GOVERNMENT OF CANADA

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

Rating Analysis - 8/29/22

Canada's economy has largely recovered from the COVID-19 crisis. But the economic outlook has dimmed over the past quarter. Inflation is staying higher for longer than previously expected, which will weigh on purchasing power for consumers and businesses. The higher interest rates required to fight inflation will further cool demand. Canada sees substantial downgrades to economic growth, as interest-rate sensitive sectors bear the brunt of the markdowns.

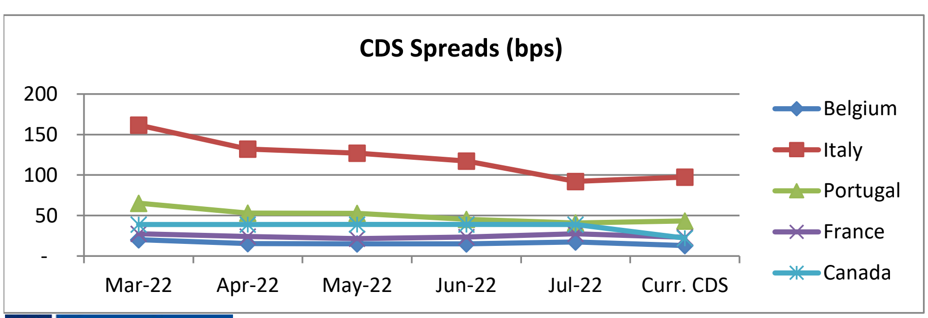
The Central Bank of Canada has in July 2022 increased its target for the overnight rate to 2½%, with the Bank Rate at 2¾% and the deposit rate at 2½%. The Canadian economy grew at a 3.1% pace over the first quarter of 2022, making it a standout performer on the global stage. Since public health restrictions were lifted earlier this year, mobility has increased, propelling spending, and building momentum heading into the summer months. Additional government spending announced in the spring round of federal-provincial budgets as well as the benefit to nominal incomes from the rally in world commodity prices have also provided a fillip to Canada's expansion rate this year. Affirming.

Annual Ratios (source for past results: IMF)

CREDIT POSITION	2019	2020	2021	P2022	P2023	P2024
Debt/ GDP (%)	112.3	126.1	111.6	114.4	113.8	110.1
Govt. Sur/Def to GDP (%)	-0.6	-12.0	-4.3	-0.8	2.7	5.7
Adjusted Debt/GDP (%)	112.3	126.1	111.6	114.6	114.0	110.2
Interest Expense/ Taxes (%)	10.5	9.9	9.5	9.0	8.5	8.1
GDP Growth (%)	3.4	-4.5	13.0	2.3	2.3	2.5
Foreign Reserves/Debt (%)	3.5	3.4	3.6	5.5	5.1	4.2
Implied Sen. Rating	AA-	A-	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

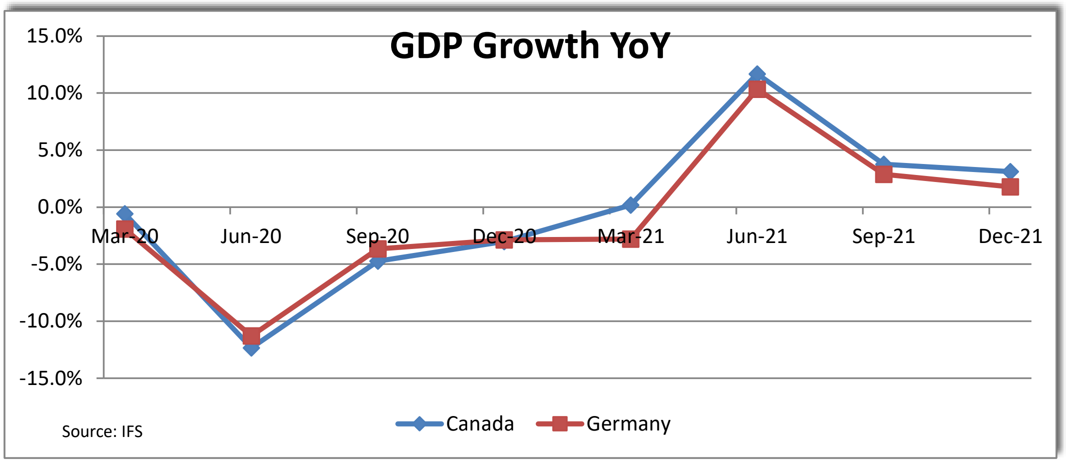
PEER RATIOS	Other NRSRO Sen.	Debt as a % GDP	Govt. Surp. Def to GDP (%)	Adjusted Debt/ GDP	Interest Expense/ Taxes %	GDP Growth (%)	Ratio-Implied Rating*
Federal Republic Of Germany	AAA	77.8	-3.6	77.8	2.4	6.0	AA
Republic Of Austria	AA+	102.1	-5.2	102.1	4.0	6.2	A+
French Republic	AA	137.3	-6.0	137.3	4.6	8.2	A-
United Kingdom	AA	190.8	-8.9	190.8	9.4	7.8	BBB



Country	EJR Rtg.	CDS
Belgium	A+	13
Italy	A+	98
Portugal	A+	43
France	AA-	23
Canada	AA	22

Economic Growth

Consumption is robust, led by a rebound in spending on hard-to-distance services. Business investment is solid and exports are being boosted by elevated commodity prices. The Bank estimates that GDP grew by about 4% in the second quarter. Growth is expected to slow to about 2% in the third quarter as consumption growth moderates and housing market activity pulls back following unsustainable strength during the pandemic. Economic activity will slow as global growth moderates and tighter monetary policy works its way through the economy. This, combined with the resolution of supply disruptions, will bring demand and supply back into balance and alleviate inflationary pressures. The GDP in Canada expanded 0.8% on quarter in the first three months of 2022, the weakest performance in three quarters, due to a 2.4% drop in international exports volumes, mostly energy products.



Fisical Policy

Additional spending commitments were a key feature of the federal and provincial fiscal blueprints this budget season. Healthcare and education spending are both projected to grow solidly in coming years at the provincial level. Many provinces are also pledging tax relief for households, which are touted by governments to counter the impact on household incomes from inflation but don't necessarily remain constrained to lower income households who bear the brunt of the burden from high inflation.

	Surplus-to-GDP (%)	Debt-to-GDP (%)	5 Yr. CDS Spreads
Canada	-4.33	0.00	22.13
Germany	-3.62	77.80	10.14
Netherlands	-2.53	66.21	23.02
Austria	-5.19	102.08	12.93
France	-5.97	137.28	97.55
United Kingd	-8.88	190.85	43.34

Sources: Thomson Reuters and IFS

Unemployment

Labour markets are tight with a record low unemployment rate, widespread labour shortages, and increasing wage pressures. With strong demand, businesses are passing on higher input and labour costs by raising prices. The Canadian labour market shed 43k positions in June. Of some comfort was the fact that nearly all of the losses (39.1k) were in part-time positions, with full-time employment down a more modest 4k positions. The unemployment rate fell 0.2 ppts to 4.9%, as the labour force declined by 97.5k and the participation rate slid from 65.3%

Unemployment (%)	2020	2021
Canada	9.50	7.47
Germany	3.83	3.58
Netherlands	4.85	4.23
Austria	6.03	6.20
France	8.03	7.88
United Kingd	0.00	0.00

Source: Intl. Finance Statistics

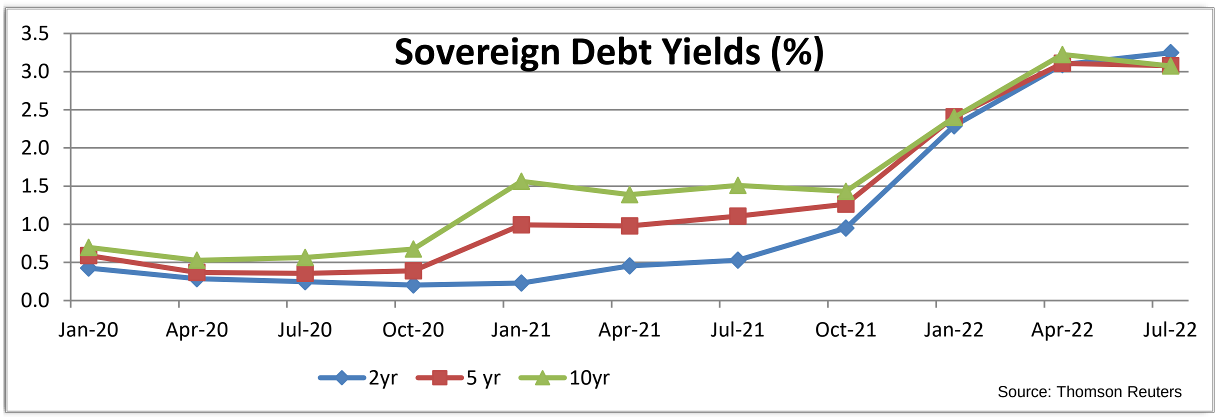
Banking Sector

The economic outlook is becoming cloudier. From elevated inflation, a rapid tightening of monetary policy, supply chain disruptions and shortages in energy, labour and housing supply, central bank auctions are having a profound impact on both bond and equity markets and in turn impacting capital markets activity. Many businesses continue to expect strong sales growth, but an increasing number of these firms expect the pace of growth to return to normal following a fast recovery from the pandemic.

Bank Assets (billions of local currency)		
	Assets	Mkt Cap/ Assets %
ROYAL BANK OF CA	1706.32	10.04
TORONTO-DOM BANK	1728.67	8.38
BANK OF NOVA SCO	1184.84	7.46
BANK OF MONTREAL	988.18	8.24
CAN IMPL BK COMM	837.68	6.51
Total	6,445.7	
EJR's est. of cap shortfall at 10% of assets less market cap		104.1
Canada's GDP		2,493.1

Funding Costs

Canada 10Y Bond Yield is trading around 2.72 percent and is expected to trade at 2.72 percent by the end of this quarter, according to Trading Economics global macro model. Market consensus estimates it to trade at 3.06 percent in 12 months' time. The Canada 5 Years CDS value is 32.90 (4 Aug 2022) and this reveals a 0.55% implied probability of default, on a 40% recovery rate supposed.



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 23 (1 is best, 189 worst) is strong.

The World Bank's Doing Business Survey*	2021 Rank	2020 Rank	Change in Rank
Overall Country Rank:	**23**	**23**	**0**
Scores:			
Starting a Business	3	3	0
Construction Permits	64	64	0
Getting Electricity	124	124	0
Registering Property	36	36	0
Getting Credit	15	15	0
Protecting Investors	7	7	0
Paying Taxes	19	19	0
Trading Across Borders	51	51	0
Enforcing Contracts	100	100	0
Resolving Insolvency	13	13	0

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

Economic Freedom
As can be seen below, Canada is strong in its overall rank of 77.9 for Economic Freedom with 100 being best.

Heritage Foundation 2021 Index of Economic Freedom
World Rank 77.9*

	2021 Rank**	2020 Rank	Change in Rank	World Avg.
Property Rights	84.5	87.7	-3.2	53.6
Government Integrity	73.3	90.3	-17.0	45.9
Judical Effectiveness	87.9	72.7	15.2	45.4
Tax Burden	76.0	76.5	-0.5	77.7
Gov't Spending	49.8	50.9	-1.1	67.1
Fiscal Health	84.2	83.3	0.9	72.1
Business Freedom	81.4	81.7	-0.3	63.2
Labor Freedom	72.4	72.0	0.4	59.5
Monetary Freedom	76.1	76.0	0.1	74.7
Trade Freedom	88.8	87.0	1.8	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:
GOVERNMENT OF CANADA has grown its taxes of 8.3% per annum in the last fiscal year which is average. We expect tax revenues will grow approximately 8.3% per annum over the next couple of years and 7.5% per annum for the next couple of years thereafter.

Credit Quality Driver: Total Revenue Growth:
GOVERNMENT OF CANADA's total revenue growth has been more than its peers and we assumed a 9.3% 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%	11.6	8.3	**8.3**	**7.5**
Social Contributions Growth %	5.1	8.4	**8.0**	**8.0**
Grant Revenue Growth %	0.0	(10.5)	**0.5**	**0.5**
Other Revenue Growth %	0.0	12.5	**7.5**	**7.5**
Other Operating Income Growth%	0.0	0.0		
Total Revenue Growth%	8.7	9.0	**9.3**	**8.4**
Compensation of Employees Growth%	3.5	6.0	**6.0**	**6.0**
Use of Goods & Services Growth%	10.8	4.1	**4.1**	**4.1**
Social Benefits Growth%	3.5	(15.9)	**(15.9)**	**(15.9)**
Subsidies Growth%	(4.8)	(39.4)		
Other Expenses Growth%	13.0	13.0	**13.0**	**13.0**
Interest Expense	1.8	2.4	**2.4**	
Currency and Deposits (asset) Growth%	1.3	0.0		
Securities other than Shares LT (asset) Growth%	(3.0)	0.0		
Loans (asset) Growth%	(31.0)	(85.2)	**8.3**	**8.3**
Shares and Other Equity (asset) Growth%	(9.9)	(128.7)	**2.0**	**2.0**
Insurance Technical Reserves (asset) Growth%	0.0	0.0		
Financial Derivatives (asset) Growth%	(16.1)	0.0		
Other Accounts Receivable LT Growth%	(1.8)	9.2	**8.3**	**8.3**
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%	2.2	17.3	**5.0**	**5.0**
Currency & Deposits (liability) Growth%	10.1	2.2	**2.2**	**2.2**
Securities Other than Shares (liability) Growth%	2.6	6.4	**4.5**	**4.5**
Loans (liability) Growth%	(3.7)	12.5	**12.5**	**12.5**
Insurance Technical Reserves (liability) Growth%	0.0	0.2	**0.2**	**0.2**
Financial Derivatives (liability) Growth%	0.0	0.0		
Additional ST debt (1st year)(billions CAD)	0.0	0.0		

ANNUAL OPERATING STATEMENTS

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

ANNUAL REVENUE AND EXPENSE STATEMENT
(BILLIONS CAD)

	2018	2019	2020	2021	P2022	P2023
Taxes	655	663	663	718	778	842
Social Contributions	104	108	108	117	126	137
Grant Revenue	1	1	1	1	1	1
Other Revenue	168	168	168	189	203	218
Other Operating Income						
Total Revenue	928	940	940	1,025	1,108	1,198
Compensation of Employees	270	281	291	308	327	346
Use of Goods & Services	194	201	212	221	230	239
Social Benefits	225	239	372	313	263	222
Subsidies	24	33	120	73	73	73
Other Expenses	46	49	60	68	77	87
Grant Expense	5	5	7	7	6	6
Depreciation	74	76	78	83	83	83
Total Expenses excluding interest	838	885	1,140	1,065	1,058	1,055
Operating Surplus/Shortfall	91	56	-200	-40	50	143
Interest Expense	67	70	66	68	70	71
Net Operating Balance	23	-14	-265	-108	-20	72

ANNUAL BALANCE SHEETS

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

	ANNUAL BALANCE SHEETS (BILLIONS CAD)					
Base Case						
ASSETS	2018	2019	2020	2021	P2022	P2023
Currency and Deposits (asset)	123	135	190	202	281	389
Securities other than Shares LT (asset)	370	411	409	447	447	447
Loans (asset)	21	42	57	8	9	10
Shares and Other Equity (asset)	-6	5	33	-9	-10	-10
Insurance Technical Reserves (asset)					0	0
Financial Derivatives (asset)						
Other Accounts Receivable LT	240	266	387	422	457	495
Monetary Gold and SDR's						
Other Assets					1,454	1,454
Additional Assets	1,076	1,090	1,239	1,454		
Total Financial Assets	1,824	1,949	2,315	2,523	2,639	2,784
LIABILITIES						
Other Accounts Payable	347	341	368	431	453	475
Currency & Deposits (liability)	6	6	7	7	7	7
Securities Other than Shares (liability)	1,816	1,947	2,350	2,501	2,614	2,732
Loans (liability)	140	163	149	167	187	115
Insurance Technical Reserves (liability)	334	338	341	342	342	343
Financial Derivatives (liability)						
Other Liabilities	0	0	0	0	0	0
Liabilities	2,643	2,796	3,215	3,449	3,584	3,658
Net Financial Worth	-819	-846	-900	-925	-945	-873
Total Liabilities & Equity	1,824	1,949	2,315	2,523	2,639	2,784

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 "AA" whereas the ratio-implied rating for th recent period is "AA-"; 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 GOVERNMENT OF CANADA with the ticker of 80710Z CN 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 used 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%	6.0	10.0	2.0	AA-	AA-	A+
Social Contributions Growth %	7.0	10.0	4.0	AA-	AA-	AA-
Other Revenue Growth %		3.0	(3.0)	AA-	AA-	AA-
Total Revenue Growth%	7.0	9.0	5.0	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 29, 2022

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Subramanian NG
Senior Rating Analyst

Reviewer Signature: **Today's Date**

Caroline Ding

August 29, 2022

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Caroline Ding
Rating Analyst

(Note, see our senior report for additional disclosures.)

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.