Japan
Rating Report

SCOPE A+ STABLE OUTLOOK

Credit strengths

- Broadly diversified economy
- Exceptional funding flexibility
- Strong external position
- Resilient financial system

Credit weaknesses

- Very high debt burden
- Growth below trend
- Weak public finances
- Demographic challenges

Rating rationale and outlook: The rating downgrade is driven by weaknesses in the 'public finance' analysis category and reflects Scope's view that Japan's fundamentals are weakened by: i) high public debt burden and weak debt dynamics, and ii) weak growth outlook with growth potential that is under trend. However, the ratings are supported by a broadly diversified economy with a wealthy population, exceptional funding flexibility, the government's commitment to reform, a strong external position, political stability, and a resilient financial system. Going forward, Scope's ongoing assessment will concentrate on the extent to which a continued unfavourable public debt trajectory is redressed through the proactive initiatives of authorities. The rating outlook is Stable and reflects Scope's view that the rating risks are balanced overall.

Figure 1: Sovereign rating categories summary

Scope's sovereign risk categories	Japan	Peer Comparison		
		Average	China	Italy
Domestic Economic Risk				
Public Finance Risk				
External Economic Risk				
Financial Risk				
Political and Institutional Risk				
Qualitative adjustment (notches)	+1		+1	-1
Final rating	A+		A+	A-

AAA AA A BBB BB B CCC CC C

NB. The comparison is based on Scope's Core Variable Scorecard (CVS) which is determined by relative rankings of key sovereign credit fundamentals. The CVS peer group average is shown together with two selected countries chosen from the entire CVS peer group. The CVS rating can be adjusted by up to three notches depending on the size of relative credit strengths or weaknesses.

Positive rating-change drivers

- Sharp acceleration of growth
- Strong debt reduction
- Successful reforms with strong increases in productivity

Negative rating-change drivers

- Sharp economic deterioration
- Deterioration in government finances
- Reversal of structural reforms

Ratings and outlook

Foreign currency

Long-term issuer rating	A+/Stable
Senior unsecured debt	A+/Stable
Short-term issuer rating	S-1+/Stable

Local currency

Long-term issuer rating	A+/Stable
Senior unsecured debt	A+/Stable
Short-term issuer rating	S-1+/Stable

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Bloomberg: SCOP

Domestic economic risk

Growth under potential

Japan's macroeconomic performance and outlook remain a key rating challenge. Potential growth in Japan is weak and averages under 1% during the next 10 years, below the historical trend level of greater than 1%. The government's growth strategy - the third 'arrow' of Abenomics – has not yet been able to raise potential output or reverse the economy's deflationary cycle, despite some encouraging structural reform initiatives undertaken by the authorities. Unfavourable demographics and structural bottlenecks in the labour market remain major limiting factors to growth potential going forward. This, combined with the anticipated slow pace of domestic investment, will further undermine the growth potential of the economy[1].

Faster GDP growth will be essential for fiscal sustainability. Japan has benefited from six quarters of uninterrupted expansion, with real GDP expected to grow at 1.3% in 2017 thanks to a continued pickup in international trade and temporary fiscal support. Preparations for the 2020 Olympic Games and accompanying urban redevelopment are expected to generate a one-off increase of between 0.2 and 0.3 percentage points of growth to Japanese GDP to continue through 2018. Given the country's deep structural constraints, Scope however expects real GDP to average below 1% over to 2020. Downside risks to the outlook include heightened geo-political tensions in Northeast Asia and trade protectionism.

Demographic impact

With a declining population, an ageing workforce, slow growth in total-factor productivity and age-induced deflationary pressures[2], the Japanese economy is facing unique challenges[3]. Overall growth rates going forward will reflect demographic developments, resulting in an apparent long-term weakness in overall growth that does not necessarily accurately reflect the developing dynamics of the economy. Scope expects growth in Japan to be driven mainly by increases in productivity, with automation extending out into service sectors, such as the use of robotics and the integration of artificial intelligence into medical care and care-giving for the elderly.

Nevertheless, Japan's A+ rating benefits from one of the most diversified economies in the world and continues to be world-class in key areas such as electronics and machinery. Structural shifts within the Japanese economy are also largely positive, with increased diversification within intermediate demand and increasing value-added in both manufacturing and exports. The unemployment rate fell to 2.8% in July 2017, the lowest rate since June 1994.

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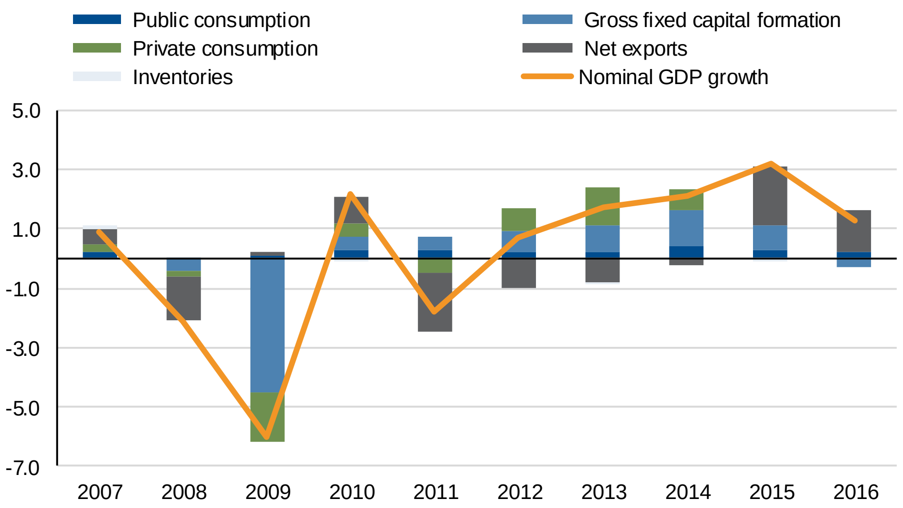
[1] Analysis for this report is based on research from the IMF 2017 Article IV Consultation July 2017 (IMF Country Report 17/242); IMF Financial System Stability Assessment, Japan, July 2017 (IMF Country Report 17/244); Ministry of Finance Debt Management Report 2017; OECD Economic Survey, Japan, April 2017. Hereinafter IMF IV, IMF FSSA, MinFin and OECD. Other sources referenced individually.
[2] Liu, Yihan and Westelius, Niklas, The Impact of Demographics on Productivity and Inflation in Japan, IMF Working Paper WP/16/237, December 2016
[3] Much of economic theory implicitly assumes a growing population. Scope considers the thesis of a balance-sheet recession to be the appropriate explanation for weakness in Japanese economic growth, above and beyond the problems of demographics. See Richard C. Koo, The Holy Grail of Macroeconomics: Lessons from Japan's Great Recession, Wiley & Sons, Singapore, 2009

Drastic demographic decline

The Japanese workforce is one of the most highly skilled in the world but it is in decline. Between 2015 and 2025, Japan's overall population will decline by 3.6%, but the nation's working-age population is expected to decline by 7.2%. This trend will worsen: over the same period, the age cohort under the age of 14 will decline by 11.7%, underscoring the severity of Japanese demographic trends. The only age cohort to increase is those over 65, which is set to rise by 8.6%4. At the same time, the Japanese economy is expected to grow over this period, cumulatively, by approximately 8%. This means that significant productivity improvements will be needed to match the declining number of workers to increases in economic activity. This unique challenge – no other major industrialised country (yet) is facing anywhere near the same demographic decline – means that the Japanese economy will undergo profound changes over the next several decades.

Figure 2: Components of nominal GDP growth



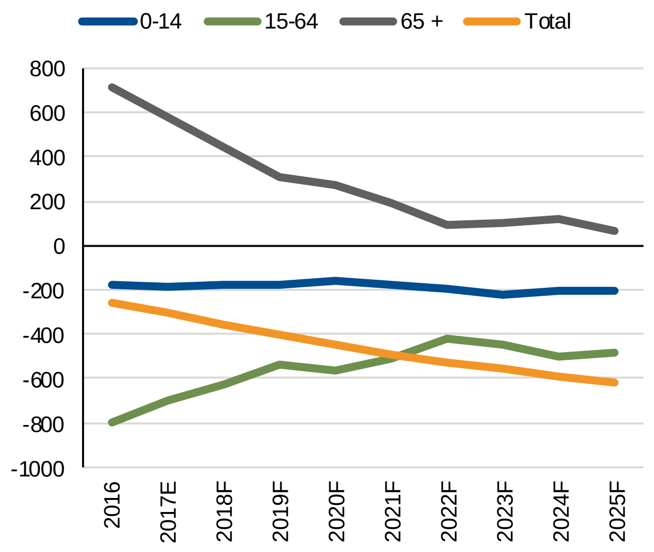
Source: National statistical accounts, calculations by Scope Rating AG

Tight employment situation

Employment development is solid. The active job openings-to-applications ratio increased to 1.52 in July 2017, the highest rate since February 1974. Employment growth continues moderately as labour force participation continues to increase. While wages are on the rise, especially in industries with major personnel shortages, such as transportation, overall wage increases have lagged employment growth. This is especially true of large companies, whereas SMEs have shown larger wage increases. Nominal wages in July 2017 declined for the first time in 13 months due to a decline in summer bonuses. This weakens the short-term private consumption outlook5. A series of supply-side reforms known collectively as 'Abenomics 2.0' has increased labour force participation (77.7% for the 15-64 cohort as of July 2017, up from an average of 73% from 2000-2010) and aims to increase productivity and competitiveness. Unemployment has fallen from a high of 5.5% in June 2009 to 2.8% in July 2017.

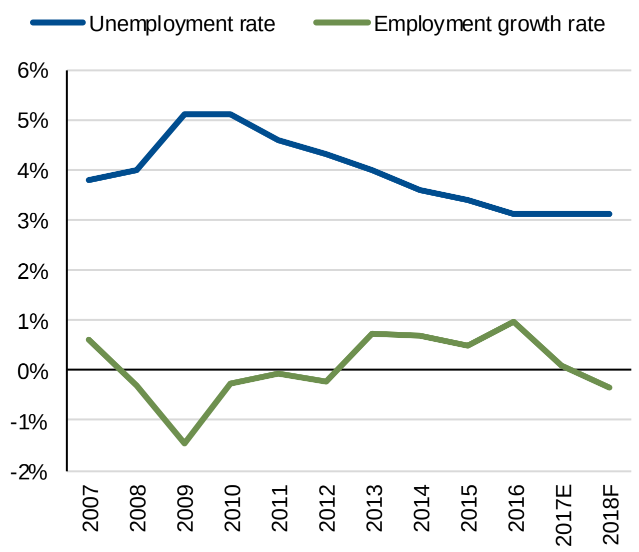
[4] Data for Japanese demographics taken from Table 1-1, Medium-fertility and medium-mortality projection, 2016-2065 Population Projections for Japan, National Institute of Population and Social Security Research, and Scope's own calculations. The former is available at http://www.ipss.go.jp/pp-zenkoku/e/zenkoku_e2017/pp_zenkoku2017e.asp
[5] Japanese Research Institute, Monthly Report of Prospects for Japan's Economy, August 2017

Figure 3: Annual changes in Population (000s)



Source: National Institute of Population and Social Security Research, Scope calculations

Figure 4: Employment and Unemployment trends



Source: IMF

Public finance risk

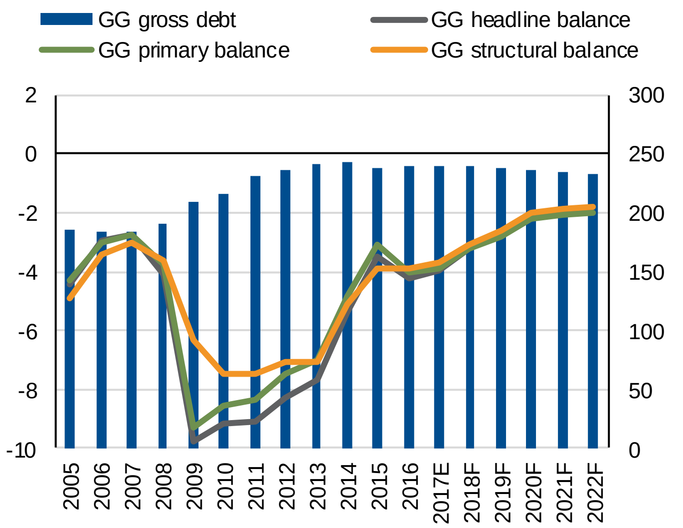
Debt as a legacy issue

Japanese government debt started accruing strongly after the collapse of the Japanese real-estate bubble in 1992 as the government took on large amounts of debt to prevent the collapse of the economy. In the balance-sheet recession that followed, additional government spending prevented further recessions or worse. Consequently, the current accumulation of debt is largely a legacy issue, the result of a very weak recovery ('the lost decade') after that bubble.

High debt burden

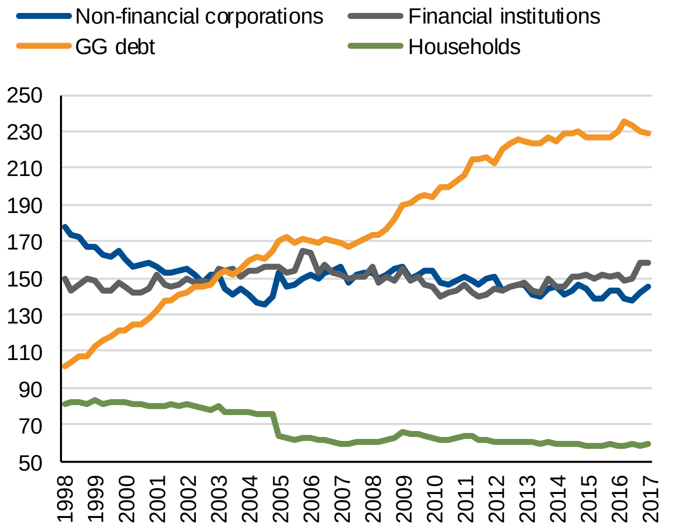
Japan's weak public finances and the high debt burden are key credit weaknesses. Headline deficits averaged 6.4% of GDP from 2010 to 2016, adding to gross debt as a percentage of GDP amounting to 239.4% in 2016, the highest of any country rated by Scope. Public debt is projected to gradually decrease due to improving primary balance and a negative interest-growth differential to 233.6% in 2022. The primary deficit is projected to decline in 2018 as the impact of the supplementary budgets fades. Nevertheless, the government projects a primary deficit of 2.4% of GDP in 2018, well above its 1% target. Consequently, it is Scope's view that the long-term target of a primary surplus by 2020 will be difficult to achieve, even with robust GDP growth.

Figure 5: Fiscal developments (% GDP)



Source: IMF

Figure 6: Long-term development of debt (% GDP)

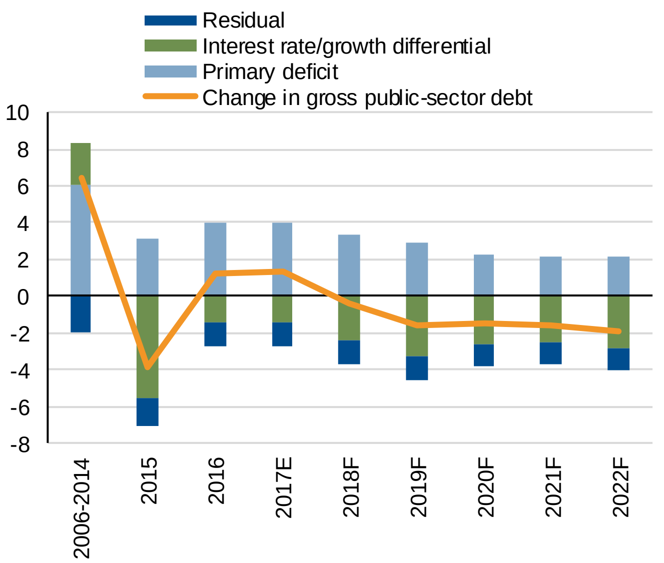


Source: IMF

Debt-sustainability framework

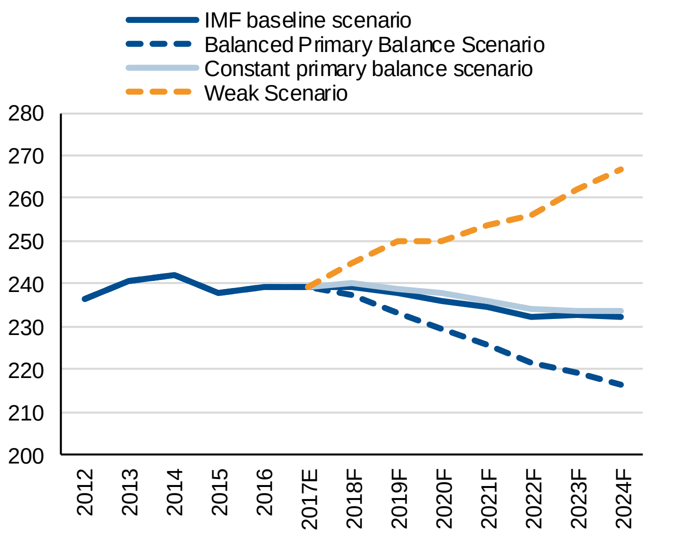
Japan's gross financing needs are high and amount to an estimated 54% of GDP in 2016. This is the highest of all advanced economies. Going forward, this is expected to remain at approximately the same level but with some decline as the primary balance deficit is reduced and maturities are extended at low interest rates. The debt profile is adequate, with no indicators exceeding early-warning benchmarks. Ten-year bonds have a negative spread against US Treasuries. External financing requirements are modest at 8% of GDP at the end of 2016, reflecting the low external holdings of Japanese government debt. While government financial assets are relatively high at 120% of GDP in 2016, these are not necessarily liquid or available for debt repayment[6]. Scope assumes a very conservative growth path in future.

Figure 7: Debt growth (% GDP)



Source: IMF

Figure 8: Long-term development of debt (% GDP)



Source: Scope

[6] IMF IV, Annex VI

2017-2024 average	Real GDP growth (% change)	Primary balance (% of GDP)	Real eff. Interest rate (%)	Debt End Period (% of GDP)
Historic values (2013-2016)	1.3	-5.6	-0.4	239.4
IMF Baseline	0.7	-2.7	-0.9	232.4
Constant Primary Scenario	0.7	-3.9	-0.9	233.8
Weak Scenario	-0.8	-3.2	-0.9	266.8
Balanced Primary Balance Scenario	0.7	-0.7	-0.9	216.4

Source: Scope

Debt-sustainability sensitive to shocks

Under Scope's debt-sustainability analysis, Japan's public debt can only be moderately reduced if the government's primary balance were to be in balance over an extended period of time. Debt dynamics are sensitive to shock scenarios and shifts in market sentiment. A modest shock scenario from weak growth, fiscal slippages, or increased financing costs would significantly increase the debt-to-GDP ratio to well over 250% in 2022 and further weaken credit fundamentals.

Under a dual-stress scenario of weakened growth coupled with higher primary-balance deficits, reflecting the historical record of Japanese government spending under low-growth or recession regimes, the debt-to-GDP ratio increases significantly to 256.2% of GDP in the first year of this scenario, past the recent historical high of 242.1% in 2014, effectively wiping out the modest reductions in this key ratio very quickly and increasing by 2024 to 266.8%. However, if the government were to increase revenues and bring the primary balance from -3.9% of GDP to 0% between 2018 and 2021, the debt-to-GDP ratio would improve from 239.2% to 216.4% by 2024, with larger reductions in subsequent years.

Mitigating factors to debt risks

Japan also benefits from safe-haven status reflecting its large domestic investor base with 91% of Japanese government bonds held by resident investors supported by a sizeable pool of private-sector savings. The importance of the yen as global reserve currency further eases funding flexibility. Moreover, the composition of the public debt helps to maintain low borrowing costs. Average debt maturity is also relatively long at eight years and eight months as of the end of 2016, but short-term debt (under two years) remains substantial at 24.8% of the total debt stock at the end of 2016. Long-term debt (5 to 10 years) has decreased from 27.6% of debt in 2007 to 23.3% at the end of 2016, with very long-term debt (10+ years) increasing from 16.5% in 2007 to 29.3% at the end of 2016[7].

More than 90% of Japanese government debt is held domestically, largely by Japanese Banks and Life and Non-Life Insurance companies, as well as by the Bank of Japan. The domestic market for Japanese bonds is strong due to Japan's high savings rate and safe-haven status of the Japanese yen. Moreover, the Bank of Japan can, to a certain degree, monetise debt without inflation concerns due to persistent low inflation and interest rates[8]. Finally, the cost of interest on debt, due again to low or negative interest rates, is under 1% of GDP.

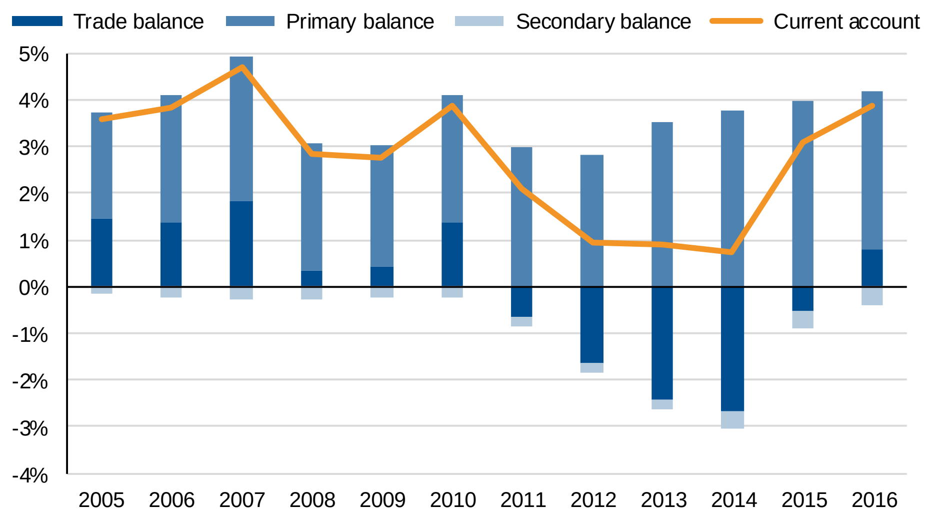
[7] IMF IV, p. 43
[8] David E. Lebow, The Monetisation of Japan's Government Debt, BIS Working Papers No. 161, 2004

External economic risk

Strong external position

The ratings are further underpinned by Japan's strong external position. A positive net international investment position of 61.0% of GDP in 2016 reflects high income flows from abroad, which has helped keep the current account in surplus for more than two decades. The current account surplus accelerated since 2015 reaching 3.9% of GDP in 2016 after several years of low current account surpluses due to high energy prices and weak exports.

Figure 9: Current account balance (% GDP)



Source: IMF, Eurostat, calculations Scope Rating AG

Strong NIIP increases

Scope considers vulnerabilities to Japan's external position to be limited, as inward investments are concentrated in equity investments (rather than portfolio) and Japanese investors have a strong home bias. Foreign-exchange reserves are high at around 24% of GDP, and Japan has not directly intervened in the free-floating yen market in recent years. Japan's external position is further aided by sizeable foreign income from Japan's large net foreign-asset position[9].

Low external debt

Japan's external debt is relatively low for an industrialised country compared to its peer group. Total external debt was 71.4% of GDP in 2016, compared to the peer average for external debt of 84.1%.

Financial stability risk

Resilient banking sector

The Japanese banking system has proven to be resilient in the face of significant challenges. It is one of the largest and most complex banking systems in the world, with total financial assets of around 620% of GDP in September 2016. More than half of total financial assets are held by commercial banks. The three largest banks alone hold 18% of total financial assets. The insurance sector is highly concentrated and the second-largest in the world after that of the US, with total financial assets of around 75% of GDP. Japanese banks are largely healthy, with low and declining non-performing loan ratios and an average capitalisation of 13% of risk-weighted assets. Local-currency liquidity indicators are favourable due to the Bank of Japan's large excess reserves.

[9] IMF IV, p. 56

Financial sector challenges

The financial intermediation sector is facing largely structural problems that represent long-term challenges. The government's policies are very accommodating but domestic demand is severely limited by demographics, with both investment and domestic credit growth lacklustre. Japanese demographics pose a challenge to the viability of the Japanese financial system because the expected search for yield (with government yields around zero or negative) will lead to riskier investments, changes to finance business models, and requires financial oversight to adapt to these challenges. Overall, the financial sector faces a continuation of an already-long period of low interest rates, flat yield curves, and resulting weak profitability. Net interest margins are expected to shrink further.

Strong financial sector oversight

Oversight of the Japanese financial sector is strong. There is a resilient institutional framework in place between the JFSA [10] and the Bank of Japan, which features coordination councils and liaison committees. Close domestic coordination is well developed, including a legislative framework for external auditors to guarantee their independence[11]. Both the JFSA and the Bank of Japan implement macroprudential policy through a micro-prudential approach[12]. While the complex and sophisticated Japanese financial system is inherently fragile to a degree, due to cross-border exposures, cross-shareholdings and very high exposure to Japanese government bonds, Scope does not consider these fragilities to be significant risk factors. Japan has an excellent track record of crisis management and resolution in comparison to its peer group, with strong and active participation of all parties in maintaining financial stability.

Institutional and political risk

Abe re-election likely

The political environment in Japan is characterised by a recent political stability and strong institutional framework. Prime Minister Shinzō Abe has called for snap elections in October 2017. Scope does not expect any major policy changes to emerge and believes that the likely re-election of Prime Minister Abe would provide continuity to reform efforts.

Heightened geopolitical risks

Next to the tensions surrounding North Korea, Japan is involved in numerous territorial disputes: Russian control of the southern Kuril Islands, South Korean claims to the Liancourt Rocks; Chinese and Taiwanese claims of the Senkaku Islands; and with Chinese claims over the Okinotorishima islands. One of the cornerstone policies of the Abe administration is the normalisation of Japan's role in the world, leading to a commitment to collective defence, rather than the current doctrine of self-defence.

Exposure to natural disaster risks

On the World Risk Index, Japan is ranked 17th, the only industrialised economy with significantly increased risk. This is largely due to the frequent and occasionally severe earthquakes and monsoons that hit Japan, but it is mitigated by the strong infrastructure that is in place to deal with such events. Hence, although Japan is exposed to multiple natural-disaster risks, the government's preparations to deal with these events are advanced and mitigate the effects[13].

[10] Financial Services Agency of Japan
[11] IMF FSSA, p. 76ff
[12] For details on this approach, see Jacek Osiński, Katharine Seal, and Lex Hordein, Macroprudential and Microprudential Policies: Toward Cohabitation, IMF Staff Discussion Note, SDN13/05, June 2013
[13] http://weltrisikobericht.de/wp-content/uploads/2016/08/WorldRiskReport2016.pdf

Methodology

The methodology applicable for this rating and/or rating outlook, 'Public Finance Sovereign Ratings', is available at www.scoperatings.com.

Historical default rates from Scope Ratings can be viewed in Scope's rating performance report at https://www.scoperatings.com/governance-and-policies/regulatory/esma-registration. Please also refer to the central platform (CEREP) of the European Securities and Markets Authority (ESMA) at http://cerep.esma.europa.eu/cerep-web/statistics/defaults.xhtml. A comprehensive clarification of Scope's definition of default and definitions of rating notations can be found in Scope's public credit rating methodologies at www.scoperatings.com.

The rating outlook indicates the most likely direction of the rating if the rating were to change within the next 12 to 18 months. A rating change is not automatically ensured, however.

I. Appendix: CVS and QS results

Sovereign rating scorecards

Scope's Core Variable Scorecard (CVS), which is based on relative rankings of key sovereign credit fundamentals, signals an indicative A (a) rating range for the State of Japan. This indicative rating range can be adjusted by up to three notches on the Qualitative Scorecard (QS) depending on the size of relative credit strengths or weaknesses versus peers based on analysts' qualitative analysis.

For the State of Japan, the following relative credit strengths have been identified: i) economic policy framework, ii) macroeconomic stability and imbalances, iii) market access and funding sources, iv) current account vulnerabilities, v) external-debt sustainability, vi) recent events and policy decisions, vii) financial-sector oversight and governance, and viii) macro-financial vulnerabilities and fragility. The following relative credit weaknesses have been identified for the State of Japan: i) growth potential of the economy and ii) fiscal performance. The combined relative credit strengths and weaknesses indicate a sovereign rating of A+ for Japan. A rating committee has discussed and confirmed these results.

Rating overview

CVS category rating range	a
QS adjustment	A+
Final rating	A+

To calculate the rating score within the CVS, Scope uses a minimum-maximum algorithm to determine a rating score for each of the 22 indicators. Scope calculates the minimum and maximum of each rating indicator and places each sovereign within this range. Sovereigns with the strongest results for each rating indicator receive the highest rating score; sovereigns with the weakest results receive the lowest rating score. The score result translates to an indicative rating range that is always presented in lower-case letters.

Within the QS assessment, analysts conduct a comprehensive review of the qualitative factors. This includes but is not limited to economic scenario analysis, review of debt sustainability, fiscal and financial performance and policy implementation assessments.

There are three assessments per category for a total of 15. For each assessment, the analyst examines the relative position of a given sovereign within its peer group. For this purpose, additional comparative analysis beyond the variables included in the CVS is conducted. These assessments are then aggregated using the same weighting system as in the CVS.

The result is the implied QS notch adjustment, which is the basis for the analysts' recommendation to the rating committee.

II. Appendix: CVS and QS results

CVS

Rating indicator	Category weight
Domestic economic risk	35%
Economic growth	
Real GDP growth	
Real GDP volatility	
GDP per capita	
Inflation rate	
Labour & population	
Unemployment rate	
Population growth	
Public finance risk	30%
Fiscal balance	
GG public balance	
GG primary balance	
GG gross financing needs	
Public debt	
GG net debt	
Interest payments	
External economic risk	15%
International position	
International investment position	
Importance of currency	
Current-account financing	
Current-account balance	
T-W effective exchange rate	
Total external debt	
Institutional and political risk	10%
Control of corruption	
Voice & accountability	
Rule of law	
Financial risk	10%
Non-performing loans	
Liquid assets	
Credit-to-GDP gap	
Indicative rating range	**a**
QS adjustment	**A+**
Final rating	**A+**

QS

Maximum adjustment = 3 notches

	+2 notch	+1 notch	0 notch	-1 notch	-2 notch
Growth potential of the economy	○ Excellent outlook, strong growth potential	○ Strong outlook, good growth potential	○ Neutral	◉ Weak outlook, growth potential under trend	○ Very weak outlook, growth potential well under trend or negative
Economic policy framework	○ Excellent	◉ Good	○ Neutral	○ Poor	○ Inadequate
Macroeconomic stability and imbalances	○ Excellent	◉ Good	○ Neutral	○ Poor	○ Inadequate
Fiscal performance	○ Exceptionally strong performance	○ Strong performance	○ Neutral	◉ Weak performance	○ Problematic performance
Debt sustainability	○ Exceptionally strong sustainability	○ Strong sustainability	○ Neutral	○ Weak sustainability	◉ Not sustainable
Market access and funding sources	◉ Excellent access	○ Very good access	○ Neutral	○ Poor access	○ Very weak access
Current-account vulnerabilities	○ Excellent	◉ Good	○ Neutral	○ Poor	○ Inadequate
External debt sustainability	○ Excellent	◉ Good	○ Neutral	○ Poor	○ Inadequate
Vulnerability to short-term shocks	○ Excellent resilience	○ Good resilience	◉ Neutral	○ Vulnerable to shock	○ Strongly vulnerable to shocks
Perceived willingness to pay	○ Excellent	○ Good	◉ Neutral	○ Poor	○ Inadequate
Recent events and policy decisions	○ Excellent	◉ Good	○ Neutral	○ Poor	○ Inadequate
Geo-political risk	○ Excellent	○ Good	◉ Neutral	○ Poor	○ Inadequate
Financial sector performance	○ Excellent	○ Good	◉ Neutral	○ Poor	○ Inadequate
Financial sector oversight and governance	○ Excellent	◉ Good	○ Neutral	○ Poor	○ Inadequate
Macro-financial vulnerabilities and fragility	○ Excellent	◉ Good	○ Neutral	○ Poor	○ Inadequate

* Implied QS notch adjustment = (QS notch adjustment for domestic economic risk)*0.35 + (QS notch adjustment for public finance risk)*0.30 + (QS notch adjustment for external economic risk)*0.15 + (QS notch adjustment for institutional and political risk)*0.10 + (QS notch adjustment for financial stability risk)*0.10

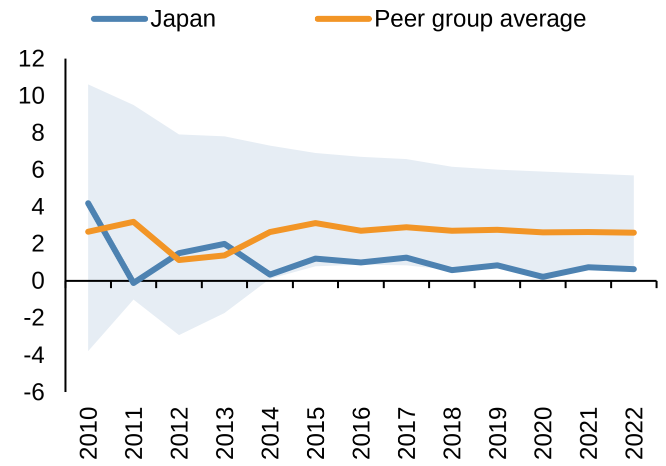
Source: Scope Ratings AG

Foreign- versus local-currency ratings

Japan's debt is predominantly issued in yen. Because of its history of openness to trade and capital flows and the yen's reserve-currency status, Scope sees no evidence that Japan would differentiate among any of its contractual debt obligations based on currency denomination.

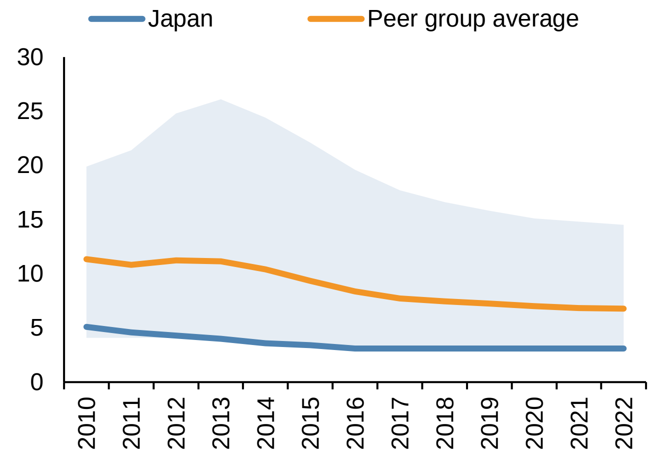
III. Appendix: Peer comparison

Figure 10: Real GDP growth



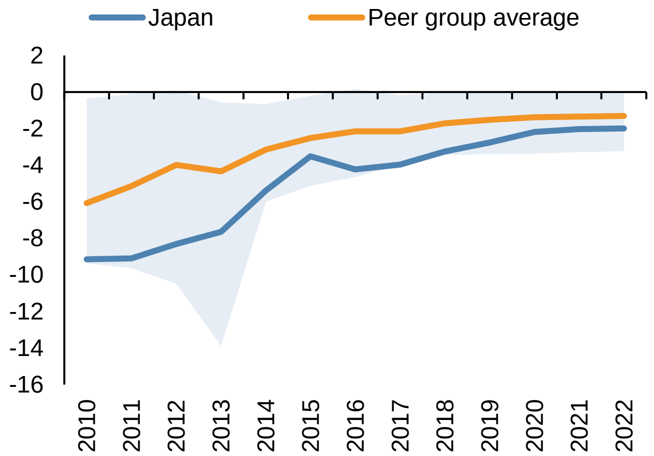
Source: IMF, Calculations Scope Ratings AG

Figure 11: Unemployment rate, % of total labour force



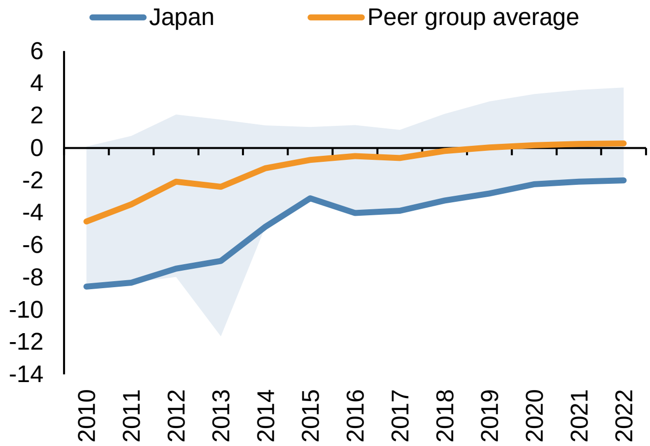
Source: IMF, Calculations Scope Ratings AG

Figure 12: General government balance, % of GDP



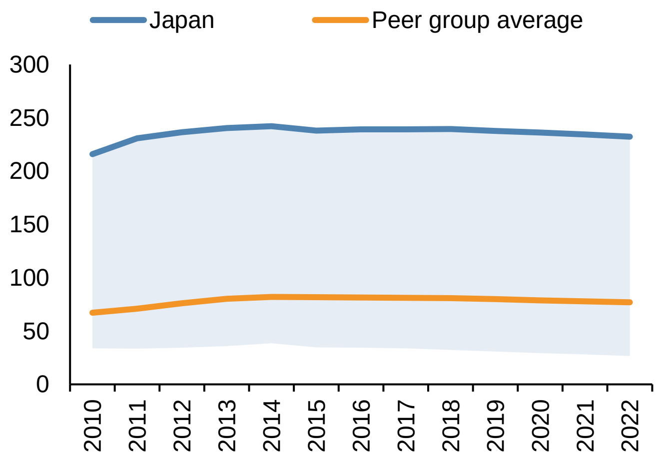
Source: IMF, Calculations Scope Ratings AG

Figure 13: General government primary balance, % of GDP



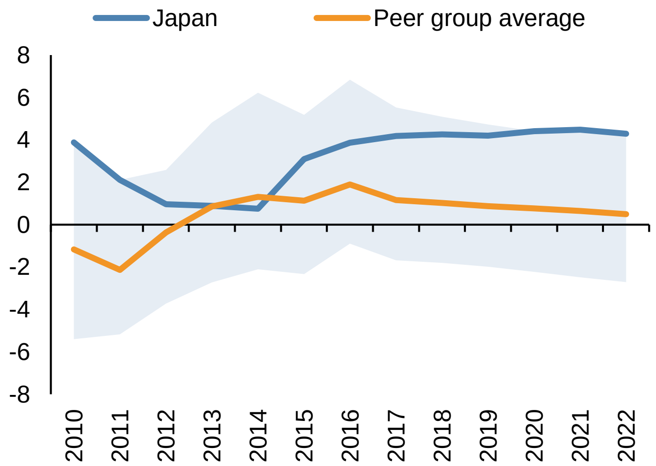
Source: IMF, Calculations Scope Ratings AG

Figure 14: General government gross debt, % of GDP



Source: IMF, Calculations Scope Ratings AG

Figure 15: Current account balance, % of GDP



Source: IMF, Calculations Scope Ratings AG

IV. Appendix: Statistical tables

	2012	2013	2014	2015	2016	2017E	2018F
Economic performance							
Nominal GDP (JPY bn)	494.957,2	503.175,5	513.698,0	530.465,7	537.289,4	546.243,3	553.309,8
Population ('000s)	128.426,4	128.312,9	128.162,9	127.975,0	127.748,5	127.484,5	127.185,3
GDP-per-capita PPP (USD)	37.191,4	38.974,1	39.386,9	40.686,0	41.469,9	-	-
GDP per capita (1000 JPY)	3.880,4	3.951,7	4.041,1	4.177,6	4.233,9	4.319,4	4.392,2
Real GDP growth, % change	1,5	2,0	0,3	1,1	1,0	1,3	0,6
GDP growth volatility (10-year rolling SD)	2,6	2,6	2,5	2,5	2,5	2,5	2,4
CPI, % change	-0,1	0,3	2,8	0,8	-0,1	1,0	0,6
Unemployment rate (%)	4,3	4,0	3,6	3,4	3,1	3,1	3,1
Investment (% of GDP)	22,7	23,2	23,9	23,9	23,4	23,5	23,7
Gross national savings (% of GDP)	23,6	24,1	24,6	27,0	27,2	27,7	27,9
Public finances							
Net lending/borrowing (% of GDP)	-8,3	-7,6	-5,4	-3,5	-4,2	-4,0	-3,3
Primary net lending/borrowing (% of GDP)	-7,5	-7,0	-4,9	-3,1	-4,0	-3,9	-3,3
Revenue (% of GDP)	30,4	31,2	32,7	33,1	32,6	32,6	32,4
Expenditure (% of GDP)	38,7	38,9	38,0	36,6	36,8	36,5	35,7
Net interest payments (% of GDP)	0,8	0,7	0,5	0,4	0,2	0,1	0,0
Net interest payments (% of revenue)	2,8	2,1	1,6	1,2	0,7	0,3	0,0
Gross debt (% of GDP)	236,6	240,5	242,1	238,0	239,2	239,2	239,4
Net debt (% of GDP)	120,5	117,4	119,0	118,4	119,8	119,9	120,1
Gross debt (% of revenue)	779,4	770,2	741,4	718,4	734,1	734,9	738,3
External vulnerability							
Gross external debt (% of GDP)	52,7	59,0	64,0	67,1	74,2	-	-
Net external debt (% of GDP)	-	-	-	-	-	-	-
Current-account balance (% of GDP)	1,0	0,9	0,8	3,1	3,9	4,2	4,3
Trade balance (% of GDP)	-1,4	-2,3	-2,5	-0,5	0,7	-	-
Net direct investment (% of GDP)	1,9	2,8	2,5	3,0	2,7	-	-
Official forex reserves (EOP, USD bn)	1.193,1	1.202,4	1.199,7	1.179,0	1.157,8	-	-
REER, % change	-1,2	-20,5	-6,2	-6,2	13,1	-	-
Nominal exchange rate (EOP, Yen/USD)	86,6	105,3	120,6	120,5	116,8	-	-
Financial stability							
Non-performing loans (% of total loans)	2,4	2,0	1,7	1,5	-	-	-
Tier 1 ratio (%)	11,7	12,2	12,3	13,1	-	-	-
Private debt (% of GDP)	207,4	204,9	205,7	202,5	201,4	-	-
Domestic credit-to-GDP gap (%)	2,1	2,8	3,2	1,8	5,4	-	-

Sources: IMF, Bank of Japan, Japanese Ministry of Finance, World Bank, United Nations, EC, Scope Ratings AG

V. Regulatory disclosures

This credit rating and/or rating outlook is issued by Scope Ratings AG.

Rating prepared by John F. Opie, Lead Analyst

Person responsible for approval of the rating Dr Stefan Bund, Chief Analytical Officer

The ratings/outlook were first assigned by Scope as subscription rating in January 2002. The subscription ratings/outlooks were last updated on 05.05.2017.

The senior unsecured debt ratings as well as the short-term issuer ratings were assigned by Scope for the first time.

As a "sovereign rating" (as defined in EU CRA Regulation 1060/2009 "EU CRA Regulation"), the ratings on Republic of Poland are subject to certain publication restrictions set out in Art 8a of the EU CRA Regulation, including publication in accordance with a pre-established calendar (see "Sovereign Ratings Calendar of 2017" published on 21.07.2017 on www.scoperatings.com). Under the EU CRA Regulation, deviations from the announced calendar are allowed only in limited circumstances and must be accompanied by a detailed explanation of the reasons for the deviation. In this case, the deviation was due to the recent revision of Scope's Sovereign Rating Methodology and the subsequent placement of ratings under review, in order to conclude the review and disclose ratings in a timely manner, as required by Article 10(1) of the CRA Regulation.

The main points discussed by the rating committee were: i) Japan's demographic trends impact on economic growth potential, ii) fiscal performance and debt sustainability, iii) external position and yen reserve currency status, iv) structural reforms, v) banking and financial sector performance, vi) recent political and geopolitical developments, vii) peer considerations.

Solicitation, key sources and quality of information

The rating was initiated by Scope and was not requested by the rated entity or its agents. The rated entity and/or its agents did not participate in the ratings process. Scope had no access to accounts, management and/or other relevant internal documents for the rated entity or related third party.

The following material sources of information were used to prepare the credit rating: The Ministry of Finance of the State of Japan; Bank of Japan; the Japanese Research Institute; Mizuho Research Institute; Cabinet Office; Financial Services Agency: Ministry of Economy, Trade and Industry; Ministry of Internal Affairs and Communications (Statistics Japan); National Institute for Defense Studies; Nomura Global Markets Research; IMF; OECD; and Haver Analytics.

Scope considers the quality of information available to Scope on the rated entity or instrument to be satisfactory. The information and data supporting Scope's ratings originate from sources Scope considers to be reliable and accurate. Scope does not, however, independently verify the reliability and accuracy of the information and data.

Prior to publication, the rated entity was given the opportunity to review the rating and/or outlook and the principal grounds upon which the credit rating and/or outlook is based. Following that review, the rating was not amended before being issued.

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