of the credit rating could be by a notch but more often than not as much as a few notches.

Information on the Content of the Credit Rating, Including the Historical Performance of the Credit Rating and the Expected Probability of Default and the Expected Loss in the Event of Default as Required by Paragraph (a)(1)(ii)(L) of Rule 17g-7

- · Historical records of the credit rating herewith presented are posted in the end of this paper.
- The credit rating herewith presented by JCR is its summary opinion with regard to the likelihood of given debt payment and hence not necessarily a perfect representation of such likelihood. The credit rating is not intended to estimate the probability of default or the loss on given default, either.
- Facts of the probability of default are posted as Form NRSRO Exhibit 1 on the JCR website under the URL:

https://www.jcr.co.jp/en/service/company/regu/nrsro/

 $13 \left\| \text{Information on the Sensitivity of the Credit Rating to Assumptions Made as Required by Paragraph (a)(1)(ii)(M) of Rule 17g-7} \right\|$

A) Economic Base

The credit rating herewith presented could be changed if and when the assumptions made at the time of its determination turn out to be inaccurate with regard to the issuer's economy or financial systems, etc. The resultant change of the credit rating is most likely by a notch, as JCR speculates, but possibly as much as a few notches if the development is rapid in improvement or deterioration of the issuer's economy or financial systems on some drastic change in environments, etc.



B) Fiscal Base

The credit rating herewith presented could be changed if and when the assumptions made at the time of its determination turn out to be inaccurate with regard to the issuer's fiscal conditions in terms of annual balance or public debt. The resultant change of the credit rating is most likely by a notch, as JCR speculates, but possibly as much as a few notches if the development is rapid in improvement or deterioration of the issuer's fiscal condition on some drastic change in its economy.

C) External Positions

The credit rating herewith presented could be changed if and when the assumptions made at the time of its determination turn out to be inaccurate with regard to the issuer's liquidity positions reflecting improvement or deterioration of the international balance of payments and the international investment position. The resultant change of the credit rating is most likely by a notch, as JCR speculates, but possibly as much as a few notches if the development is rapid in improvement or deterioration of the issuer's liquidity positions on some drastic change in the country's economic/ fiscal conditions and financing activities, etc.

D) Social and Political Bases and Economic Policies

The credit rating herewith presented could be changed if and when the assumptions made at the time of its determination turn out to be inaccurate with regard to the issuer's social and political bases and economic/ monetary policies. The resultant change of the credit rating is most likely by a notch, as JCR speculates, but possibly as much as a few notches if the country's situation changes drastically, making the issuer's social and political bases and economic/monetary policies significantly improved or deteriorated.

E) International Economics

The credit rating herewith presented could be changed if and when the assumptions made at the time of its determination turn out to be inaccurate with regard to the prospects of the international economies or commodity/ foreign exchange markets, etc. JCR expects the change should be most likely by a notch but could be as much as a few notches, should the economy or the markets change so greatly.

14 Information on the Representations, Warranties, and Enforcement Mechanisms of an Asset-backed Security as Required by Paragraph (a)(1)(ii)(N) of rule 17g-7

• The credit rating herewith presented is not for an ABS product, and hence no relevant issue.

Japan Credit Rating Agency, Ltd.

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The Historical Performance of the Credit Rating

Issuer Name	Issue Name	Publication Date	Rating	Outlook/Direction
		November 25, 1999		Outlook/Direction
Hungary	Issuer(Long-term)(FC)	December 1, 2000	A-	
Hungary	Issuer(Long-term)(FC)		A-	D '4'
Hungary	Issuer(Long-term)(FC)	January 9, 2002	A-	Positive
Hungary	Issuer(Long-term)(FC)	May 16, 2003	A	Stable
Hungary	Issuer(Long-term)(FC)	March 22, 2004	A	Stable
Hungary	Issuer(Long-term)(FC)	June 17, 2005	A	Stable
Hungary	Issuer(Long-term)(FC)	February 23, 2006	A	Stable
Hungary	Issuer(Long-term)(FC)	October 4, 2006	A-	Stable
Hungary	Issuer(Long-term)(FC)	April 4, 2007	A-	Stable
Hungary	Issuer(Long-term)(FC)	March 7, 2008	A-	Stable
Hungary	Issuer(Long-term)(FC)	October 21, 2008	#A-	Negative
Hungary	Issuer(Long-term)(FC)	December 18, 2008	BBB+	Negative
Hungary	Issuer(Long-term)(FC)	April 10, 2009	BBB+	Negative
Hungary	Issuer(Long-term)(FC)	March 5, 2010	BBB+	Stable
Hungary	Issuer(Long-term)(FC)	March 31, 2011	BBB+	Negative
Hungary	Issuer(Long-term)(FC)	April 3, 2012	BBB	Negative
Hungary	Issuer(Long-term)(FC)	March 14, 2013	BBB	Negative
Hungary	Issuer(Long-term)(FC)	March 18, 2014	BBB	Stable
Hungary	Issuer(Long-term)(FC)	March 25, 2015	BBB	Stable
Hungary	Issuer(Long-term)(FC)	February 17, 2016	BBB	Positive
Hungary	Issuer(Long-term)(FC)	February 21, 2017	BBB+	Stable
Hungary	Issuer(Long-term)(FC)	March 1, 2018	BBB+	Stable
	Issuer(Long-term)(FC)	March 27, 2019	BBB+	Positive
Hungary	· • / /			
Hungary	Issuer(Long-term)(FC)	February 21, 2020	A-	Stable
Hungary	Issuer(Long-term)(FC)	February 3, 2021	A-	Stable
Hungary	Issuer(Long-term)(FC)	January 31, 2022	A-	Stable
Hungary	Issuer(Long-term)(FC)	March 28, 2023	A-	Stable
Hungary	Issuer(Long-term)(LC)	May 16, 2003	A+	Stable
Hungary	Issuer(Long-term)(LC)	March 22, 2004	A+	Stable
Hungary	Issuer(Long-term)(LC)	June 17, 2005	A+	Stable
Hungary	Issuer(Long-term)(LC)	February 23, 2006	A	Stable
Hungary	Issuer(Long-term)(LC)	October 4, 2006	A	Stable
Hungary	Issuer(Long-term)(LC)	April 4, 2007	A	Stable
Hungary	Issuer(Long-term)(LC)	March 7, 2008	A	Stable
Hungary	Issuer(Long-term)(LC)	October 21, 2008	#A	Negative
Hungary	Issuer(Long-term)(LC)	December 18, 2008	A-	Negative
Hungary	Issuer(Long-term)(LC)	April 10, 2009	A-	Negative
Hungary	Issuer(Long-term)(LC)	March 5, 2010	A-	Stable
Hungary	Issuer(Long-term)(LC)	March 31, 2011	A-	Negative
Hungary	Issuer(Long-term)(LC)	April 3, 2012	BBB+	Negative
Hungary	Issuer(Long-term)(LC)	March 14, 2013	BBB+	Negative
Hungary	Issuer(Long-term)(LC)	March 18, 2014	BBB+	Stable
Hungary	Issuer(Long-term)(LC)	March 25, 2015	BBB+	Stable
Hungary	Issuer(Long-term)(LC)	February 17, 2016	BBB+	Positive
Hungary	Issuer(Long-term)(LC)	February 21, 2017	A-	Stable
	1 1	March 1, 2018		Stable
Hungary	Issuer(Long-term)(LC)		A-	
Hungary	Issuer(Long-term)(LC)	March 27, 2019	A-	Positive
Hungary	Issuer(Long-term)(LC)	February 21, 2020	A	Stable
Hungary	Issuer(Long-term)(LC)	February 3, 2021	A	Stable
Hungary	Issuer(Long-term)(LC)	January 31, 2022	A	Stable
Hungary	Issuer(Long-term)(LC)	March 28, 2023	A	Stable
Hungary	Japanese Yen Bonds-Eighth Series (2020)	September 11, 2020	A-	
Hungary	Japanese Yen Bonds-Eighth Series (2020)	February 3, 2021	A-	
Hungary	Japanese Yen Bonds-Eighth Series (2020)	January 31, 2022	A-	
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The Historical Performance of the Credit Rating

Issuer Name	Issue Name	Publication Date	Rating	Outlook/Direction
Hungary	Japanese Yen Bonds-Eighth Series (2020)	March 28, 2023	A-	
Hungary	Japanese Yen Bonds-First Series (2020) (Green Bonds)	September 11, 2020	A-	
Hungary	Japanese Yen Bonds-First Series (2020) (Green Bonds)	February 3, 2021	A-	
Hungary	Japanese Yen Bonds-First Series (2020) (Green Bonds)	January 31, 2022	A-	
Hungary	Japanese Yen Bonds-First Series (2020) (Green Bonds)	March 28, 2023	A-	
Hungary	Japanese Yen Bonds-Second Series (2020) (Green Bonds)	September 11, 2020	A-	
Hungary	Japanese Yen Bonds-Second Series (2020) (Green Bonds)	February 3, 2021	A-	
Hungary	Japanese Yen Bonds-Second Series (2020) (Green Bonds)	January 31, 2022	A-	
Hungary	Japanese Yen Bonds-Second Series (2020) (Green Bonds)	March 28, 2023	A-	
Hungary	Japanese Yen Bonds-Ninth Series (2022)	February 18, 2022	A-	
Hungary	Japanese Yen Bonds-Ninth Series (2022)	March 28, 2023	A-	
Hungary	Japanese Yen Bonds-Third Series (2022) (Green Bonds)	February 18, 2022	A-	
Hungary	Japanese Yen Bonds-Third Series (2022) (Green Bonds)	March 28, 2023	A-	
Hungary	Japanese Yen Bonds-Fourth Series (2022) (Green Bonds)	February 18, 2022	A-	
Hungary	Japanese Yen Bonds-Fourth Series (2022) (Green Bonds)	March 28, 2023	A-	
Hungary	Japanese Yen Bonds-Fifth Series (2022) (Green Bonds)	February 18, 2022	A-	
Hungary	Japanese Yen Bonds-Fifth Series (2022) (Green Bonds)	March 28, 2023	A-	



The Historical Performance of the Credit Rating

Issuer Name	Issue Name	Publication Date	Rating	Outlook/Direction
National Bank of Hungary	Issuer(Long-term)(LC)	February 23, 2006	A	Stable
National Bank of Hungary	Issuer(Long-term)(LC)	October 4, 2006	A	Stable
National Bank of Hungary	Issuer(Long-term)(LC)	April 4, 2007	A	Stable
National Bank of Hungary	Issuer(Long-term)(LC)	March 7, 2008	A	Stable
National Bank of Hungary	Issuer(Long-term)(LC)	October 21, 2008	#A	Negative
National Bank of Hungary	Issuer(Long-term)(LC)	December 18, 2008	A-	Negative
National Bank of Hungary	Issuer(Long-term)(LC)	April 10, 2009	A-	Negative
National Bank of Hungary	Issuer(Long-term)(LC)	March 5, 2010	A-	Stable
National Bank of Hungary	Issuer(Long-term)(LC)	March 31, 2011	A-	Negative
National Bank of Hungary	Issuer(Long-term)(LC)	April 3, 2012	BBB+	Negative
National Bank of Hungary	Issuer(Long-term)(LC)	March 14, 2013	BBB+	Negative
National Bank of Hungary	Issuer(Long-term)(LC)	March 18, 2014	BBB+	Stable
National Bank of Hungary	Issuer(Long-term)(LC)	March 25, 2015	BBB+	Stable
National Bank of Hungary	Issuer(Long-term)(LC)	February 17, 2016	BBB+	Positive
National Bank of Hungary	Issuer(Long-term)(LC)	February 21, 2017	A-	Stable
National Bank of Hungary	Issuer(Long-term)(LC)	March 1, 2018	A-	Stable
National Bank of Hungary	Issuer(Long-term)(LC)	March 27, 2019	A-	Positive
National Bank of Hungary	Issuer(Long-term)(LC)	February 21, 2020	A	Stable
National Bank of Hungary	Issuer(Long-term)(LC)	February 3, 2021	A	Stable
National Bank of Hungary	Issuer(Long-term)(LC)	January 31, 2022	A	Stable
National Bank of Hungary	Issuer(Long-term)(LC)	March 28, 2023	A	Stable
National Bank of Hungary	Issuer(Long-term)(FC)	February 23, 2006	A	Stable
National Bank of Hungary	Issuer(Long-term)(FC)	October 4, 2006	A-	Stable
National Bank of Hungary	Issuer(Long-term)(FC)	April 4, 2007	A-	Stable
National Bank of Hungary	Issuer(Long-term)(FC)	March 7, 2008	A-	Stable
National Bank of Hungary	Issuer(Long-term)(FC)	October 21, 2008	#A-	Negative
National Bank of Hungary	Issuer(Long-term)(FC)	December 18, 2008	BBB+	Negative
National Bank of Hungary	Issuer(Long-term)(FC)	April 10, 2009	BBB+	Negative
National Bank of Hungary	Issuer(Long-term)(FC)	March 5, 2010	BBB+	Stable
National Bank of Hungary	Issuer(Long-term)(FC)	March 31, 2011	BBB+	Negative
National Bank of Hungary	Issuer(Long-term)(FC)	April 3, 2012	BBB	Negative
National Bank of Hungary	Issuer(Long-term)(FC)	March 14, 2013	BBB	Negative
National Bank of Hungary	Issuer(Long-term)(FC)	March 18, 2014	BBB	Stable
National Bank of Hungary	Issuer(Long-term)(FC)	March 25, 2015	BBB	Stable
National Bank of Hungary	Issuer(Long-term)(FC)	February 17, 2016	BBB	Positive
National Bank of Hungary	Issuer(Long-term)(FC)	February 21, 2017	BBB+	Stable
National Bank of Hungary	Issuer(Long-term)(FC)	March 1, 2018	BBB+	Stable
National Bank of Hungary	Issuer(Long-term)(FC)	March 27, 2019	BBB+	Positive
National Bank of Hungary	Issuer(Long-term)(FC)	February 21, 2020	A-	Stable
National Bank of Hungary	Issuer(Long-term)(FC)	February 3, 2021	A-	Stable
National Bank of Hungary	Issuer(Long-term)(FC)	January 31, 2022	A-	Stable
National Bank of Hungary	Issuer(Long-term)(FC)	March 28, 2023	A-	Stable

Attestation Required by Paragraph (a)(1)(iii) of Rule 17g-7

- I, Kiichi Sugiura, have responsibility to this Rating Action and to the best of my knowledge:
- A) No part of the credit rating was influenced by any other business activities.
- B) The credit rating was based solely upon the merits of the obligor, security, or money market instrument being rated.
- C) The credit rating was an independent evaluation of the credit risk of the obligor, security, or money market instrument.

水沙浦 輝一

Kiichi Sugiura General Manager of International Rating Department