985000
Japan

Chief Analyst Atsushi Masuda
Analyst Shinichi Endo

Long-term Rating	AAA
Outlook*	Stable
Short-term Rating	-

*Long-term Rating refers to Foreign Currency Long-term Issuer Rating in principle.

1. Overview and socio-political conditions

Japan had a nominal GDP of USD 4.9 trillion in 2017, ranking third in the world after the United States and China, with its per capita GDP reaching USD 38,440. It had a total population of 127 million, the 10th largest in the world (IMF World Economic Outlook).

The current administration of Prime Minister Shinzo Abe (the second Abe Cabinet) was inaugurated in December 2012 as a coalition of the Liberal Democratic Party (LDP) and New Komeito Party. Immediately after its inauguration, the administration launched what it called "Abenomics" composed of three arrows: aggressive monetary policy, flexible fiscal policy and growth strategy to stimulate private investment. It has made clear its stance of putting priority on economic policy aimed at overcoming deflation. Amid a steady economic growth, the government has been enjoying a high approval rating in excess of 50% except for some brief periods against the background of a stable administration management and a decline in the presence of the opposition alliance.

A spate of misconducts within the administration surfaced in 2017, and the management of the government by Prime Minister Abe became temporarily unstable in the face of a scathing attack by the opposition parties. However, in August 2017, Abe reshuffled his cabinet (the third Abe Cabinet and the third reshuffled Cabinet) in a bid to bolster its approval ratings and dissolved the House of Representatives at the beginning of the extraordinary Diet session in September. In the general election held in October 2017, the ruling coalition of LDP and the New Komeito Party won 313 seats (down five seats), surpassing the two-thirds majority (310 seats) needed to propose a constitutional amendment (under the fourth Abe Cabinet). On the other hand, the Democratic Party, the largest opposition force, had split up into the Party of Hope and the Constitutional Democratic Party of Japan (CDP) before the general election. In May 2018, the Democratic Party and some members of the Party of Hope joined together to form the Democratic Party for the People (DPFP). Given such a divided opposition camp, the ruling collation will continue to retain its stable political base unless it makes a fatal gaffe.

In September 2018, LDP held its once-every-three-years presidential election and elected Abe for a third term. The Abe administration entered its last three-year term of the maximum nine-year term of office permitted by the party rules. Nearly six years have passed since the inauguration of his first administration in December 2012 and it may continue until September 2021 when the term of the presidency expires. Abe reshuffled his Cabinet in October 2018 following his election as LDP president (the fourth Abe Cabinet and the first reshuffled Cabinet). While it should be noted some harmful effects may emerge from s long-term government, JCR will watch whether the Abe administration will continue to carry out its economic structural reforms by taking advantage of its stable political base.

2. Economic base

(1) Economic expansion under Abenomics will be longest in postwar period

The Japanese economy grew 1.6% in FY2017 in real GDP terms (the second preliminary report for the April-June quarter of FY2018), driven by domestic demand centering on private-sector capital investment and external demand. Growth accelerated from 1.2% in the previous year.

Under Abenomics that began in December 2012, annual growth rates in real GDP terms averaged 1.3% in FY2013-17. It exceeded the potential growth rate estimated by the Cabinet Office (1.1%) and the annual average growth rate (1.2%) logged under the Koizumi administration (2001-06) and the first Abe administration (2006-07) in the 2000s. It is highly likely that the current economic expansion will continue for 74 months until January 2019, outperforming the longest postwar growth period of 73 months registered in the 2000s.

The consumption tax rate in Japan is scheduled to be raised from the current 8% to 10% in October 2019. As demand declined significantly when the rate was increased from 5% to 8% in April 2014, there is concern that the next hike may also have some adverse impact on the economy. However, given that (i) the increase this time is 2%, or smaller than the previous 3%, (ii) the introduction of a reduced tax rate regime may help ease household financial burdens and (iii) the government will be introducing a wide range of measures aimed to smooth out last-minute demand boost and its contraction, JCR does not think the economy will stall as a result of the tax rate hike. In fact, the Bank of Japan (BOJ) in April 2018 estimated the net financial burden on households from the tax hike at JPY 2.2 trillion, much smaller than the JPY 8.0 trillion in the previous tax increase in April 2014.

A comparison of the performance of each demand component relative to real GDP growth under the second Abe administration during FY2013-17 with that of the Koizumi administration and the first Abe administration in the 2000s shows that the contribution by private non-residential capital investment was +0.5ppt in FY2013-17, well exceeding +0.2ppt in the 2000s. This demonstrates that corporate activity has been particularly buoyant in the latest economic expansion. In fact, corporate profits soared to record highs (ordinary income based on the Financial Statements Statistics of Corporations by Industry). Private non-residential capital investment exceeded JPY 90 trillion in the second quarter of 2018 on an SNA basis to reach JPY 91.5 trillion, eclipsing the previous record high available since 1994. Amid upbeat corporate activities, the employment environment turned increasingly tight, with the unemployment rate declining to 2.2% in May 2018 and the job openings-to-applicants ratio reaching 1.63 in July 2018, the highest in 44 years.

On the other hand, contribution by private final consumption expenditure, which normally accounts for nearly 60% of GDP, was +0.3 ppt under the second Abe administration, falling by half from +0.6 ppt in the 2000s. One of the major factors behind for the bleak private consumption is a decline in the labor share. The labor share dropped to less than 60%, indicating that the record-high corporate profits did not sufficiently seeped into individual households. In particular, a setback in the average propensity to consume among young people (Household Survey) was prominent. Structural problems, such as the declining birthrate and the aging population and the consequent increase in uncertainty about the future, seem to be depressing consumer spending, especially among the younger generations. The contrast between robust corporate activity and weak consumer spending characterizes the economic growth under Abenomics.

(2) Effects of growth strategies on potential growth

In the concept of growth accounting, the potential growth rate can be broken down into the core productive factors of labor and capital and the total factor productivity (TFP). According to an estimate by the Cabinet Office (based on the second preliminary report for the April-June quarter of 2018), the potential growth rate rose from 0.8% in the fourth quarter of 2012 when the Abe administration started to 1.1% in the second quarter of 2018, a 3ppt gain over the last five and a half years. The breakdown shows that capital input and labor input, which both negatively contributed to the potential growth rate in the fourth quarter of 2012, turned positive in 2014. Thereafter, their positive contributions widened moderately, giving a modest push to the potential growth.

Behind this background were the measures taken by Abe administration to expand capital investment and promote labor participation by females and the elderly under the growth strategy it first formulated in 2013 and revised annually thereafter. In fact, an annual increase of JPY 70 trillion in capital investment (revised to JPY 80 trillion in FY2015), which was the key performance indicator set in the first year of Abenomics in FY2013, was achieved, actually reaching JPY 87 trillion in FY2018. As to the employment rate for females and the elderly, the KPI was set at 77% for females aged 25-44 and 67% for both males and females aged 60-64 to be attained by 2020. The former stood at 74.4% and the latter at 66.2% in 2017, coming closer to the targets.

However, much cannot be expected of contribution by labor as the "working-age population" defined as the one aged 15-64 will keep decreasing in the future. With regard to capital, the growth rate of capital stock has declined in keeping with its accumulation over the years and its contribution to growth is unlikely to turn significantly positive.

In such situation, a rise of total factor productivity is indispensable for a sustained enhancement of the potential growth rate. However, total factor productivity has been on a declining trend. The estimate by the Cabinet Office shows that its contribution to the potential growth rate dropped by half between the fourth quarter of 2012 and the second quarter of 2018. In the "Basic Policies for Economic and Fiscal Management and Reform 2018" (the so-called "Basic Policies"), which was approved by the Cabinet in June 2018, the Abe administration clearly stated its policy of advancing reforms on two wheels of "Human Resource Development Revolution" and "Productivity Revolution". JCR will watch whether the government initiatives will lead up to sustained improvement of the potential growth rate.

3. Fiscal base

(1) PB deficit narrowed and newly-issued bonds declined

Japan's outstanding balance of government bonds and borrowings (referred to as "government debt" in this paper) totaled JPY 1,087.8 trillion at the end of FY2017, equivalent to 198.3% of GDP, the highest in the world in terms of debt-to-GDP ratio. The main cause of the swollen government debt was the continuing deficit in the primary fiscal balance (PB). The PB deficit is in principle covered by the issuance of government bonds (newly-issued bonds). The government debt swelled due mainly to the accumulation of newly-issued bonds amid the continuing PB deficit [*1].

Primarily responsible for the persistent PB deficit is the expansion of social security-related expenditures necessitated by the progress in the aging of population. There are only two options to control the PB deficit: to increase tax revenues or reduce total expenditures. Under the Abe administration, the PB deficit of the central government has been shrinking on increased tax revenues and restrained expenditures. The deficit is expected to continue shrinking from JPY 20.0 trillion in FY2016 (final result) to JPY 18.7 trillion in FY2017 (revised budget) and JPY 15.3 trillion in FY2018 (initial budget).

If the PB deficit persists, however, the government will have to continue to rely on newly-issued bonds, which will further increase its debt outstanding. An unabated debt accumulation adds to concerns about the sustainability of government debt on a stock basis. If the outstanding balance of newly-issued bonds accumulates as a result of the persistent PB deficit, the demand for issuance of refinancing bonds will also increase, which in turn will lead up to greater risks of annual debt rollover. For this reason, JCR believes that it is important to swiftly turn a PB deficit into a surplus (see the next section for JCR's evaluation of the government's fiscal consolidation plan).

The annual issue amount of JGBs, including the aforementioned newly-issued bonds and refinancing bonds, has been on a decreasing trend since peaking out at JPY 176.2 trillion (35.7% of GDP) in FY2012 and is expected to fall to JPY 156.1 trillion (28.5% of GDP) in FY2017 (revised budget) and JPY 149.9 trillion in FY 2018 (initial budget). The main factors behind the decline were the reduced volume of newly-issued bonds resulting from the shrinking PB deficit and the decline in refinancing bonds made possible by the longer average maturity of JGBs under the environment of low interest rates. Nevertheless, according to the IMF Fiscal Monitor (April 2018), total financing needs of the maturing debt of the Japanese government for CY2018 (based on IMF estimates; debt is as defined by IMF) are 37.2% of GDP, which is substantially higher those of the US (18.7%), France (10.4%), the UK (6.7%) and Germany (5.0%). In the event of a major shock in Japan's capital markets, the financing risk of government bonds including refinancing bonds is considerably higher than that in other developed countries. The large-scale monetary easing by BOJ is expected to enter a phase toward an exit sometime in the future. Accordingly, there could be great pressure on the capital market, such as a sharp rise in interest rates, during the run-up period to the exit, and this point needs to be closely watched.

(2) The new fiscal consolidation plan increased the possibility of fiscal reconstruction

Under its "Plan to Advance Economic and Fiscal Revitalization" adopted by the Cabinet in June 2015, the Abe administration has been implementing fiscal management by setting a target of turning around the PB of central and local governments into surplus by FY2020. However, the "New Economic Policy Package"

*1 Primary fiscal balance (PB) is referred to as "tax revenues minus policy expenditures" in this paper as defined by the Ministry of Finance of Japan. Policy expenditures are defined as total expenditures minus government debt service.

formulated in December 2017, which included a change in the use of increased revenues from the consumption tax rate hike to 10%, made the target harder to achieve in FY2020. Accordingly, in June 2018, the Abe administration adopted its "New Plan to Advance Economic and Fiscal Revitalization" as a new fiscal consolidation plan. This plan firmly retained the surplus target itself but postponed the timing of achieving it by five years from FY2020 to FY2025.

JCR has considered the government's target of achieving a PB surplus as a core element imperative to restoring fiscal discipline. Yet, it will be premature to judge that the government's commitment to fiscal consolidation has receded simply because of the five-year postponement. Rather, it is crucial to assess the government's commitment by judging whether the feasibility of fiscal consolidation has increased as a result of the formulation of the new plan, including the postponement of the target date, as compared to the old plan.

It should be noted in this respect that the assumptions for the "Economic and Fiscal Projections for Medium to Long Term Analysis" (hereinafter referred to as the medium and long-term fiscal estimates) by the Cabinet Office based on the new plan have been appreciably changed. The Cabinet Office submits such estimates to the Council on Economic and Fiscal Policy twice a year in January and July to provide data necessary to review the progress on fiscal consolidation and measures to be taken to achieve the target. Notable here is that the Cabinet Office drastically lowered the assumptions for growth and inflation rates in its estimated in January 2018, making them closer to the reality of the economy.

In addition to changing the economic assumptions, the Office revised the pace of PB deficit reduction to be more realistic. The July 2017 medium and long-term fiscal estimates ("Economic Recovery Case") based on the old plan had estimated the PB deficit at JPY 8.2 trillion (1.3% of GDP) in FY2020, saying it would turn into a surplus in FY2025. In order to achieve the PB surplus in FY2020 under this scenario, it would have been necessary to reduce the deficit by more than 1% of GDP on a cumulative basis by that year. A reduction of the deficit at such pace might seriously impair economic growth. On the other hand, the July 2018 medium and long-term fiscal estimates ("Economic Growth Case") based on the new plan estimated the PB deficit at JPY 2.4 trillion in FY2025 (0.3% of GDP) and predicted the achievement of a surplus in FY2027. Under this scenario, the new target of achieving a PB surplus in FY2025 will be achievable with the efforts to reduce the deficit by only 0.3% of GDP

The latest medium and long-term estimates showed that, even on the more realistic economic assumptions, the debt-to-GDP ratio will steadily decline after peaking in FY2018. JCR also estimates that if the pace of economic growth and deficit reduction under Abenomics is generally sustained in the future, the debt-to-GDP ratio will remain stable at the current level until around FY2020 and then gradually decline.

Taking these points into consideration, the new plan can be regarded as one aimed to strike a balance between fiscal consolidation for the reduction of the swollen debt and a fiscal policy in favor of economic growth. JCR judged that the feasibility of medium-to long-term fiscal consolidation was higher than that of the old plan, and that the government's strong commitment to fiscal consolidation was still maintained under the new plan. The reform schedule of the new fiscal soundness plan is scheduled to be formulated by the end of 2018. The JCR will closely monitor the progress and implementation of fiscal consolidation, including its detail.

4. Financial system

Under the framework of its Quantitative and Qualitative Monetary Easing (QQE) introduced in April 2013, BOJ is aiming to achieve a price stability target of 2%. Negative Interest Rate Policy (NIRP) was introduced in January 2016, and a Quantitative and Qualitative Monetary Easing with Yield Curve Control was introduced in September 2016. However, at its Monetary Policy Meeting held in July 2018, BOJ lowered its forecast for prices, predicting that the CPI inflation is expected to be 1.6% year-on-year in FY2020, excluding the effect of the planned consumption tax hike, and that the 2% target will not be achieved during the forecast period. It also deleted the reference to FY2020 as a specific date for achieving the 2% price stability target. This implied that BOJ's large-scale monetary easing may continue at least until FY2021.

In its Outlook Report released after the Monetary Policy Meeting in July 2018, BOJ presented the results of its analysis that factors such as a cautious stance on setting wages and prices on the part of companies and a persistently cautious attitude toward future price increases on the part of households are jointly responsible for the continued weakness of prices relative to the economic and employment situation. Accordingly, BOJ decided at the meeting on "Strengthening the Framework for Continuous Powerful Monetary Easing". It introduced a forward guidance on the policy interest rate, deciding to maintain the current extremely low levels of short- and long-term interest rates for an extended period of time. On the other hand, as to its yield curve control, BOJ added a new statement that "with regard to the amount of JGBs to be purchased, the Bank will conduct purchases in a flexible manner so that their amount outstanding will increase at an annual pace of about 80 trillion yen".

In this regard, BOJ's actual outright purchases of long-term JGBs totaled JPY 49.3 trillion in FY2017, which was considerably lower than its projected purchase increase of approximately JPY 80 trillion per year. JCR estimates the purchases will decline to around JPY 30 trillion in FY2018. Meanwhile, the outstanding balance of JGBs held by BOJ stood at JPY 447.4 trillion at the end of FY2017. According to the Flow of Funds Accounts, BOJ's JGB holdings ratio reached 42.3% at the end of June 2018. In fact, a working paper released by BOJ in October 2018 showed the results of its estimate indicating that its JGB purchases had an extremely strong downward pressure on interest rates.

However, looking at the actual rate of inflation, the core inflation rate of the consumer price index, which BOJ set as a major price index, was only 0.9% year-on-year in August 2018. In particular, non-energy items had little impact on the price inflation. While BOJ's monetary easing thus far has contributed to improving the supply-demand gap through a fall of real interest rates, the actual pace of inflation has fallen considerably short of its expectations, and the expected inflation rate, which BOJ sees as an important path to inflation, has been consistently sluggish. Consequently, it must be said that the path to achieving the BOJ's 2% price target is still a long way to go.

In contrast, long-term interest rates have been steadily rising since BOJ's Monetary Policy Meeting in July 2018 amid the widespread market view that the Bank has decided to allow interest rates to rise. In fact, at a press conference after the Meeting, Governor Haruhiko Kuroda indicated that he will tolerate the long-term interest rates to go up to a maximum of around 0.2%. The rates actually rose to around 0.15% at one point in mid-October 2018.

A major factor behind the shift in BOJ's stance was falling profits in the banking sector. According to the Financial Services Agency, the net business profits of 549 depository institutions totaled JPY 3.8 trillion in FY2018, down 37.7% from JPY 6.1 trillion in FY2015 before the introduction of NIRP. Given that BOJ's large-scale monetary easing is expected to continue at least until FY2021, there is no denying that regional banks with relatively inferior profitability will see their financial intermediation functions undermined unless they bolster their incomes. This indeed requires prompt measures to be taken. On the other hand, the continuation of low interest rates has produced a secondary effect of curbing interest payments in fiscal aspects. According to the Ministry of Finance, the weighted-average yield on general government bonds kept declining, falling below 1% to reach 0.95% at the end of FY2017. While outstanding JGBs grew 28.6% to JPY 241.7 trillion over the past 10 years from FY2007 to FY2017, interest payments increased only 16.1% to JPY 1.2 trillion during the same period.

Given the above, BOJ has entered a difficult phase where it has to strike a balance between retaining the effect of monetary easing through outright purchases of JGBs and expanding the allowable range of interest rate fluctuations to stem the adverse effects such as deteriorating profitability of financial institutions. At its Monetary Policy Meeting held in July 2018, BOJ took seemingly contradictory decisions to adopt a forward guidance that promises ultra-low interest rates on one hand and buy JGBs in a flexible manner on the other. This seems to indicate the growing difficulties the bank faces in steering its monetary policy in such a phase.

Seen from a global perspective, differences in the stance of monetary policy among Japan, the United States, and Europe are becoming clearer. While Japan is expected to continue its large-scale monetary easing at least until the end of FY2020 as seen above, the U.S. Federal Reserve began raising interest rates in December 2015 and the ECB decided to terminate its asset purchase program at the end of 2018.

If the United States and Europe were to take the lead in normalizing their monetary policy, a widened interest rate differential would bring about a depreciation of the yen and benefit the Japanese economy under normal circumstances. However, in the event of a global economic downturn, Japan has little room for manipulation of interest rates under conditions where the monetary policy has not been normalized and will have to go deeper into non-traditional monetary easing measures. If the United States and Europe turn to monetary easing in response to the global economic downturn, the yen's appreciation resulting from the narrowing interest rate differential between the United States, Europe and Japan may have a negative impact on the Japanese economy, such as a setback of exports. It should be noted that BOJ may lose its freedom of monetary policy amid market volatility resulting from the sharpening difference in the financial stance among Japan, the United States and Europe.

5. External position

Japan's current account has been chronically in the surplus. However, against the background of the suspension of all nuclear power plants in Japan following the Great East Japan Earthquake in 2011, its goods trade balance slipped into deficit in FY2011 on increased fuel imports and its current account surplus shrank to JPY 2.4 trillion or 0.5% of GDP in FY2013. The goods trade balance bounced back to post a modest surplus in FY2015 partly because crude oil prices fell sharply from the middle of 2014. In addition, as more Japanese companies accelerated their overseas expansion since the 2000s, a primary income balance surplus has kept its uptrend mainly on increased investment income from overseas. These helped to revive the current account surplus, which in FY2017 reached JPY 21.8 trillion or 4.0% of GDP to recover the level in FY2007.

On the financial account, net assets have kept increasing since FY2014. In the first place, net assets in the direct investment account continued to steadily increase amid outward investments constantly in excess of inward investments. In FY2017, direct investment registered an increase in net assets equivalent to 2.6% of GDP. Other components of the financial account generally stayed volatile, but the portfolio investment account ended the year with an increase in net assets equivalent to 1.2% of GDP on a solid growth of outward investment in equities and medium- to long-term bonds. Other investments resulted in an increase in net liabilities equivalent to 1.0% of GDP while the repatriation of Japanese funds as seen in FY2015 seemed to have ended.

As of the end of June 2018, the amount of net external assets stood at JPY 325.6 trillion (primary estimate by the Ministry of Finance) or equivalent to 59.3% of GDP, of which official reserve assets totaled JPY 137.6 trillion. Japan's net external assets were equivalent to USD 2.9 trillion, the largest in the world, and Japan's lead was overwhelming; according to IMF statistics as of the end of March 2018, Germany ranked second at USD 2.3 trillion and China third at USD 1.8 trillion. Japan has abundantly accumulated its external assets by investing the chronic current account surplus for many years in foreign countries, and its external position is extremely firm and stable.

6. Overall assessment and outlook

The ratings mainly reflect the country's highly advanced economic structure, its position as the world's largest net external creditor, holdings and purchases of government bonds by domestic investors in a stable manner against the backdrop of ample household savings, moderate economic recovery and ongoing momentum of an exit from deflation, and continued implementation of economic policy measures aimed at fiscal consolidation and economic growth. The economic growth under the Abenomics has exceeded JCR's earlier forecast and has now reached a level faster than that during the economic expansion in the 2000s. Steady tax revenues are expected to continue going forward amid a moderate economic expansion. With the Bank of Japan's large-scale monetary easing expected to remain in force for a while, JCR holds that the interest payments of the government will be kept suppressed amid continuation of low interest rates. In its new fiscal consolidation plan announced in June 2018, the government postponed the target date for achieving a primary fiscal surplus by five years. However, JCR believes that the debt-to-GDP ratio will either stay stable or slowly decline even at the more realistic pace of deficit reduction in favor of economic growth. The feasibility of fiscal consolidation has rather increased under the new plan as compared to the previous one, although it is true that the huge government debt stemming from chronic fiscal deficits continues to put downward pressure on the ratings. These have led to JCR's judgement that uncertainty over medium- to long-term fiscal sustainability has now receded. In light of the above, JCR has retained its ratings and changed its outlook from Negative to Stable.

In the future, JCR will pay attention to the following points: (1) whether the promotion of the growth strategy based on the firm leadership of the government will pave the way for enhancement of the potential growth rate; (2) whether the reduction of the primary balance deficit and the government debt-to-GDP ratio will proceed as planned on the basis of the reform schedule formulated under the new fiscal consolidation plan; and (3) whether BOJ's monetary policy can sustain the monetary easing effect while taking into consideration the adverse effects of low interest rates, such as the deterioration of the financial intermediation function.

985000 Japan

Selected Economic Indicators

(%)

	FY2013	FY2014	FY2015	FY2016	FY2017
Real GDP growth	2.6	-0.3	1.4	1.2	1.6
CPI Inflation (core, annual average)	0.8	2.8	-0.0	-0.2	0.7
Central government primary fiscal balance to GDP	-3.6	-3.1	-2.0	-1.6	-2.0
Central government overall fiscal balance to GDP	-7.8	-7.3	-6.1	-5.7	-6.0
outstanding of government bonds and borrowings to GDP	202.1	203.2	196.5	198.7	198.3
Current account balance to GDP	0.5	1.6	3.5	3.9	3.7
Trade balance to GDP	-2.1	-1.3	0.1	1.1	0.8
Financial account balance to GDP	-1.1	2.5	4.5	4.6	3.2
Official reserve assets (USD trillion)	1.3	1.2	1.3	1.2	1.3
Net external assets to GDP	63.2	66.4	65.4	60.4	57.0
Foreign exchange rate (annual average) (JPY/USD)	97.6	105.9	121.0	108.8	112.2
Monetary base, annual increase	50.6	34.5	27.0	19.0	8.9
Money stock, annual increase	2.9	3.0	2.5	3.5	2.6
Short-term interest rate	0.1	0.1	0.0	-0.1	-0.1
Long-term interest rate	0.7	0.5	0.3	-0.0	0.0

* Figures for the most recent period could be indicators based on preliminary figures.

(Notes)
1 Primary fiscal balance = tax revenues minus policy expenditures.
2 Tax revenues = tax revenue plus other revenue.
3 Policy expenditures = total expenditures minus government debt service.

Source: Ministry of Finance, Bank of Japan, and Cabinet Office

Ratings

(millions of yen)

	Rating	Outlook*	Amount	Rate (%)	Issue Date	Maturity Date	Release
Foreign Currency Long-term Issuer Rating	AAA	Stable	-	-	-	-	2018.08.09
Local Currency Long-term Issuer Rating	AAA	Stable	-	-	-	-	2018.08.09

History of Long-term Issuer Rating (Foreign Currency Long-term Issuer Rating or its equivalent)

Date	Rating	Outlook*	Issuer
2000.10.31	AAA		Japan
2002.06.12	AAA	Negative	Japan
2006.08.28	AAA	Stable	Japan
2016.07.14	AAA	Negative	Japan
2018.08.09	AAA	Stable	Japan

*Outlook for Foreign Currency long-term issuer rating, or direction in case of Credit Monitor

Japan Credit Rating Agency, Ltd.
Jiji Press Building, 5-15-8 Ginza, Chuo-ku, Tokyo 104-0061, Japan
Tel. +81 3 3544 7013, Fax. +81 3 3544 7026