# REPUBLIC OF AUSTRIA

Rating Analysis - 12/26/18

Austria is in the upper half of OECD countries in most well-being dimensions. Austria is one of the 10 richest countries in the world in terms of GDP per capita at $44,872, and unlike most of the Eurozone, narrowly escaped recession in 2012 and 2013. The global credit crisis has exacerbated the split in Europe between the crisis-ridden North and the more affluent South. Fortunately, Austria has found itself firmly in the Northern 'camp' and has benefited greatly from its strong social and economic ties to the euro powerhouse – Germany. The favourable external business environment will stimulate export growth (+4.1% p.a.) and encourage investment in new machinery and equipment. Rising disposable household income will allow private consumption to gain 1.5% per year, after +0.7% p.a. in the previous five-year period. Robust economic growth, a low interest rate environment and efforts to constrain government spending have helped to reduce public deficits. Nevertheless, further measures, including addressing inefficiencies in education, health care and public administration would help to address the costs of an ageing society and free up funds to better reconcile work and family life. Upgrading.
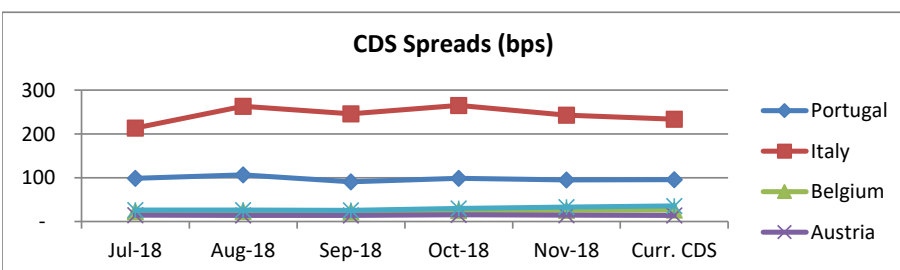
### Annual Ratios (source for past results: IMF)

| CREDIT POSITION | 2015 | 2016 | 2017 | P2018 | P2019 | P2020 |
|---|---|---|---|---|---|---|
| Debt/ GDP (%) | 84.5 | 83.6 | 78.4 | 76.5 | 74.0 | 70.4 |
| Govt. Sur/Def to GDP (%) | -0.7 | -1.2 | -0.2 | 0.4 | 1.1 | 1.8 |
| Adjusted Debt/GDP (%) | 84.5 | 83.6 | 78.4 | 76.5 | 74.0 | 70.4 |
| Interest Expense/ Taxes (%) | 8.2 | 7.7 | 6.8 | 6.8 | 6.8 | 6.8 |
| GDP Growth (%) | 3.3 | 3.5 | 3.8 | 1.9 | 1.9 | 2.5 |
| Foreign Reserves/Debt (%) | 2.9 | 3.0 | 2.0 | 2.1 | 1.1 | 1.3 |
| Implied Sen. Rating | A+ | A+ | A+ | A+ | A+ | A+ |

| INDICATIVE CREDIT RATIOS | AA | A | BBB | BB | B | CCC |
|---|---|---|---|---|---|---|
| Debt/ GDP (%) | 100.0 | 115.0 | 130.0 | 145.0 | 170.0 | 200.0 |
| Govt. Sur/Def to GDP (%) | 2.5 | 0.5 | -2.0 | -5.0 | -8.0 | -10.0 |
| Adjusted Debt/GDP (%) | 95.0 | 110.0 | 125.0 | 140.0 | 160.0 | 190.0 |
| Interest Expense/ Taxes (%) | 9.0 | 12.0 | 15.0 | 22.0 | 26.0 | 35.0 |
| GDP Growth (%) | 3.5 | 3.0 | 2.0 | 1.0 | -1.0 | -5.0 |
| Foreign Reserves/Debt (%) | 3.0 | 2.5 | 2.0 | 1.5 | 1.0 | 0.5 |

| PEER RATIOS | Other NRSRO Sen. | Debt as a % GDP | Govt. Surp. Def to GDP (%) | Adjusted Debt/ GDP | Interest Expense/ Taxes % | GDP Growth (%) | Ratio-Implied Rating* |
|---|---|---|---|---|---|---|---|
| Federal Republic Of Germany | AAA | 64.1 | 1.0 | 64.1 | 4.4 | 3.7 | AA |
| French Republic | AA | 97.0 | -2.5 | 97.0 | 6.3 | 2.8 | A+ |
| Kingdom Of Belgium | AA | 103.1 | -0.8 | 103.1 | 8.1 | 3.4 | AA- |
| Republic Of Italy | BBB- | 131.8 | -3.0 | 131.8 | 13.1 | 2.1 | BBB |
| Portugal Republic | BB+ | 125.7 | -3.9 | 125.7 | 15.3 | 4.4 | A |

## CDS Spreads (bps)

| Country | CDS |
|---|---|
| Portugal | 95 |
| Italy | 233 |
| Belgium | 26 |
| Austria | 14 |
| France | 36 |

**REPUBLIC OF AUSTRIA**
Rating Analysis - 12/26/18

*EJR Sen Rating(Curr/Prj) A+/ A+
*EJR CP Rating: A1
EJR's 3 yr. Default Probability: 1.3%

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## Economic Growth

Economic growth is projected to remain solid, but will slow in 2019 and 2020. A deterioration in the external environment will damp export and investment growth. Solid employment growth is fostering wage and private consumption growth. Inflation remains moderate. Data from the first half of this year suggest that the economic growth momentum experienced by Austria in 2017 has continued into 2018. Domestic demand remains the main driver of growth, thanks to a rise in private consumption due to favourable labour market developments and increasing wages, as well as solid investment linked to high capacity utilisation in the business sector. In 2019 and 2020, GDP is forecast to grow more moderately at 2.0% and 1.8%, respectively.

**GDP Growth YoY**



Source: IFS
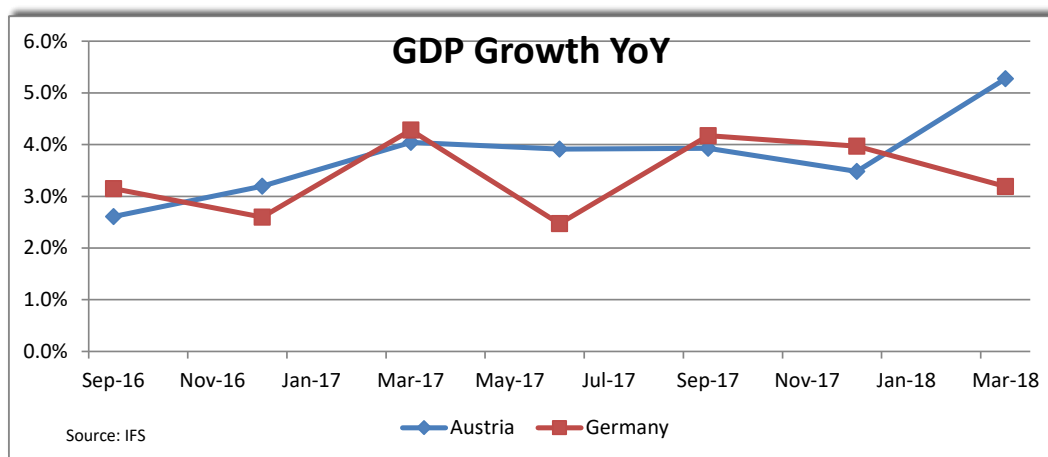
## Fiscal Policy

Having improved to -0.24% of GDP in 2017 on the back of the economic upswing, the net operating balance of Austria government is expected to further narrow in 2018. Government expenditure as a percentage of GDP is expected to fall from 49.1% in 2017 to 48.7% in 2018, mainly due falling interest payments, lower unemployment benefits, and the discontinuation or reduction of several expansionary measures adopted in 2017. Govt expects public debt to decrease from 78.3% of GDP in 2017 to 74.2% in 2018.

| | Surplus-to-GDP (%) | Debt-to-GDP (%) | 5 Yr. CDS Spreads |
|---|---|---|---|
| Austria | -0.24 | 78.40 | 14.15 |
| Germany | 1.02 | 64.10 | 13.28 |
| France | -2.54 | 97.00 | 35.62 |
| Belgium | -0.79 | 103.10 | 26.30 |
| Italy | -2.96 | 131.80 | 233.36 |
| Portugal | -3.92 | 125.70 | 95.24 |
| Sources: Thomson Reuters and IFS | | | |

## Unemployment

Sturdy labour market and steady decline in unemployment are the key positives. Strong dynamics in the first half of 2018 indicate robust figures for annual employment growth and a considerable decrease in unemployment. These positive dynamics are set to continue but to moderate somewhat in 2019 and 2020 along with the economic slowdown. Overall, the unemployment rate is expected to fall to 4.8% in 2018 and to 4.4% in 2020 as per government estimates.

| Unemployment (%) | | |
|---|---|---|
| | 2016 | 2017 |
| Austria | 6.03 | 5.52 |
| Germany | 4.13 | 3.76 |
| France | 10.07 | 9.43 |
| Belgium | 7.86 | 7.16 |
| Italy | 11.68 | 11.23 |
| Portugal | 11.18 | 8.97 |
| Source: Intl. Finance Statistics | | |

*EJR Sen Rating(Curr/Prj) A+/ A+
*EJR CP Rating: A1
EJR's 3 yr. Default Probability: 1.3%

## Banking Sector

On 21 November 2018, the Austrian Federal Government announced its plans to reform the national banking supervisory system. Currently, the Austrian banking supervisory system is a dual one. Austrian banks came in below the average in the EU's stress test, whose results were published earlier this month. While Austria's biggest banks, including Erste Group Bank AG, Raiffeisen Bank International AG and Bawag Group AG, are supervised by the ECB - a pos.

**Bank Assets (billions of local currency)**

|  | Assets | Mkt Cap/ Assets % |
|---|---|---|
| ERSTE GROUP BANK | 196.29 | 5.83 |
| RAIFFEISEN INTL | 121.62 | 0.00 |
| OEST VOLKSBANKEN | 15.13 | 0.35 |
| OBERBANK AG | 17.77 | 8.73 |
| VORARLBERG LAN-P | 14.15 | 0.00 |
| Total | 365.0 | |
| EJR's est. of cap shortfall at 10% of assets less market cap | | 23.4 |
| Austria's GDP | | 369.9 |

## Funding Costs

Absolute level of interest payments relatively stable and relative to the GDP, interest payments are below 2% and well beneath peak levels in 1996. The Country's debt rollover ratio among the lowest worldwide - a pos.



Sovereign Debt Yields (%)

Source: Thomson Reuters
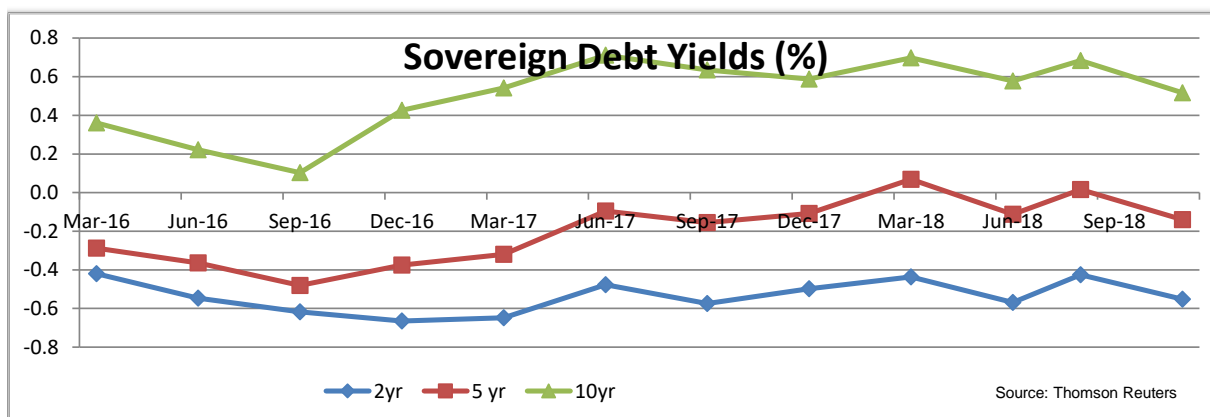
## Ease of Doing Business

Major factors for growing the economy are the ease of doing business and the economic freedom; although not the sole factor for determining economic growth, a country which makes it easy for businesses to operate and provides a reasonably free environment to conduct business has a good chance for growth. The chart on the right indicates that with an overall rank of 22 (1 is best, 189 worst) is strong.

**The World Bank's Doing Business Survey***

|  | 2018 Rank | 2017 Rank | Change in Rank |
|---|---|---|---|
| **Overall Country Rank:** | **22** | **19** | **-3** |
| **Scores:** | | | |
| Starting a Business | 118 | 111 | -7 |
| Construction Permits | 42 | 49 | 7 |
| Getting Electricity | 22 | 20 | -2 |
| Registering Property | 31 | 30 | -1 |
| Getting Credit | 77 | 62 | -15 |
| Protecting Investors | 29 | 32 | 3 |
| Paying Taxes | 39 | 42 | 3 |
| Trading Across Borders | 1 | 1 | 0 |
| Enforcing Contracts | 9 | 10 | 1 |
| Resolving Insolvency | 23 | 20 | -3 |

* Based on a scale of 1 to 189 with 1 being the highest ranking.

## Economic Freedom

As can be seen below, Austria is above average in its overall
rank of 71.8 for Economic Freedom with 100 being best.

| Heritage Foundation 2018 Index of Economic Freedom World Rank 71.8* | | | | |
|---|---|---|---|---|
| | 2018 Rank** | 2017 Rank | Change in Rank | World Avg. |
| Property Rights | 83.5 | 86.0 | -2.5 | 51.5 |
| Government Integrity | 73.5 | 75.2 | -1.7 | 42.1 |
| Judical Effectiveness | 80.9 | 81.8 | -0.9 | 46.9 |
| Tax Burden | 49.9 | 50.3 | -0.4 | 76.7 |
| Gov't Spending | 19.4 | 19.3 | 0.1 | 63.5 |
| Fiscal Health | 81.1 | 79.7 | 1.4 | 66.3 |
| Business Freedom | 75.5 | 76.9 | -1.4 | 64.8 |
| Labor Freedom | 66.7 | 67.6 | -0.9 | 58.9 |
| Monetary Freedom | 83.7 | 83.4 | 0.3 | 76.0 |
| Trade Freedom | 86.9 | 87.0 | -0.1 | 75.9 |
| *Based on a scale of 1-100 with 100 being the highest ranking. | | | | |
| **The ten economic freedoms are based on a scale of 0 (least free) to 100 (most free). | | | | |
| Source:  The Heritage Foundation | | | | |

*EJR Sen Rating(Curr/Prj) A+/ A+
*EJR CP Rating: A1
EJR's 3 yr. Default Probability: 1.3%

**Credit Quality Driver: Taxes Growth:**
REPUBLIC OF AUSTRIA has grown its taxes of 3.3% per annum in the last fiscal year which is disappointing. We expect tax revenues will grow approximately 2.3% per annum over the next couple of years and 2.3% per annum for the next couple of years thereafter.

**Credit Quality Driver: Total Revenue Growth:**
REPUBLIC OF AUSTRIA's total revenue growth has been less than its peers and we assumed no growth in total revenue over the next two years.

| Income Statement | Peer Median | Issuer Avg. | Assumptions Yr 1&2 | Yr 3,4,5 |
|---|---|---|---|---|
| Taxes Growth% | 5.0 | 3.3 | **2.3** | **2.3** |
| Social Contributions Growth % | 3.2 | 3.7 | **3.1** | **3.1** |
| Grant Revenue Growth % | 0.0 | NMF | | |
| Other Revenue Growth % | 0.0 | NMF | | |
| Other Operating Income Growth% | 0.0 | 0.7 | **0.7** | **0.7** |
| Total Revenue Growth% | 4.0 | 3.1 | **3.1** | **2.8** |
| Compensation of Employees Growth% | 0.0 | 0.6 | **0.6** | **0.6** |
| Use of Goods & Services Growth% | 0.3 | 0.0 | | |
| Social Benefits Growth% | 2.1 | 1.5 | **1.5** | **1.5** |
| Subsidies Growth% | 1.3 | 6.6 | | |
| Other Expenses Growth% | 0.0 | | | |
| Interest Expense | 1.8 | 2.3 | **2.3** | |
| | | | | |
| Currency and Deposits (asset) Growth% | 0.0 | 0.0 | | |
| Securities other than Shares LT (asset) Growth% | 0.0 | 0.0 | | |
| Loans (asset) Growth% | (1.8) | (4.4) | **(4.4)** | **(4.4)** |
| Shares and Other Equity (asset) Growth% | 0.0 | 8.4 | **8.4** | **8.4** |
| Insurance Technical Reserves (asset) Growth% | 0.0 | 0.0 | | |
| Financial Derivatives (asset) Growth% | 0.0 | 0.0 | | |
| Other Accounts Receivable LT Growth% | 0.0 | 5.8 | **3.3** | **3.3** |
| Monetary Gold and SDR's Growth % | 0.0 | 0.0 | **5.0** | **5.0** |
| | | | | |
| Other Assets Growth% | 0.0 | 0.0 | | |
| Other Accounts Payable Growth% | 0.0 | | | |
| Currency & Deposits (liability) Growth% | 0.0 | 0.0 | | |
| Securities Other than Shares (liability) Growth% | 0.0 | 0.0 | | |
| | | | | |
| Loans (liability) Growth% | (2.7) | 2.0 | **2.0** | **2.0** |
| Insurance Technical Reserves (liability) Growth% | 0.0 | 0.0 | | |
| Financial Derivatives (liability) Growth% | 0.0 | 0.0 | | |
| | | | | |
| Additional ST debt (1st year)(millions EUR) | 0.0 | 0.0 | | |

**REPUBLIC OF AUSTRIA**
Rating Analysis - 12/26/18

*EJR Sen Rating(Curr/Prj) A+/ A+
*EJR CP Rating: A1
EJR's 3 yr. Default Probability: 1.3%

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## ANNUAL INCOME STATEMENTS

Below are REPUBLIC OF AUSTRIA's annual income statements with the
projected years based on the assumptions listed on page 5.

**ANNUAL REVENUE AND EXPENSE STATEMENT**
**(MILLIONS EUR)**

| | 2014 | 2015 | 2016 | 2017 | P2018 | P2019 |
|---|---|---|---|---|---|---|
| **Taxes** | 93,858 | 98,270 | 97,050 | 100,219 | 102,524 | 104,882 |
| **Social Contributions** | 50,532 | 52,112 | 53,954 | 55,956 | 57,691 | 59,479 |
| **Grant Revenue** | | | | | | |
| **Other Revenue** | | | | | | |
| **Other Operating Income** | 20,836 | 21,687 | 22,266 | 22,426 | 22,426 | 22,426 |
| **Total Revenue** | 165,226 | 172,069 | 173,270 | 178,601 | 182,641 | 186,787 |
| **Compensation of Employees** | 21,276 | 21,885 | 22,497 | 22,637 | 22,778 | 22,920 |
| **Use of Goods & Services** | | | | | | |
| **Social Benefits** | 76,587 | 78,506 | 80,872 | 82,085 | 83,316 | 84,566 |
| **Subsidies** | 4,524 | 4,499 | 4,985 | 5,312 | 5,313 | 5,313 |
| **Other Expenses** | | | | 53,198 | 53,198 | 53,198 |
| **Grant Expense** | | | | | | |
| **Depreciation** | 8,757 | 8,909 | 9,143 | 9,470 | 9,470 | 9,470 |
| **Total Expenses excluding interest** | 165,224 | 166,307 | 169,959 | 172,702 | 174,075 | 175,467 |
| **Operating Surplus/Shortfall** | 2 | 5,762 | 3,311 | 5,899 | 8,566 | 11,321 |
| **Interest Expense** | 8,120 | 8,069 | 7,440 | 6,776 | 6,934 | 7,096 |
| **Net Operating Balance** | -8,118 | -2,307 | -4,130 | -877 | 1,632 | 4,224 |

## ANNUAL BALANCE SHEETS

Below are REPUBLIC OF AUSTRIA's balance sheets with the projected years based
on the assumptions listed on page 5.

| | | ANNUAL BALANCE SHEETS | | | | |
|---|---|---|---|---|---|---|
| **Base Case** | | **(MILLIONS EUR)** | | | | |
| **ASSETS** | **2014** | **2015** | **2016** | **2017** | **P2018** | **P2019** |
| **Currency and Deposits (asset)** | 27,456 | 33,167 | 38,631 | 33,691 | 33,691 | 33,691 |
| **Securities other than Shares LT (asset)** | | | | | | |
| **Loans (asset)** | 45,771 | 48,055 | 45,015 | 43,021 | 41,115 | 39,294 |
| **Shares and Other Equity (asset)** | 54,852 | 55,990 | 59,493 | 64,461 | 69,844 | 75,676 |
| **Insurance Technical Reserves (asset)** | 4 | 4 | | | 0 | 0 |
| **Financial Derivatives (asset)** | | | | | | |
| **Other Accounts Receivable LT** | 24,121 | 25,382 | 23,324 | 24,687 | 25,502 | 26,343 |
| **Monetary Gold and SDR's** | | | | | | |
| **Other Assets** | | | | | 7,396 | 7,396 |
| **Additional Assets** | 9,887 | 10,243 | 8,953 | 7,396 | | |
| **Total Financial Assets** | 162,091 | 172,841 | 175,416 | 173,256 | 177,548 | 182,401 |
| **LIABILITIES** | | | | | | |
| **Other Accounts Payable** | | | | | | |
| **Currency & Deposits (liability)** | | | | | 0 | 0 |
| **Securities Other than Shares (liability)** | | | | | | |
| **Loans (liability)** | 48,385 | 49,449 | 44,615 | 45,500 | 43,868 | 39,644 |
| **Insurance Technical Reserves (liability)** | | | | | | |
| **Financial Derivatives (liability)** | | | | | | |
| **Other Liabilities** | 314,695 | 321,126 | 338,336 | 328,278 | 328,278 | 328,278 |
| **Liabilities** | 363,080 | 370,575 | 382,951 | 373,778 | 376,438 | 377,067 |
| **Net Financial Worth** | -200,990 | -197,734 | -207,536 | -200,522 | -198,890 | -194,666 |
| **Total Liabilities & Equity** | 162,090 | 172,841 | 175,415 | 173,256 | 177,548 | 182,401 |

# REPUBLIC OF AUSTRIA

Rating Analysis - 12/26/18

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*EJR Sen Rating(Curr/Prj) A+/ A+
*EJR CP Rating: A1
EJR's 3 yr. Default Probability: 1.3%

## Comments on the Difference between the Model and Assigned Rating

In this case, there has been little change in the recent results and therefore we have used our best judgement in making adjustmer which are reflected in the results for the projected ratings. We have assigned a rating of "A+" whereas the ratio-implied rating for th most recent period is "A+"; we expect results to remain approximately the same.

## Changes in Indicative Ratios

We have not made any adjustment in the indicative ratios at this time.

**REPUBLIC OF AUSTRIA**

Rating Analysis - 12/26/18

*EJR Sen Rating(Curr/Prj) A+/ A+

*EJR CP Rating: A1

EJR's 3 yr. Default Probability: 1.3%

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## SEC Rule 17g-7(a) Disclosure

Below are the disclosures as required by Paragraph (a) of Rule 17g-7.

*1. The symbol in the rating scale used to denote the credit rating categories and notches within categories and the identity of the obligor, security, or money market instrument as required by Paragraph (a)(1)(ii)(A) of Rule 17g-7:*
For the issuer REPUBLIC OF AUSTRIA with the ticker of 1480Z AV we have assigned the senior unsecured rating of A+. There are three notches in our rating categories (e.g., A-, A, and A+) other than those deep into speculative grade; for CC, C, and D there are no notches.

*2. 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:*
We are using the methodology available in our Form NRSRO Exhibit #2 dated Nov 5, 2018 available via egan-jones.com under the tab at the bottom of the page "Methodologies".

*3. 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 assigned reflects our judgement regarding the future credit quality of the issuer. Regarding the specific assumptions used, please refer to page 3 of this Rating Analysis Report.

*4. The potential limitations of the credit rating as required by Paragraph (a)(1)(ii)(D) of Rule 17g-7:*
Our rating pertains solely to our view of current and prospective credit quality. Our rating does not address pricing, liquidity, or other risks associated with holding investments in the issuer.

*5. Information on the uncertainty of the credit rating as required by Paragraph (a)(1)(ii)(E) of Rule 17g-7:*
Our rating is dependant on numerous factors including the reliability, accuracy, and quality of the data relied used in determining the credit rating. The data is sourced from publicly-available 10Q and 10K statements, quarterly reports, 8K filings, earnings reports, and other similar sources. In some cases, the information is limited because of issues such as short operating histories, the lack of reported data, a delay in reporting data, restatements, inaccurate accounting, and other issues. Such shortcomings are not always readily apparent. EJR aims to identify such shortcomings and make adjustments using its best judgement.

*6. Whether and to what extent third-party due diligence services have been used in taking the rating action as required by Paragraph (a)(1)(ii)(F) of Rule 17g-7:*
EJR does not utilize third-party due diligence services.

*7. How servicer or remittance reports were used, and with what frequency, to conduct surveillance of the credit rating as required by Paragraph (a)(1)(ii)(G) of Rule 17g-7:*
Servicer or remittance reports normally pertain to structured finance issuers; this report does not pertain to a structured finance issuer (EJR is not an NRSRO for structured finance or sovereigns/ municipal issuers). Regarding surveillance, the minimum time period for corporation issuers is normally one year.

*8. A description of the data that were relied upon for the purpose of determining the credit rating as required by Paragraph (a)(1)(ii)(H) of Rule 17g-7:*
EJR uses 10Q and 10K statements, quarterly reports, 8K filings, earnings reports, and other similar sources for ratings on publicly-traded issuers. In the case of private issuers, EJR relies on information provided mainly by issuers.

*9. A statement containing an overall assessment of the quality of information available and considered in the credit rating as required by Paragraph (a)(1)(ii)(I) of Rule 17g-7: The information is generally high quality and readily avail.*

*10. Information relating to conflicts of interest as required by Paragraph (a)(1)(ii)(J) of Rule 17g-7:*
This rating is unsolicited.

# REPUBLIC OF AUSTRIA

Rating Analysis - 12/26/18

*EJR Sen Rating(Curr/Prj) A+/ A+

*EJR CP Rating: A1

EJR's 3 yr. Default Probability: 1.3%

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**11. An explanation or measure of the potential volatility of the credit rating as required by Paragraph (a)(1)(ii)(K) of Rule 17g-7:**
Our rating aims to assess the probability of the payment of obligations in full and on-time. Factors which affect such probability, and in turn our rating, include changes in the operating performance of the issuer, changes in capital structure, and merger and acquisition events.

**12. Information on the content of the credit rating as required by Paragraph (a)(1)(ii)(L) of Rule 17g-7:**
Regarding the historical performance of the credit rating, our rating transition matrix is available in our Form NRSRO, exhibit 1. The expected probability of default and the expected loss in the event of default is listed on the first page of this report.

**13. Information on the sensitivity of the credit rating to assumptions as required by Paragraph (a)(1)(ii)(M) of Rule 17g-7:**
Below is a summary of the impact of the 5 assumptions which independently would have the greatest impact on our "ratio-implied rating":

|  | Assumptions | | | Resulting Ratio-Implied Rating | | |
|---|---|---|---|---|---|---|
|  | Base | Optimistic | Pessimistic | Base | Optimistic | Pessimistic |
| Taxes Growth% | 2.3 | 6.3 | (1.7) | A+ | A+ | A+ |
| Social Contributions Growth % | 3.1 | 6.1 | 0.1 | A+ | A+ | A+ |
| Other Revenue Growth % |  | 3.0 | (3.0) | A+ | A+ | A+ |
| Total Revenue Growth% | 3.1 | 5.1 | 1.1 | A+ | A+ | A+ |
| Monetary Gold and SDR's Growth % | 5.0 | 7.0 | 3.0 | A+ | A+ | A+ |

**14. If the credit rating is assigned to an asset-backed security, a description of: (i) the representations, warranties, and enforcement mechanisms available to investors; and (ii) how they differ from the representations, warranties, and enforcement mechanisms in issuances of similar securities, as required by Paragraph (a)(1)(ii)(N) of Rule 17g-7:**
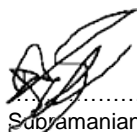This credit rating is not assigned to an asset-backed security.

## ATTESTATION FORM

In compliance with the US Securities and Exchange Commission (SEC) Rule 17g-7(a), the Egan-Jones analyst who published the report is responsible for the rating action and to the best knowledge of the person:

1) No part of the credit rating was influenced by any other business activities,
2) The credit rating was based solely upon the merits of the obligor, security, or money market instrument being rated, and
3) The credit rating was an independent evaluation of the credit risk of the obligor, security, or money market instrument.

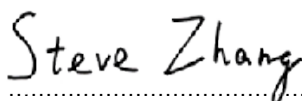**Analyst Signature:**

**Today's Date**

December 26, 2018

……………………………………….. ………………………………………

Subramanian NG
Senior Rating Analyst

**Reviewer Signature:**

**Today's Date**

December 26, 2018

……………………………………….. ………………………………………

Steve Zhang
Senior Rating Analyst

## Sovereign Rating Methodology (Non-NRSRO)

**Scope and Limitations: Sovereign Issuer Credit Quality Ratings (CQR) are a forward-**
looking assessment of a sovereign's capacity and willingness to honor its existing and
future obligations in full and on time. Sovereigns are assigned two CQRs: a Local-Currency
CQR, which reflects the likelihood of default on debt issued and payable in the currency of the
sovereign, and a Foreign-Currency CQR, which is an assessment of the credit risk associated
with debt issued and payable in foreign currencies.

**Key Rating Drivers: EJR's approach to sovereign risk analysis is a synthesis of quantitative**
and qualitative judgments. The quantitative factors EJR uses are:

- Debt in relation to GDP.
- Surplus or deficit in relation to GDP.
- Debt plus potential under-funding of major banks in relation to GDP.
- Interest expense in relation to taxes.
- GDP growth.
- Foreign reserves in relation to debt.

Debt levels for many sovereign issuers have increased at an accelerating rate over the past
decade, affecting implied ratings. EJR also considers unemployment levels and funding costs.
EJR recognizes that no model can fully capture all the relevant influences on sovereign
creditworthiness, meaning that the its sovereign ratings can and do differ from those implied by
the rating model. Some of the qualitative factors that impact its ultimate assessment of credit
quality include the flexibility, stability and overall strength of the economy, efficiency of tax
collection, acceptance of contract law, ease of doing business, trade balances, prospects for
future growth and health and monetary policy, and economic freedom. These subjective and
dynamic qualitative issues are not captured by the model but affect sovereign ratings

*For additional information, please see Exhibit 2: Methodologies in EJR's Form NRSRO.*