

CZECH REPUBLIC

Rating Analysis - 8/31/21

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

*EJR CP Rating: A1+

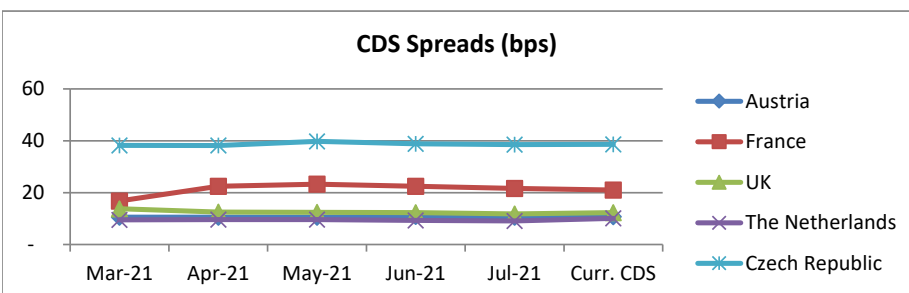
EJR's 3 yr. Default Probability: 1.0%

The Czech nation's GDP is projected to recover by 3.3% and 4.9% in 2021 and 2022, respectively. The Czech Republic has experienced one of the highest infection and death rates in the OECD area and progress in vaccinations has been relatively slow, delaying the relaxation of containment measures. By end-April 2021, it had recorded 273 COVID-19 related deaths per 100,000 inhabitants in cumulative terms, more than double the EU average. Economic recovery is expected to gather pace in H2 2021, once the population is more extensively vaccinated, triggering a rebound in services and boosting private consumption and investment. Inflation has picked up due to rising food and fuel prices, and Unemployment too is expected to start to decline. Policy appropriately remains very accommodative. The government deficit will rise further in 2021, due to recent changes in taxation and the extension of emergency measures to support incomes, employment and hard-hit sectors. A gradual rise in interest rates is projected to begin towards the end of 2021. Affirming.

CREDIT POSITION	Annual Ratios (source for past results: IMF)					
	2018	2019	2020	P2021	P2022	P2023
Debt/ GDP (%)	39.7	37.5	46.6	45.1	44.5	43.0
Govt. Sur/Def to GDP (%)	1.3	1.0	-5.2	-6.2	-6.9	-7.3
Adjusted Debt/GDP (%)	39.7	37.5	46.6	45.2	44.6	43.0
Interest Expense/ Taxes (%)	3.6	3.4	3.9	3.8	3.8	3.7
GDP Growth (%)	5.8	7.0	-1.7	6.0	6.0	6.0
Foreign Reserves/Debt (%)	102.5	113.3	99.3	86.3	72.9	60.4
Implied Sen. Rating	AA+	AA+	AA-	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

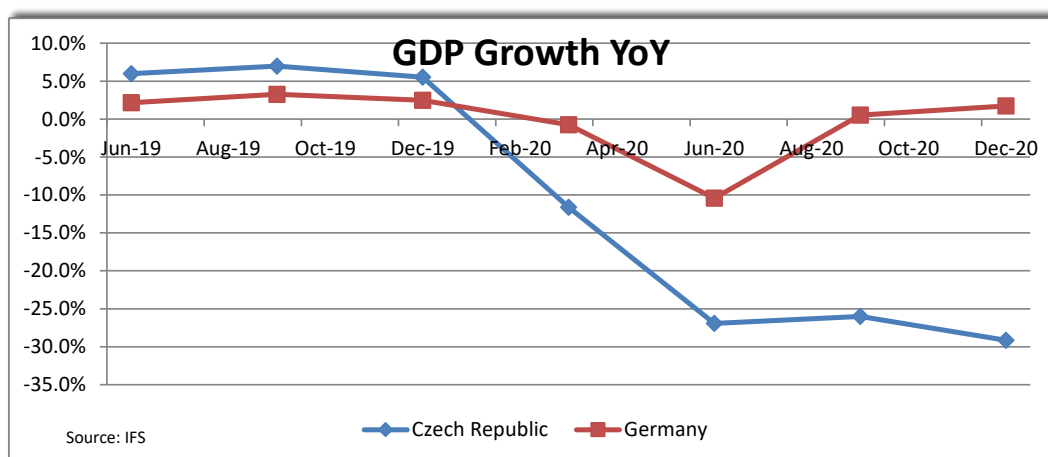
PEER RATIOS	Other NRSRO Sen.	Debt as a % of GDP	Govt. Surp. Def to GDP (%)	Adjusted Debt/ GDP	Interest Expense/ Taxes %	GDP Growth (%)	Ratio-Implied Rating*
Federal Republic Of Germany	AAA	79.7	-4.2	79.7	2.9	-3.3	A+
Kingdom Of The Netherlands	AAA	69.8	-4.0	69.8	2.7	-1.6	A+
Republic Of Austria	AA+	109.1	-8.2	109.1	5.1	-5.1	A-
French Republic	AA	145.9	-8.8	145.9	4.2	-5.5	BBB
United Kingdom	AA	187.8	-12.8	187.8	7.2	-4.8	BBB-



Country	EJR Rtg.	CDS
Austria	A+	11
France	A+	21
UK	A+	12
The Netherlands	AA-	10
Czech Republic	AA	39

Economic Growth

In early 2021, the Czech economy was still strongly affected by the ongoing pandemic, halting the pick-up in activity that had started in Q3 2020. Services continued to be severely restricted. Manufacturing, which had fully recovered by the end of 2020, also faced headwinds due to slower growth in trading partners and supply-side constraints. Business sentiment and consumer confidence remained below pre-crisis levels. The unemployment rate rose but remained very low at 3.3%, reflecting pre-crisis labour market tightness as well as government support measures. After falling for roughly half a year, inflation edged up in spring 2021, due to rising oil prices. Headline CPI inflation jumped to 3.4% in July, from June's 2.8% – beyond the upper bound of the 1-3% target range.



Fiscal Policy

The ongoing epidemic will be reflected in 2021's balance, which is expected to be 2.6% deeper year-on-year. Public debt is then likely to rise from 38.1% of GDP in 2020 to 44.8% of GDP at the end of 2021. With consolidation under way, the Czech Central Bank is forecasting a deficit below 6% of GDP and debt above 48% of GDP in 2022. Despite the increase in the volume of debt and the decline in GDP, the relative household-debt-to-GDP ratio remained relatively low compared to the rest of the EU (34.0% of GDP).

	Surplus-to-GDP (%)	Debt-to-GDP (%)	5 Yr. CDS Spreads
Czech Republ	-5.23	46.64	38.68
Germany	-4.19	79.69	10.33
The Netherlar	-4.00	69.76	10.08
Austria	-8.17	109.12	10.77
France	-8.79	145.87	21.00
UK	-12.82	187.83	12.26

Sources: Thomson Reuters and IFS

Unemployment

Unemployment, despite some increase, is therefore at a much lower level than would be consistent with the current cyclical position of the Czech economy. The unemployment rate is expected to increase to 3.6% in 2021 as the delayed effects of the economic downturn come to the fore. It could rise slightly to 3.7% in 2022, as the economic recovery.

Unemployment (%)		
	2019	2020
Czech Republic	2.11	2.57
Germany	3.20	4.31
The Netherlands	3.38	4.09
Austria	4.51	5.35
France	8.43	8.62
UK	3.74	4.34

Source: Intl. Finance Statistics

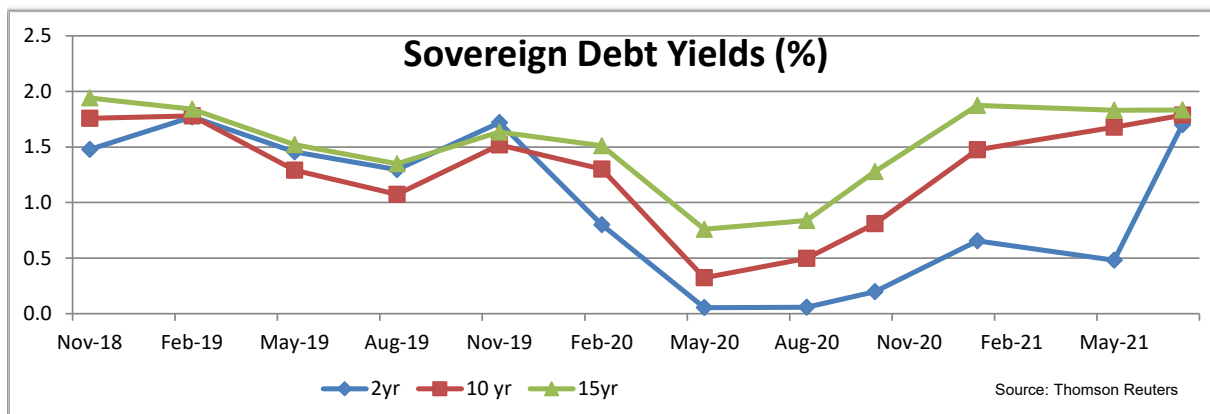
Banking Sector

The banking sector (including building savings banks) recorded asset growth by 5.2% to CZK 8.0 trillion. The total capital ratio, a key factor in the sector's resilience, rose again year on year to a new all-time high of 24.4%. The effects of the COVID-19 pandemic did not have a major impact on developments in most of the sector's year-end composite indicators.

Bank Assets (billions of local currency)		
	Assets	Mkt Cap/ Assets %
Komerční Banka	1,167.1	13.4
Total	1,167.1	
EJR's est. of cap shortfall at 10% of assets less market cap		-39.3
Czech Republic's GDP		5,694.6

Funding Costs

The previous three-year trend of tightening monetary policy in the Czech Republic was reversed in 2020 when the CNB initially raised the basic 2W repo rate to 2.25% in February in response to inflationary pressures, only to gradually reduce it by 2.00 percentage points to 0.25% in March and May. The average CZK/EUR exchange rate weakened only slightly YOY to CZK 26.4 per EUR.



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 41 (1 is best, 189 worst) is above average.

The World Bank's Doing Business Survey*			
	2021	2020	Change in
	Rank	Rank	Rank
Overall Country Rank:	41	41	0
Scores:			
Starting a Business	134	134	0
Construction Permits	157	157	0
Getting Electricity	11	11	0
Registering Property	32	32	0
Getting Credit	48	48	0
Protecting Investors	61	61	0
Paying Taxes	53	53	0
Trading Across Borders	1	1	0
Enforcing Contracts	103	103	0
Resolving Insolvency	16	16	0

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

Economic Freedom

As can be seen below, Czech Republic is above average in its overall rank of 73.8 for Economic Freedom with 100 being best.

Heritage Foundation 2021 Index of Economic Freedom				
World Rank 73.8*				
	2021	2020	Change in	World
	Rank**	Rank	Rank	Avg.
Property Rights	76.2	76.8	-0.6	53.6
Government Integrity	56.8	64.2	-7.4	45.9
Judicial Effectiveness	64.4	49.9	14.5	45.4
Tax Burden	79.1	82.0	-2.9	77.7
Gov't Spending	51.4	52.7	-1.3	67.1
Fiscal Health	98.1	97.8	0.3	72.1
Business Freedom	68.8	69.7	-0.9	63.2
Labor Freedom	77.1	77.6	-0.5	59.5
Monetary Freedom	79.7	80.8	-1.1	74.7
Trade Freedom	84.0	86.4	-2.4	70.7

*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:

Czech Republic has seen a decline in taxes of 6.0% per annum in the last fiscal year which is disappointing. We expect tax revenues will grow approximately 3.0% per annum over the next couple of years and 2.0% per annum for the next couple of years thereafter.

Credit Quality Driver: Total Revenue Growth:

CZECH REPUBLIC's total revenue growth has been more than its peers and we assumed a 6.0% 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%	(6.4)	(6.0)	3.0	2.0
Social Contributions Growth %	(0.2)	1.6	1.6	1.6
Grant Revenue Growth %	0.0	NMF		
Other Revenue Growth %	0.0	NMF		
Other Operating Income Growth%	0.0	(0.8)	5.0	5.0
Total Revenue Growth%	(4.4)	(2.4)	6.0	6.0
Compensation of Employees Growth%	4.5	10.0	10.0	10.0
Use of Goods & Services Growth%	4.4	1.9	1.9	1.9
Social Benefits Growth%	7.5	14.9	2.0	2.0
Subsidies Growth%	240.8	35.2	20.0	20.0
Other Expenses Growth%	0.0			
Interest Expense	1.5	1.6	1.0	1.0
Currency and Deposits (asset) Growth%	30.4	0.0		
Securities other than Shares LT (asset) Growth%	(9.5)	0.0		
Loans (asset) Growth%	20.2	(68.4)	6.0	6.0
Shares and Other Equity (asset) Growth%	5.0	166.8	5.0	5.0
Insurance Technical Reserves (asset) Growth%	2.5	(5.5)	2.0	2.0
Financial Derivatives (asset) Growth%	6.7	179.3	3.0	3.0
Other Accounts Receivable LT Growth%	8.0	(4.3)	6.0	6.0
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%	11.3	13.6	3.0	3.0
Currency & Deposits (liability) Growth%	1.2	113.6	(5.0)	(5.0)
Securities Other than Shares (liability) Growth%	15.0	26.4		
Loans (liability) Growth%	3.6	(6.1)	0.5	0.5
Insurance Technical Reserves (liability) Growth%	0.0	(9.3)	3.0	3.0
Financial Derivatives (liability) Growth%	5.5	53.8		
Additional ST debt (1st year)(billions CZK)	0.0	0.0		

ANNUAL OPERATING STATEMENTS

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

	ANNUAL REVENUE AND EXPENSE STATEMENT					
	(BILLIONS CZK)					
	2017	2018	2019	2020	P2021	P2022
Taxes	1,043	1,106	1,178	1,108	1,141	1,176
Social Contributions	760	834	895	909	924	939
Grant Revenue						
Other Revenue						
Other Operating Income	<u>267</u>	<u>306</u>	<u>322</u>	<u>319</u>	<u>319</u>	<u>319</u>
Total Revenue	2,069	2,246	2,395	2,337	2,384	2,433
Compensation of Employees	462	521	576	633	696	765
Use of Goods & Services	296	326	339	346	352	359
Social Benefits	776	818	885	1,017	1,037	1,058
Subsidies	110	119	128	173	208	249
Other Expenses				191	191	191
Grant Expense						
Depreciation	202	209	220	231	277	333
Total Expenses excluding interest	<u>1,981</u>	<u>2,138</u>	<u>2,299</u>	<u>2,591</u>	<u>2,762</u>	<u>2,956</u>
Operating Surplus/Shortfall	87	108	97	-255	-378	-523
Interest Expense	<u>38</u>	<u>40</u>	<u>41</u>	<u>43</u>	<u>44</u>	<u>44</u>
Net Operating Balance	50	68	56	-298	-422	-567

ANNUAL BALANCE SHEETS

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

Base Case	ANNUAL BALANCE SHEETS (BILLIONS CZK)					
	2017	2018	2019	2020	P2021	P2022
ASSETS						
Currency and Deposits (asset)	549	577	600	714	714	714
Securities other than Shares LT (asset)	14	14	13	14	14	14
Loans (asset)	-14	-8	-5	-1	-2	-2
Shares and Other Equity (asset)	-7	0	0	1	1	1
Insurance Technical Reserves (asset)	3	4	4	4	4	4
Financial Derivatives (asset)	1	1	0	1	1	1
Other Accounts Receivable LT	338	345	353	338	358	379
Monetary Gold and SDR's						
Other Assets					759	759
Additional Assets	<u>744</u>	<u>767</u>	<u>763</u>	<u>759</u>		
Total Financial Assets	1,629	1,699	1,729	1,829	1,849	1,871
LIABILITIES						
Other Accounts Payable	336	335	336	382	393	405
Currency & Deposits (liability)	6	9	5	11	11	11
Securities Other than Shares (liability)	1,724	1,629	1,685	2,129	2,129	2,129
Loans (liability)	141	172	138	130	552	1,118
Insurance Technical Reserves (liability)	7	5	4	4	4	4
Financial Derivatives (liability)	0	0	0	0	0	0
Other Liabilities	<u>0</u>					
Liabilities	2,215	2,150	2,169	2,656	3,098	3,687
Net Financial Worth	<u>-586</u>	<u>-451</u>	<u>-441</u>	<u>-828</u>	<u>-1,249</u>	<u>-1,816</u>
Total Liabilities & Equity	1,629	1,699	1,729	1,829	1,849	1,871

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Egan-Jones is not an NRSRO (as defined by the SEC) for sovereign/municipal issuers and structured finance/ABS issuers.

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

Changes in Indicative Ratios

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

SEC Rule 17g-7(a) Disclosure (Non-NRSRO)

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 CZECH REPUBLIC with the ticker of 1040Z CP we have assigned the senior unsecured rating of AA.

There are three notches in our rating categories (e.g., A- A, and A+) except for AAA and those deep into speculative grade, i.e., CC, C, and D do not have 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 Methodologies for Determining Credit Ratings (Main Methodology) version #15a 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 projections on pages 1, 6, and 7 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 dependent on numerous factors including the reliability, accuracy, and quality of the data relied upon in determining the credit rating. The data is sourced from publicly available information from the IMF and other similar sources. In some cases, the information is limited because of issues such as the lack of reported data, a delay in reporting data, restatements, inaccurate accounting and other issues. Such issues 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 publicly available information from the IMF, governmental filings and other similar sources for ratings on sovereign 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%	3.0	7.0	(1.0)	A+	AA-	A+
Social Contributions Growth %	1.6	4.6	(1.4)	A+	A+	A+
Other Revenue Growth %	0.0	3.0	(3.0)	A+	A+	A+
Total Revenue Growth%	6.0	8.0	4.0	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.

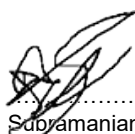
ATTESTATION FORM

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

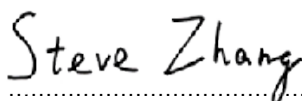


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Subramanian NG
Senior Rating Analyst

August 31, 2021
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Reviewer Signature:

Today's Date



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Steve Zhang
Senior Rating Analyst

August 31, 2021
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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.