# SWISS CONFEDERATION

Rating Analysis - 8/18/23

*EJR Sen Rating(Curr/Prj) AAA/ AAA

According to the OECD, the Swiss economy is projected to experience moderate growth, with an expected expansion of 0.6% in 2023 and 1.2% in 2024. Several factors contribute to this outlook, including tighter financial conditions, subdued economic sentiment, and heightened inflation, which will have a dampening effect on household consumption and private investment. Additionally, geopolitical tensions and elevated uncertainty are anticipated to lead to a reduction in trade.

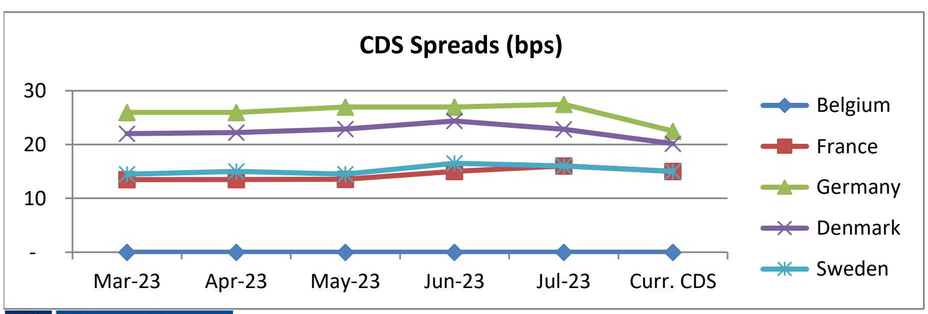
Inflation is expected to remain above the Swiss National Bank's target range of 0-2% in 2023 before showing signs of moderation towards the end of that year. Key downside risks to economic activity include financial market stress, corrections in house prices, and a further weakening of foreign demand. To address these challenges, monetary policy will need to be tightened further to ensure inflation returns to the target range, while also closely monitoring risks to financial stability. Continued fiscal surpluses are deemed appropriate, but it is crucial to maintain targeted measures that assist the most vulnerable households. Affirming.

Annual Ratios (source for past results: IMF)

| CREDIT POSITION | 2020 | 2021 | 2022 | P2023 | P2024 | P2025 |
|---|---|---|---|---|---|---|
| Debt/ GDP (%) | 42.5 | 41.6 | 39.1 | 42.9 | 45.3 | 47.7 |
| Govt. Sur/Def to GDP (%) | -2.5 | -0.9 | -0.2 | -4.7 | -3.3 | -3.5 |
| Adjusted Debt/GDP (%) | 42.5 | 41.6 | 39.1 | 42.9 | 45.3 | 47.7 |
| Interest Expense/ Taxes (%) | 1.4 | 1.0 | 1.2 | 1.2 | 1.2 | 1.2 |
| GDP Growth (%) | -3.1 | 5.3 | 5.4 | 2.5 | 3.6 | 3.6 |
| Foreign Reserves/Debt (%) | 299.0 | 312.8 | 261.8 | 228.3 | 211.0 | 195.5 |
| Implied Sen. Rating | AA+ | AAA | AAA | AA+ | AA+ | AA+ |

| 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 |

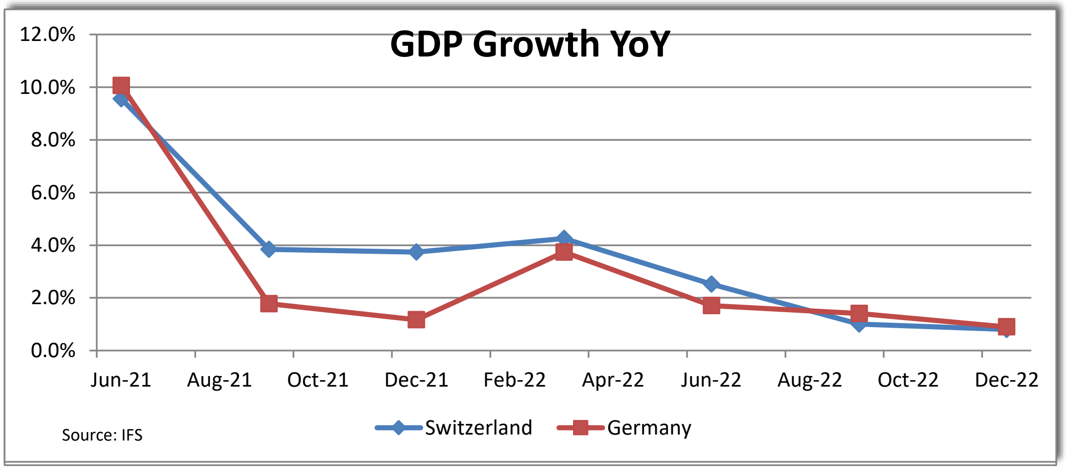
| PEER RATIOS | Other NRSRO Sen. | Debt as a % GDP | Govt. Surp. Def to GDP (%) | Adjusted Debt/ GDP | Interest Expense/ Taxes % | GDP Growth (%) | Ratio-Implied Rating* |
|---|---|---|---|---|---|---|---|
| Federal Republic Of Germany | AAA | 65.3 | -2.6 | 65.3 | 2.7 | 7.4 | AA |
| French Republic | AA | 117.1 | -4.2 | 117.1 | 6.1 | 5.5 | A- |
| Kingdom Of Belgium | AA | 103.8 | -3.4 | 103.8 | 5.1 | 9.3 | BBB |
| Kingdom Of Sweden | AAA | 53.6 | 2.1 | 53.6 | 1.3 | 8.7 | BB+ |
| Kingdom Of Denmark | AAA | 29.7 | 4.1 | 29.7 | 1.7 | 11.7 | BBB- |




| Country | EJR Rtg. | CDS |
|---|---|---|
| Belgium | BBB | N/A |
| France | A+ | 15 |
| Germany | AA | 23 |
| Denmark | AA | 20 |
| Sweden | AA+ | 15 |

## Economic Growth

The Swiss economy displayed robust performance in the first quarter, aligning with expectations, but prospects for future growth are likely to be more modest. The services sector gained momentum, and there was a slight increase in value added in manufacturing. The labor market remained strong, and overall production capacity was well utilized. The Swiss National Bank (SNB) foresees GDP growth of around 1% for this year, although the forecast remains subject to high uncertainty. In response to increased inflationary pressures over the medium term, the SNB is taking further steps to tighten its monetary policy. The SNB policy rate is being raised by 0.25 percentage points to 1.75%. This move aims to counter the growing inflationary pressure and ensure price stability.




## Fiscal Policy

On June 22, 2023, the Swiss National Bank (SNB) announced a further tightening of its monetary policy. To address the renewed increase in inflationary pressure, the SNB policy rate was raised by 0.25 percentage points to 1.75%. The conditional inflation forecast indicated a rise above the March projections over the medium term, and the policy rate increase helped to mitigate the inflationary impact.

| | Surplus-to-GDP (%) | Debt-to-GDP (%) | 5 Yr. CDS Spreads |
|---|---|---|---|
| Switzerland | 0.00 | 0.00 | 0.00 |
| Germany | -2.62 | 65.28 | 15.01 |
| France | -4.25 | 117.11 | 22.50 |
| Belgium | -3.36 | 103.79 | 20.17 |
| Sweden | 2.14 | 53.60 | 15.01 |
| Denmark | 4.05 | 29.70 | 15.01 |
| Sources: Thomson Reuters and IFS | | | |

## Unemployment

In June 2023, the Swiss unemployment rate was at 1.9% on a non-seasonally adjusted basis, unchanged from the previous month, and slightly above market forecasts of 1.8%. The number of unemployed individuals decreased by 2,977 or 3.4%, reaching 85,099. Additionally, the youth unemployment rate, measuring job-seekers between 15-24 years old, remained steady at 1.7%, with the number of young unemployed decreasing by 94 or 1.2% to 7,463.

| Unemployment (%) | 2021 | 2022 |
|---|---|---|
| Switzerland | 5.11 | 4.30 |
| Germany | 3.58 | 3.07 |
| France | 7.88 | 7.32 |
| Belgium | 6.28 | 5.58 |
| Sweden | 8.80 | 7.47 |
| Denmark | 5.10 | 4.46 |
| Source: Intl. Finance Statistics | | |

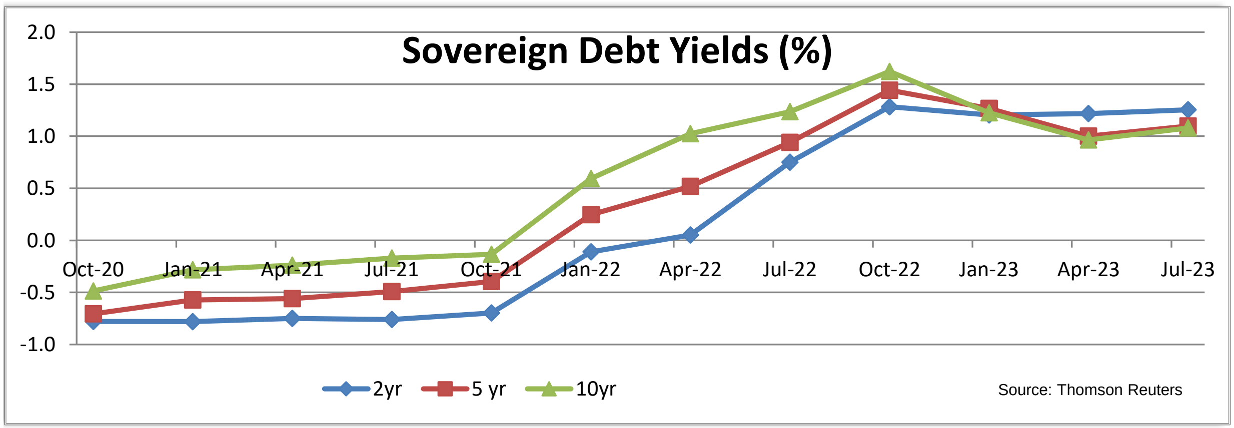
## Banking Sector

During Q1'23, the globally active Swiss banks faced a dominant crisis at Credit Suisse, which eventually led to its acquisition by UBS, as announced on March 19, 2023, and completed on June 12, 2023. Amid rising interest rates, focused banks experienced a slight improvement in profitability in 2022, although it remained at low levels. The Swiss National Bank's (SNB) stress scenario analysis indicates that domestically focused banks' capital buffers should ensure overall adequate resilience.

| Bank Assets (billions of local currency) | Assets | Mkt Cap/ Assets % |
|---|---|---|
| UBS AG-REG | 1104.36 | 5.54 |
| UBS AG-REG | 531.36 | 0.62 |
| BANQUE CANTO-REG | 59.40 | 13.85 |
| BASLER KANTON-PC | 55.23 | 0.66 |
| BERNER KANTO-REG | 39.76 | 5.44 |
| Total | 1,790.1 | |
| EJR's est. of cap shortfall at 10% of assets less market cap | | 103.8 |
| Switzerland's GDP | | 771.2 |

## Funding Costs

According to the Trading Economics global macro model, the Interest Rate in Switzerland is expected to be 1.75 percent by the end of this quarter. Looking ahead, the projection for the Switzerland Interest Rate indicates a downward trend, with rates projected to be around 1.25 percent in 2024 and 1.00 percent in 2025. The Switzerland 10Y Government Bond currently offers a yield of 1.003%. Furthermore, the 10 Years vs 2 Years bond spread is -9 basis points, indicating an inverted yield curve between long-term and short-term maturities.




## 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 36 (1 is best, 189 worst) is above average.

| The World Bank's Doing Business Survey* | 2021 Rank | 2020 Rank | Change in Rank |
|---|---|---|---|
| **Overall Country Rank:** | **36** | **36** | **0** |
| **Scores:** | | | |
| Starting a Business | 81 | 81 | 0 |
| Construction Permits | 71 | 71 | 0 |
| Getting Electricity | 13 | 13 | 0 |
| Registering Property | 18 | 18 | 0 |
| Getting Credit | 67 | 67 | 0 |
| Protecting Investors | 105 | 105 | 0 |
| Paying Taxes | 20 | 20 | 0 |
| Trading Across Borders | 26 | 26 | 0 |
| Enforcing Contracts | 57 | 57 | 0 |
| Resolving Insolvency | 49 | 49 | 0 |

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

## Economic Freedom

As can be seen below, Switzerland is strong in its overall rank of 83.8 for Economic Freedom with 100 being best.

**Heritage Foundation 2023 Index of Economic Freedom**
**World Rank 83.8***

| | 2023 Rank** | 2022 Rank | Change in Rank | World Avg. |
|---|---|---|---|---|
| Property Rights | 94.2 | 95.2 | -1.0 | 53.3 |
| Government Integrity | 92.3 | 92.3 | 0.0 | 44.4 |
| Judical Effectiveness | 97.8 | 98.0 | -0.2 | 48.3 |
| Tax Burden | 70.6 | 70.1 | 0.5 | 78.1 |
| Gov't Spending | 63.9 | 67.2 | -3.3 | 64.3 |
| Fiscal Health | 95.4 | 96.3 | -0.9 | 54.5 |
| Business Freedom | 84.3 | 84.3 | 0.0 | 59.8 |
| Labor Freedom | 60.5 | 60.0 | 0.5 | 55.5 |
| Monetary Freedom | 85.1 | 84.9 | 0.2 | 72.1 |
| Trade Freedom | 86.6 | 86.6 | 0.0 | 69.6 |

*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

**Credit Quality Driver: Taxes Growth:**
SWISS CONFEDERATION has seen a decline in taxes of 5.3% per annum in the last fiscal year which is disappointing. We expect tax revenues will grow approximately 0.5% per annum over the next couple of years and 0.5% per annum for the next couple of years thereafter.

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

| Income Statement | Peer Median | Issuer Avg. | Assumptions Yr 1&2 | Yr 3,4,5 |
|---|---|---|---|---|
| Taxes Growth% | 7.9 | (5.3) | **0.5** | **0.5** |
| Social Contributions Growth % | 5.4 | NMF | | |
| Grant Revenue Growth % | 0.0 | 0.0 | **0.0** | **0.0** |
| Other Revenue Growth % | 0.0 | 0.7 | **0.7** | **0.7** |
| Other Operating Income Growth% | 0.0 | 0.6 | **0.6** | **0.6** |
| Total Revenue Growth% | 7.2 | (4.8) | **(4.8)** | **(4.3)** |
| Compensation of Employees Growth% | 4.2 | 1.7 | **1.7** | **1.7** |
| Use of Goods & Services Growth% | 6.4 | 9.5 | **5.0** | **5.0** |
| Social Benefits Growth% | 3.5 | (80.6) | **(10.0)** | **(10.0)** |
| Subsidies Growth% | (18.6) | 6.3 | | |
| Other Expenses Growth% | 1,129.4 | 1,129.4 | **(10.0)** | **2.0** |
| Interest Expense | 1.8 | 0.3 | **0.3** | |
| | | | | |
| Currency and Deposits (asset) Growth% | (11.4) | 0.0 | | |
| Securities other than Shares LT (asset) Growth% | (8.8) | 0.0 | | |
| Loans (asset) Growth% | 5.4 | 0.0 | | |
| Shares and Other Equity (asset) Growth% | 57.9 | 0.0 | | |
| Insurance Technical Reserves (asset) Growth% | 0.0 | 0.0 | | |
| Financial Derivatives (asset) Growth% | (28.7) | 0.0 | | |
| Other Accounts Receivable LT Growth% | 4.2 | 0.0 | | |
| 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% | 6.8 | 0.0 | | |
| Currency & Deposits (liability) Growth% | (4.0) | 0.0 | | |
| Securities Other than Shares (liability) Growth% | (17.3) | 0.0 | | |
| | | | | |
| Loans (liability) Growth% | 2.6 | 0.0 | | |
| Insurance Technical Reserves (liability) Growth% | 3.4 | 0.0 | | |
| Financial Derivatives (liability) Growth% | (31.3) | 0.0 | | |
| | | | | |
| Additional ST debt (1st year)(millions CHF) | 0.0 | 0.0 | | |

## ANNUAL INCOME STATEMENTS

Below are SWISS CONFEDERATION's annual income statements with the projected years based on the assumptions listed on page 5.

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

| | 2019 | 2020 | 2021 | 2022 | P2023 | P2024 |
|---|---|---|---|---|---|---|
| Taxes | 69,534 | 63,563 | 73,478 | 69,570 | 69,918 | 70,268 |
| Social Contributions | | | | | 5 | 5 |
| Grant Revenue | 533 | 528 | 578 | 578 | 578 | 578 |
| Other Revenue | 5,383 | 5,706 | 6,718 | 6,764 | 6,811 | 6,859 |
| Other Operating Income | 5,915 | 6,233 | 7,296 | 7,342 | 7,342 | 7,342 |
| Total Revenue | 75,449 | 69,796 | 80,774 | 76,912 | 84,655 | 85,052 |
| Compensation of Employees | 5,654 | 5,832 | 5,852 | 5,954 | 6,056 | 6,161 |
| Use of Goods & Services | 5,942 | 6,671 | 6,259 | 6,853 | 7,195 | 7,555 |
| Social Benefits | 228 | 2,823 | 4,313 | 837 | 753 | 678 |
| Subsidies | 2,165 | 2,214 | 2,303 | 2,449 | 2,449 | 2,449 |
| Other Expenses | 4,208 | 4,139 | 4,784 | 58,817 | 52,935 | 47,642 |
| Grant Expense | 47,847 | 61,299 | 59,911 | 53,967 | 48,613 | 43,790 |
| Depreciation | 2,996 | 3,048 | 2,946 | 2,893 | 2,893 | 2,893 |
| Total Expenses excluding interest | 69,039 | 86,026 | 86,368 | 77,803 | 120,896 | 111,169 |
| Operating Surplus/Shortfall | 6,410 | -16,230 | -5,595 | -890 | -36,241 | -26,117 |
| Interest Expense | 1,038 | 891 | 760 | 852 | 854 | 856 |
| Net Operating Balance | 5,372 | -17,121 | -6,355 | -1,742 | -37,095 | -26,974 |

## ANNUAL BALANCE SHEETS

Below are SWISS CONFEDERATION's balance sheets with the projected years based on the assumptions listed on page 5.

**ANNUAL BALANCE SHEETS (MILLIONS CHF)**

**Base Case**

| ASSETS | 2019 | 2020 | 2021 | 2022 | P2023 | P2024 |
|---|---|---|---|---|---|---|
| Currency and Deposits (asset) | 78,859 | 77,474 | 77,474 | 77,474 | 77,474 | 77,474 |
| Securities other than Shares LT (asset) | 706,720 | 657,451 | 657,451 | 657,451 | 657,451 | 657,451 |
| Loans (asset) | 33,380 | 33,129 | 33,129 | 33,129 | 33,129 | 33,129 |
| Shares and Other Equity (asset) | | | | | | |
| Insurance Technical Reserves (asset) | | | | | 0 | 0 |
| Financial Derivatives (asset) | 42 | 44 | 44 | 44 | 44 | 44 |
| Other Accounts Receivable LT | 6,980 | 7,124 | 7,124 | 7,124 | 7,124 | 7,124 |
| Monetary Gold and SDR's | 42,007 | 41,124 | 41,124 | 41,124 | 43,180 | 45,339 |
| Other Assets | | | | | 0 | 0 |
| Additional Assets | 0 | 0 | 0 | 0 | | |
| Total Financial Assets | 867,988 | 816,345 | 816,345 | 816,345 | 818,401 | 820,560 |
| **LIABILITIES** | | | | | | |
| Other Accounts Payable | 33,145 | 28,410 | 28,410 | 28,410 | 28,410 | 28,410 |
| Currency & Deposits (liability) | 93,042 | 90,752 | 90,752 | 90,752 | 90,752 | 90,752 |
| Securities Other than Shares (liability) | 140,776 | 138,201 | 138,201 | 138,201 | 138,201 | 138,201 |
| Loans (liability) | 66,320 | 66,281 | 66,281 | 66,281 | 103,376 | 130,350 |
| Insurance Technical Reserves (liability) | | | | | | |
| Financial Derivatives (liability) | | | | | | |
| Other Liabilities | 0 | 0 | 0 | 0 | 0 | 0 |
| Liabilities | 333,284 | 323,644 | 323,644 | 323,644 | 362,795 | 391,928 |
| Net Financial Worth | 534,704 | 492,701 | 492,701 | 492,701 | 455,606 | 428,632 |
| Total Liabilities & Equity | 867,988 | 816,345 | 816,345 | 816,345 | 818,401 | 820,560 |

### 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 adjustments which are reflected in the results for the projected ratings. We have assigned a rating of "AAA" whereas the ratio-implied rating for the most recent period is "AAA"; 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.

## 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 SWISS CONFEDERATION with the ticker of 344758Z SW we have assigned the senior unsecured rating of AAA. 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 version #16 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, governmental filings 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.

***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% | 0.5 | 4.5 | (3.5) | AA+ | AA+ | AA+ |
| Social Contributions Growth % | | 3.0 | (3.0) | AA+ | AA+ | AA+ |
| Other Revenue Growth % | 0.7 | 3.7 | (2.3) | AA+ | AA+ | AA+ |
| Total Revenue Growth% | (4.8) | 0.1 | (6.8) | AA+ | AA+ | AA+ |
| Monetary Gold and SDR's Growth % | 5.0 | 7.0 | 3.0 | AA+ | AA+ | AA+ |

***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**

August 18, 2023

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Subramanian NG
Senior Rating Analyst

**Reviewer Signature:** **Today's Date**

Steve Zhang

August 18, 2023

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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.*