

REPUBLIC OF FINLAND

Rating Analysis - 11/27/19

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

*EJR CP Rating: A1+

The European Commission has warned that Finland is one of a handful of countries at risk of being non-compliant with the growth and stability pact of the European Union in 2020. Fiscal deficit is a concern given the gov't's spending increases in areas such as education, social security, health care and infrastructure, which would be partially funded by revenue-increasing measures, but would inevitably lead to a substantial increase in expenditure.

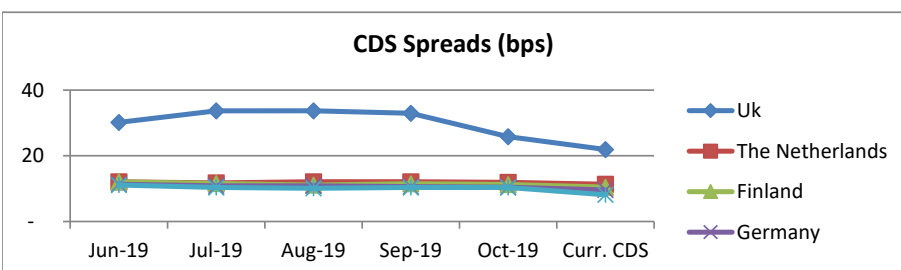
With expectations of Finland's structural budget balance expected to deteriorate by 0.5% points to -1.5% of GDP in 2019 and remain around that level in 2020–2021, incremental debt to fund its projected growth and employment rates is a concern. Finland's real GDP growth is expected to reach 1.4% this year, after having already decelerated in 2018. Amid weakening external demand and rising uncertainties, most high-frequency indicators point to a gradual slowdown in 2019 and 2020. Private consumption is expected to remain the main driver of growth, fuelled by the expected rise in wage income and modest increases in employment. Being a small open economy, Finland is vulnerable to disruptions in trade. We are affirming with a devlp. watch.

Annual Ratios (source for past results: IMF)

CREDIT POSITION	2016	2017	2018	P2019	P2020	P2021
Debt/ GDP (%)	75.5	73.2	69.5	68.1	66.7	65.3
Govt. Sur/Def to GDP (%)	-1.3	-0.2	0.0	-0.1	-0.2	-0.3
Adjusted Debt/GDP (%)	75.5	73.2	69.5	68.1	66.7	65.3
Interest Expense/ Taxes (%)	3.5	3.2	2.9	2.9	2.8	2.8
GDP Growth (%)	2.9	3.6	3.7	2.3	2.3	2.5
Foreign Reserves/Debt (%)	3.8	3.2	3.3	3.3	3.3	3.3
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

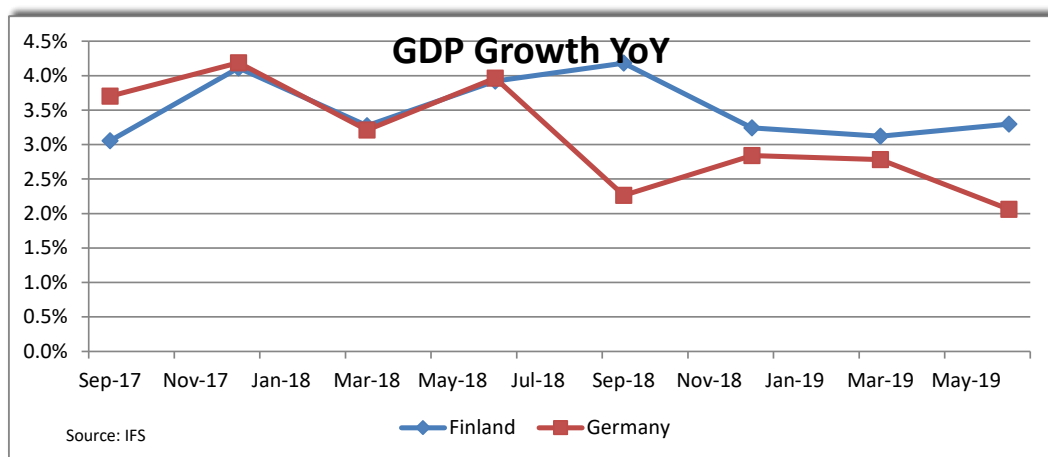
PEER RATIOS	Other NRSRO Sen.	Debt as a % of GDP	Govt. Surp. Def to GDP (%)	Adjusted Debt/ GDP	Interest Expense/ Taxes %	GDP Growth (%)	Ratio-Implied Rating*
Federal Republic Of Germany	AAA	69.2	1.8	69.2	3.9	3.1	AA
Kingdom Of Denmark	AAA	48.0	1.2	48.0	2.4	2.1	AA+
Kingdom Of Sweden	AAA	56.7	2.4	56.7	1.2	4.6	AA+
Kingdom Of The Netherlands	AA+	65.6	1.4	65.6	3.7	4.9	AA+
United Kingdom	AA	113.2	-0.4	113.2	9.0	3.3	AA-



Country	CDS
Uk	22
The Netherlands	11
Finland	10
Germany	10
Denmark	8

Economic Growth

Finland's real GDP growth is expected to reach 1.4% this year, after having already decelerated in 2018. Amid weakening external demand and rising uncertainties, indicators point to a gradual slowdown in 2019 and 2020. Growth is expected to be broad-based this year and in 2020 and 2021, GDP growth is forecast to stay close to 1%, as the contribution from net exports turns negative. Inflation remained low and below the euro area average in 2019. The general government headline balance is forecast to deteriorate from -0.8% of GDP in 2018 to -1.1% of GDP in 2019. Given the supportive stance, the general government balance is forecast to further deteriorate to -1.4% of GDP in 2020.



Fiscal Policy

In terms of fiscal prudence, tough times ahead given that IMF has as recently as Nov'19 questioned the Finnish government's ability to reach its goal of a balanced budget by 2023. EJR supports IMF's view given that the projected growth and employment rates indicates that the Finnish government would still have to borrow about 1 percent of GDP in 2023. Finland has stepped up spending to preserve the country's generous welfare state and agreed in September on a 2020 budget deficit of €2 billion. The IMF forecast the Finnish economy would grow 1.25% in 2019 and 1.5% in 2020, down from 1.7% in 2018.

	Surplus-to-GDP (%)	Debt-to-GDP (%)	5 Yr. CDS Spreads
Finland	-0.01	69.54	10.48
Germany	1.77	69.18	9.61
Denmark	1.24	48.01	8.13
Sweden	2.45	56.68	21.92
The Netherla	1.44	65.57	11.35
Uk	-0.39	113.24	9.73

Sources: Thomson Reuters and IFS

Unemployment

Wage increases are likely to outpace productivity growth as the unemployment rate nears its structural level. Finland's unemployment rate edged down to 6.2% in October 2019 from 6.3% in the same month of the previous year. The activity rate went up to 66.0% in October from 65.6% a year earlier, and the employment rate increased to 72.0% from 71.5%. Unemployment Rate in Finland averaged 6.4% from 1959 until 2019, reaching an all-time high of 19.9% in May 1994 and a record low of 0.7% in September 1961.

Unemployment (%)	2017		2018	
	2017	2018	2017	2018
Finland	8.63	7.36	8.63	7.36
Germany	3.76	3.40	3.76	3.40
Denmark	5.72	4.97	5.72	4.97
Sweden	6.68	6.28	6.68	6.28
The Netherla	4.86	3.84	4.86	3.84
Uk	4.40	4.09	4.40	4.09

Source: Intl. Finance Statistics

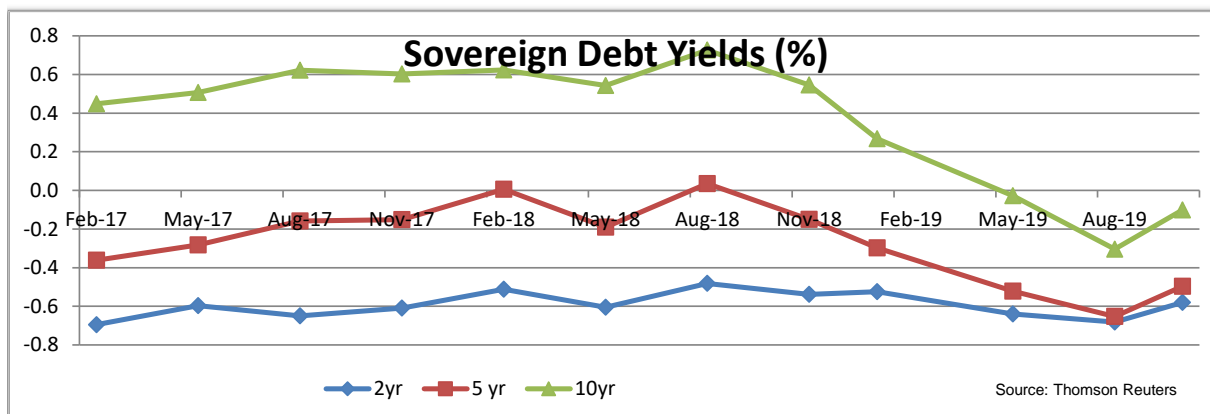
Banking Sector

The entire financial world is going through massive change with the arrival of financial technology, fintech. The sector's operations were influenced by low and even negative market rates, stricter regulation, expanding digitalization, and slow growth in the national economy. New housing loans taken out were 2.2% higher than the previous year. The IMF has approved of the Finnish government's recent for banks to limit the ratio of household debt to income.

Bank Assets (billions of local currency)		
	Assets	Mkt Cap/ Assets %
Aktia Bank	9.3	2.04
ALBAV FH Equity	5.6	1.91
Total	14.8	
EJR's est. of cap shortfall at 10% of assets less market cap		1.2
Finland's GDP		232.1

Funding Costs

Finland's Long-Term Interest Rate was reported at -0.21% per annum in Oct 2019, compared with -0.30% per annum in the previous month. Although the 10-year sovereign debt yield increased a little in late 2019, the overall yields have dropped a lot since 2014.



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 20 (1 is best, 189 worst) is strong.

The World Bank's Doing Business Survey*			
	2019	2018	Change in
	Rank	Rank	Rank
Overall Country Rank:	20	13	-7
Scores:			
Starting a Business	31	26	-5
Construction Permits	42	37	-5
Getting Electricity	24	20	-4
Registering Property	34	27	-7
Getting Credit	80	55	-25
Protecting Investors	61	62	1
Paying Taxes	10	12	2
Trading Across Borders	37	34	-3
Enforcing Contracts	45	46	1
Resolving Insolvency	1	2	1

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

Economic Freedom

As can be seen below, Finland is above average in its overall rank of 74.9 for Economic Freedom with 100 being best.

Heritage Foundation 2019 Index of Economic Freedom				
World Rank 74.9*				
	2019 Rank**	2018 Rank	Change in Rank	World Avg.
Property Rights	89.6	89.0	0.6	52.3
Government Integrity	81.2	89.8	-8.6	44.9
Judicial Effectiveness	92.5	82.7	9.8	41.5
Tax Burden	66.8	66.5	0.3	77.2
Gov't Spending	7.2	2.3	4.9	64.2
Fiscal Health	86.4	81.1	5.3	66.0
Business Freedom	89.4	89.9	-0.5	63.5
Labor Freedom	50.3	50.5	-0.2	59.4
Monetary Freedom	84.8	86.0	-1.2	75.1
Trade Freedom	86.0	86.9	-0.9	74.3

*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 FINLAND has grown its taxes of 2.1% per annum in the last fiscal year which is disappointing. We expect tax revenues will grow approximately 2.1% per annum over the next couple of years and 2.1% per annum for the next couple of years thereafter.

Credit Quality Driver: Total Revenue Growth:

REPUBLIC OF FINLAND's total revenue growth has been less than its peers and we assumed a 3.1% 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%	3.9	2.1	2.1	2.1
Social Contributions Growth %	4.2	2.4	2.4	2.4
Grant Revenue Growth %	0.0	NMF		
Other Revenue Growth %	0.0	NMF		
Other Operating Income Growth%	0.0	4.0	4.2	4.2
Total Revenue Growth%	4.4	2.5	3.1	2.8
Compensation of Employees Growth%	3.5	2.6	2.6	2.6
Use of Goods & Services Growth%	4.3	3.3	3.3	3.3
Social Benefits Growth%	2.4	1.5	1.5	1.5
Subsidies Growth%	3.7	1.7		
Other Expenses Growth%	0.0			
Interest Expense	1.8	1.3	1.3	1.3
Currency and Deposits (asset) Growth%	(6.6)	0.0		
Securities other than Shares LT (asset) Growth%	8.5	0.0		
Loans (asset) Growth%	6.3	(10.6)	(10.6)	(10.6)
Shares and Other Equity (asset) Growth%	1.8	(1.2)	2.0	2.0
Insurance Technical Reserves (asset) Growth%	0.0	1.1	1.1	1.1
Financial Derivatives (asset) Growth%	(9.2)	207.8	2.1	2.1
Other Accounts Receivable LT Growth%	1.2	(19.4)	(19.4)	(19.4)
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	(17.9)	3.0	3.0
Currency & Deposits (liability) Growth%	1.0	(13.3)	0.5	0.5
Securities Other than Shares (liability) Growth%	(2.4)	(0.1)	(0.0)	(0.0)
Loans (liability) Growth%	1.2	3.1	3.1	3.1
Insurance Technical Reserves (liability) Growth%	0.0	4.1	2.0	2.0
Financial Derivatives (liability) Growth%	0.0	740.3	2.7	2.7
Additional ST debt (1st year)(millions EUR)	0.0	0.0		

ANNUAL INCOME STATEMENTS

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

	ANNUAL REVENUE AND EXPENSE STATEMENT					
	(MILLIONS EUR)					
	2015	2016	2017	2018	P2019	P2020
Taxes	65,121	67,209	69,688	71,148	72,642	74,168
Social Contributions	26,942	27,949	27,302	27,947	28,607	29,283
Grant Revenue						
Other Revenue						
Other Operating Income	21,914	21,948	22,577	23,474	23,474	23,474
Total Revenue	113,977	117,106	119,567	122,569	124,723	126,925
Compensation of Employees	29,055	28,714	28,026	28,767	29,528	30,308
Use of Goods & Services	23,087	23,695	24,396	25,197	26,024	26,879
Social Benefits	47,467	48,387	48,971	49,709	50,458	51,219
Subsidies	2,832	2,673	2,703	2,749	2,749	2,750
Other Expenses				6,317	6,317	6,317
Grant Expense						
Depreciation	7,322	7,449	7,602	7,808	7,808	7,808
Total Expenses excluding interest	116,640	117,507	117,733	120,547	122,884	125,280
Operating Surplus/Shortfall	-2,663	-401	1,834	2,022	1,839	1,645
Interest Expense	<u>2,448</u>	<u>2,336</u>	<u>2,229</u>	<u>2,046</u>	<u>2,072</u>	<u>2,098</u>
Net Operating Balance	-5,111	-2,737	-395	-24	-233	-454

ANNUAL BALANCE SHEETS

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

	ANNUAL BALANCE SHEETS					
	(MILLIONS EUR)					
Base Case	2015	2016	2017	2018	P2019	P2020
ASSETS						
Currency and Deposits (asset)	18,910	17,636	20,511	17,920	18,920	18,920
Securities other than Shares LT (asset)	44,208	42,326	39,890	39,071	39,071	39,071
Loans (asset)	30,918	29,776	27,304	24,417	21,835	19,526
Shares and Other Equity (asset)	162,256	177,319	192,857	190,567	194,378	198,266
Insurance Technical Reserves (asset)	176	293	275	278	281	284
Financial Derivatives (asset)	2,177	2,010	2,507	7,717	7,879	8,045
Other Accounts Receivable LT	9,278	8,742	13,160	10,603	8,543	6,883
Monetary Gold and SDR's						
Other Assets						
Additional Assets						
Total Financial Assets	267,923	278,102	296,504	290,573	290,907	290,995
LIABILITIES						
Other Accounts Payable	13,049	14,489	18,309	15,031	15,482	15,946
Currency & Deposits (liability)	831	874	908	787	787	787
Securities Other than Shares (liability)	113,264	116,911	114,833	114,751	114,694	114,636
Loans (liability)	30,336	30,652	29,792	30,714	30,947	31,401
Insurance Technical Reserves (liability)	105	115	123	128	131	133
Financial Derivatives (liability)	-1,941	-557	745	6,260	6,431	6,606
Other Liabilities	<u>521</u>	<u>522</u>	<u>522</u>	<u>522</u>	<u>522</u>	<u>522</u>
Liabilities	156,165	163,006	165,232	168,193	168,760	169,301
Net Financial Worth	<u>111,758</u>	<u>115,096</u>	<u>131,272</u>	<u>122,380</u>	<u>122,147</u>	<u>121,693</u>
Total Liabilities & Equity	267,923	278,102	296,504	290,573	290,907	290,995

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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 "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

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 FINLAND with the ticker of 1306Z FH we have assigned the senior unsecured rating of AA. 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 #13 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 upon 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%	2.1	6.1	(1.9)	AA	AA	AA
Social Contributions Growth %	2.4	5.4	(0.6)	AA	AA	AA
Other Revenue Growth %		3.0	(3.0)	AA	AA	AA
Total Revenue Growth%	3.1	5.1	1.1	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.

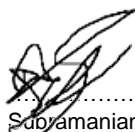
ATTESTATION FORM

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

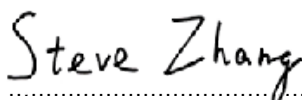


Subramanian NG
Senior Rating Analyst

November 27, 2019

Reviewer Signature:

Today's Date



Steve Zhang
Senior Rating Analyst

November 27, 2019

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.