REPUBLIC OF BRAZIL

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

Rating Analysis - 8/18/23

Economic activity in Brazil is facing challenges due to weakened private consumption and exports. According to the OECD, the country's Real GDP is projected to grow by 1.7% in 2023 and 1.2% in 2024. These projections are influenced by factors such as lower employment growth, persistent high inflation, and tighter credit conditions, which are likely to limit household spending capacity despite higher social transfers. Private investment is expected to continue increasing, but at a slower pace.

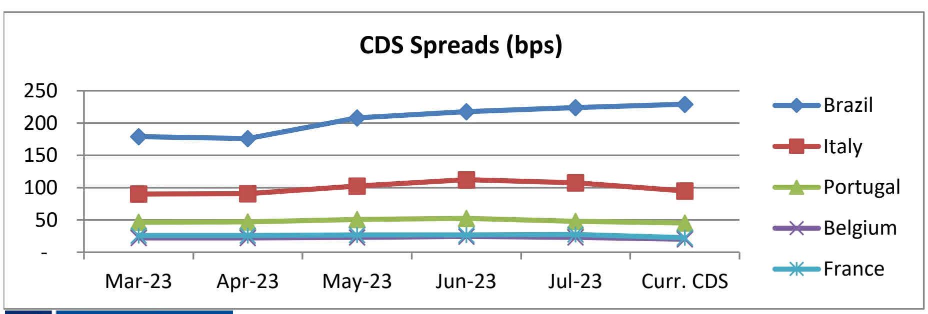
The inflation projections are slightly different, with estimates at 4.9% for 2023, 3.4% for 2024, and 3.0% for 2025. For administered prices, the projections are even higher, at 9.4% for 2023, 4.6% for 2024, and 3.5% for 2025. Monetary policy is expected to remain restrictive, with the policy rate staying at 13.75% until at least the third quarter of 2023. On the other hand, fiscal policy is currently expansionary but should start gradual consolidation in 2024. To restore confidence and achieve a more consistent macro-economic policy mix, implementing a credible medium-term fiscal framework will be crucial. Upgrading.

Annual Ratios (source for past results: IMF)

CREDIT POSITION	2020	2021	2022	P2023	P2024	P2025
Debt/ GDP (%)	95.3	90.7	85.9	83.2	81.7	81.8
Govt. Sur/Def to GDP (%)	-12.1	-2.6	-2.8	4.2	3.0	1.5
Adjusted Debt/GDP (%)	95.3	90.7	85.9	83.2	81.8	81.8
Interest Expense/ Taxes (%)	25.3	27.3	32.0	30.9	29.8	29.1
GDP Growth (%)	3.0	16.9	11.4	2.5	3.6	3.6
Foreign Reserves/Debt (%)	22.8	23.3	17.7	17.5	17.4	17.0
Implied Sen. Rating	BBB-	BBB+	BBB	BBB+	BBB+	BBB

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

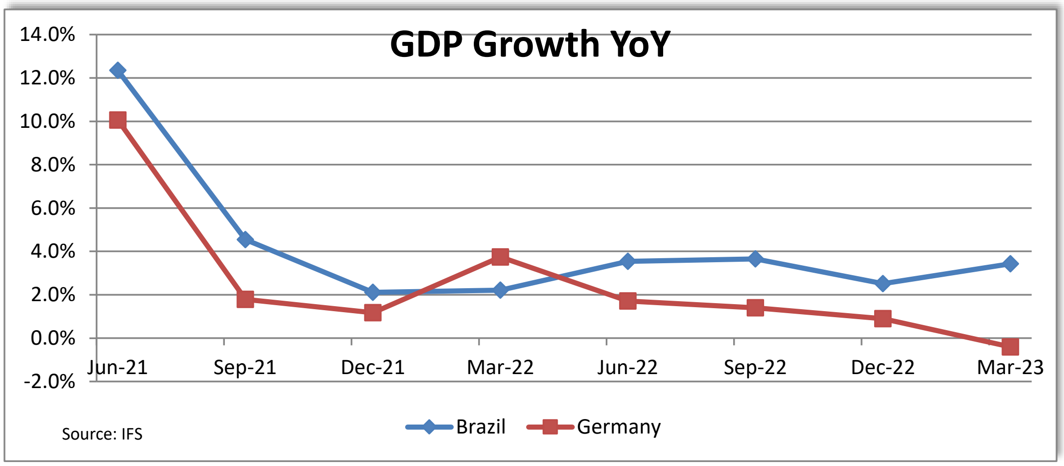
PEER RATIOS	Other NRSRO Sen.	Debt as a % GDP	Govt. Surp. Def to GDP (%)	Adjusted Debt/ GDP	Interest Expense/ Taxes %	GDP Growth (%)	Ratio-Implied Rating*
Federal Republic Of Germany	AAA	65.3	-2.6	65.3	2.7	7.4	AA+
French Republic	AA	117.1	-4.2	117.1	6.1	5.5	A-
Kingdom Of Belgium	AA	103.8	-3.4	103.8	5.1	9.3	BBB
Republic Of Italy	BBB-	151.3	-7.8	151.3	14.6	6.8	BB+
Portugal Republic	BB+	116.6	-0.7	116.6	7.6	11.4	BBB-



Country	EJR Rtg.	CDS
Brazil	NR	229
Italy	BBB-	95
Portugal	BBB-	45
Belgium	BBB	20
France	A+	23

Economic Growth

Brazil's economic activity showed signs of growth, increasing by 2% in the first quarter of 2023. The expansion was mainly driven by the services sector and a remarkable surge in agricultural production. Notably, retail sales recorded a robust growth of 3.8% in January 2023, with even previously declining sectors, such as clothing and footwear, and food and beverages, experiencing positive trends. The industrial sector continues to face challenges, as industrial production remains stagnant, hovering 2.2% below pre-pandemic levels. Investment took a hit, declining by 3.4% in the first quarter of 2023, primarily due to increased financing costs. This decline in investment, coupled with other factors, has led to a slight rise in unemployment, impacting job creation. On a positive note, there are indications of gradual disinflation as core inflation measures for both goods and services continue to decline steadily.



Fisical Policy

Despite recent declines, inflation in 2023 is expected to remain significantly above the targeted range of 1.75-3.75%. As a response, the central bank is anticipated to maintain the policy rate at 13.75% until the third quarter of 2023. Additionally, the exchange rate is facing pressures due to higher interest rates in advanced countries. However, starting from late 2023, policymakers plan to gradually reduce the policy rates, with a target of reaching 10% by the end of 2024.
In 2023, fiscal policy will continue to be expansionary, aligned with a fiscal package approved in December.

	Surplus-to-GDP (%)	Debt-to-GDP (%)	5 Yr. CDS Spreads
Brazil	-2.75	85.90	229.12
Germany	-2.62	65.28	15.01
France	-4.25	117.11	22.50
Belgium	-3.36	103.79	20.17
Italy	-7.83	151.26	95.04
Portugal	-0.66	116.63	45.31

Sources: Thomson Reuters and IFS

Unemployment

The unemployment rate in Brazil averaged 8% in the three months leading up to June 2023, significantly lower than the market's expectations of 8.2%. These figures highlight the tightness in Brazil's labor market, despite enduring high interest rates for an extended period. During this period, the number of unemployed individuals decreased by 785K, reaching 8.6M, while the employed population saw a substantial increase of 1.1M, reaching 98.9M. Meanwhile, the overall labor force remained relatively stable at 107.6M.

Unemployment (%)

	2021	2022
Brazil	13.50	9.46
Germany	3.58	3.07
France	7.88	7.32
Belgium	6.28	5.58
Italy	9.56	8.08
Portugal	6.59	6.04

Source: Intl. Finance Statistics

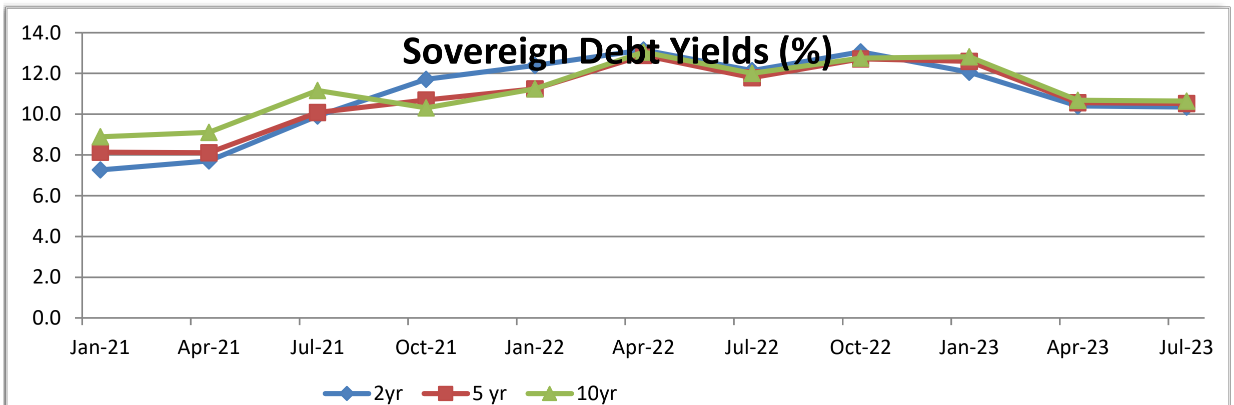
Banking Sector

The Brazilian banking system maintains ample liquid assets to withstand potential losses, even under stressed scenarios, while adhering to current regulations. Short-term liquidity levels are deemed sufficient, ensuring financial stability and the smooth functioning of the intermediation system. Although broad credit growth has declined across various credit markets, household bank credit experienced a decrease, particularly in higher-risk credit facilities like credit cards.

Bank Assets (billions of local currency)	Assets	Mkt Cap/ Assets %
BANK OF BRAZIL	2,029.0	7.06
Total	2,029.0	
EJR's est. of cap shortfall at 10% of assets less market cap		59.7
Brazil's GDP		9,915.3

Funding Costs

According to the Trading Economics global macro model, the interest rate in Brazil is expected to be 13.25% by the end of this quarter. In the long term, the Brazil Interest Rate is projected to trend around 9.00% in 2024 and 8.50% in 2025. The Brazil 10Y Government Bond currently offers a yield of 10.803%, and the 10 Years vs 2 Years bond spread is at 104.2 basis points. The yield curve shows normal convexity in long-term vs. short-term maturities.



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 124 (1 is best, 189 worst)

The World Bank's Doing Business Survey*	2021 Rank	2020 Rank	Change in Rank
Overall Country Rank:	**124**	**124**	**0**
Scores:			
Starting a Business	138	138	0
Construction Permits	170	170	0
Getting Electricity	98	98	0
Registering Property	133	133	0
Getting Credit	104	104	0
Protecting Investors	61	61	0
Paying Taxes	184	184	0
Trading Across Borders	108	108	0
Enforcing Contracts	58	58	0
Resolving Insolvency	77	77	0

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

Economic Freedom

As can be seen below, Brazil is mediocre in its overall rank of 53.5 for Economic Freedom with 100 being best.

Heritage Foundation 2023 Index of Economic Freedom
World Rank 53.5*

	2023 Rank**	2022 Rank	Change in Rank	World Avg.
Property Rights	49.7	50.3	-0.6	53.3
Government Integrity	39.1	40.0	-0.9	44.4
Judical Effectiveness	55.3	57.2	-1.9	48.3
Tax Burden	70.9	69.9	1.0	78.1
Gov't Spending	55.0	53.8	1.2	64.3
Fiscal Health	2.7	0.4	2.3	54.5
Business Freedom	63.6	63.2	0.4	59.8
Labor Freedom	57.0	55.9	1.1	55.5
Monetary Freedom	73.7	78.4	-4.7	72.1
Trade Freedom	65.0	60.0	5.0	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:
REPUBLIC OF BRAZIL has grown its taxes of 13.4% per annum in the last fiscal year which is more than the average for its peers. We expect tax revenues will grow approximately 13.4% per annum over the next couple of years and 12.1% per annum for the next couple of years thereafter.

Credit Quality Driver: Total Revenue Growth:
REPUBLIC OF BRAZIL's total revenue growth has been more than its peers and we assumed a 14.4% 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%	7.9	13.4	**13.4**	**12.1**
Social Contributions Growth %	6.2	13.9	**14.0**	**14.0**
Grant Revenue Growth %	0.0	78.8	**15.0**	**15.0**
Other Revenue Growth %	0.0	42.8	**12.1**	**12.1**
Other Operating Income Growth%	0.0	42.8	**26.8**	**26.8**
Total Revenue Growth%	7.9	17.9	**14.4**	**13.0**
Compensation of Employees Growth%	4.3	13.5	**13.5**	**13.5**
Use of Goods & Services Growth%	6.4	21.2	**21.2**	**19.1**
Social Benefits Growth%	3.5	13.3	**13.3**	**13.3**
Subsidies Growth%	(6.3)	51.3		
Other Expenses Growth%	31.1	31.1	**31.1**	**28.0**
Interest Expense	1.8	9.4	**9.4**	
Currency and Deposits (asset) Growth%	(11.4)	0.0		
Securities other than Shares LT (asset) Growth%	(4.6)	0.0		
Loans (asset) Growth%	5.4	1.6	**1.6**	**1.6**
Shares and Other Equity (asset) Growth%	57.9	0.0		
Insurance Technical Reserves (asset) Growth%	0.0	0.0		
Financial Derivatives (asset) Growth%	0.0	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			
Currency & Deposits (liability) Growth%	(2.6)	0.0		
Securities Other than Shares (liability) Growth%	(15.1)	6.0	**4.2**	**4.2**
Loans (liability) Growth%	2.6	(2.2)	**0.5**	**0.5**
Insurance Technical Reserves (liability) Growth%	2.8	0.0		
Financial Derivatives (liability) Growth%	(60.0)	0.0		
Additional ST debt (1st year)(billions BRL)	0.0	0.0		

ANNUAL INCOME STATEMENTS

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

ANNUAL REVENUE AND EXPENSE STATEMENT
(BILLIONS BRL)

	2019	2020	2021	2022	P2023	P2024
Taxes	1,749	1,717	2,201	2,497	2,831	3,210
Social Contributions	811	799	895	1,019	1,161	1,324
Grant Revenue	0	0	0	0	0	0
Other Revenue	527	371	548	783	877	983
Other Operating Income	527	371	548	783	783	783
Total Revenue	3,087	2,886	3,644	4,298	5,652	6,299
Compensation of Employees	964	980	1,034	1,173	1,332	1,512
Use of Goods & Services	382	392	446	540	655	793
Social Benefits	1,331	1,740	1,468	1,664	1,886	2,137
Subsidies	18	14	15	22	22	22
Other Expenses	142	120	164	215	282	370
Grant Expense	2	4	5	10	21	41
Depreciation	115	122	142	156	156	156
Total Expenses excluding interest	2,954	3,371	3,273	3,770	4,353	5,032
Operating Surplus/Shortfall	133	-485	371	527	1,299	1,267
Interest Expense	526	434	602	800	875	957
Net Operating Balance	-394	-919	-231	-273	424	310

ANNUAL BALANCE SHEETS

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

Base Case	ANNUAL BALANCE SHEETS (BILLIONS BRL)					
ASSETS	**2019**	**2020**	**2021**	**2022**	**P2023**	**P2024**
Currency and Deposits (asset)	1,978	2,110	2,504	2,694	3,457	4,102
Securities other than Shares LT (asset)						
Loans (asset)	-122	-9	-73	-74	-75	-77
Shares and Other Equity (asset)						
Insurance Technical Reserves (asset)					0	0
Financial Derivatives (asset)						
Other Accounts Receivable LT					0	0
Monetary Gold and SDR's						
Other Assets					149	149
Additional Assets	350	232	224	149		
Total Financial Assets	2,205	2,333	2,655	2,769	3,531	4,174
LIABILITIES						
Other Accounts Payable						
Currency & Deposits (liability)					0	0
Securities Other than Shares (liability)	6,080	6,882	7,563	8,018	8,356	8,709
Loans (liability)	357	424	452	443	19	-291
Insurance Technical Reserves (liability)						
Financial Derivatives (liability)						
Other Liabilities	0	0	0	0	0	0
Liabilities	6,437	7,306	8,015	8,461	8,799	9,132
Net Financial Worth	-4,232	-4,973	-5,360	-5,692	-5,268	-4,958
Total Liabilities & Equity	2,205	2,333	2,655	2,769	3,531	4,174

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 "BB" whereas the ratio-implied rating for the most recent period is "BBB"; the median rating for the peers is significantly higher than the issuer's rating.

Changes in Indicative Ratios

There were no change in Indicative Ratios.

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 BRAZIL with the ticker of 1323Z BZ we have assigned the senior unsecured rating of BB. 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%	13.4	17.4	9.4	BBB+	BBB+	BBB
Social Contributions Growth %	14.0	17.0	11.0	BBB+	BBB+	BBB+
Other Revenue Growth %	12.1	15.1	9.1	BBB+	BBB+	BBB+
Total Revenue Growth%	14.4	16.4	12.4	BBB+	BBB+	BBB+
Monetary Gold and SDR's Growth %	5.0	7.0	3.0	BBB+	BBB+	BBB+

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

………………………………………………………….. ………………………………………

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.