HELLENIC REPUBLIC (GREECE)

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

Rating Analysis - 8/18/23

Greece's GDP growth was primarily driven by significantly stronger private consumption and investment. Consumption was fueled by pent- up demand, the utilization of savings accumulated by households during the pandemic, and fiscal measures implemented in response to the energy crisis. Looking ahead, the economic growth is expected to remain robust, with real GDP projected to increase by 2.2% in 2023 and 1.9% in 2024, according to the OECD's forecasts.

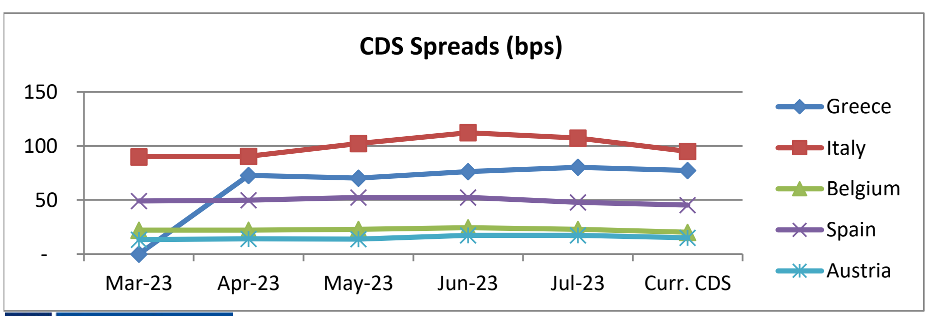
There are indications that consumption growth might slow down in the near term due to the impact of high inflation on households' purchasing power. Despite rising borrowing costs, real investment growth is expected to remain strong, supported by the increased spending related to the Recovery and Resilience Funds. In conclusion, Greece's economy has shown resilience and strong growth in recent years. By implementing prudent fiscal policies and addressing labor market challenges, the country can continue its positive trajectory and ensure a stable economic future. Affirming.

Annual Ratios (source for past results: IMF)

CREDIT POSITION	2020	2021	2022	P2023	P2024	P2025
Debt/ GDP (%)	236.8	224.3	191.5	180.6	163.9	140.9
Govt. Sur/Def to GDP (%)	-10.5	-7.1	-1.8	3.4	9.7	16.4
Adjusted Debt/GDP (%)	236.8	224.3	191.5	180.6	163.9	140.9
Interest Expense/ Taxes (%)	11.4	9.3	8.4	7.0	5.8	4.9
GDP Growth (%)	-9.8	9.8	14.5	2.5	3.6	3.6
Foreign Reserves/Debt (%)	0.9	0.8	0.8	0.9	0.9	1.1
Implied Sen. Rating	CCC+	B-	B+	B+	BB-	BB

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*
Austria	AA+	83.0	-1.8	83.0	3.4	10.0	AAA
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 Spain	BBB	117.7	-4.2	117.7	9.6	10.0	BB+
Republic Of Italy	BBB-	151.3	-7.8	151.3	14.6	6.8	BBB-

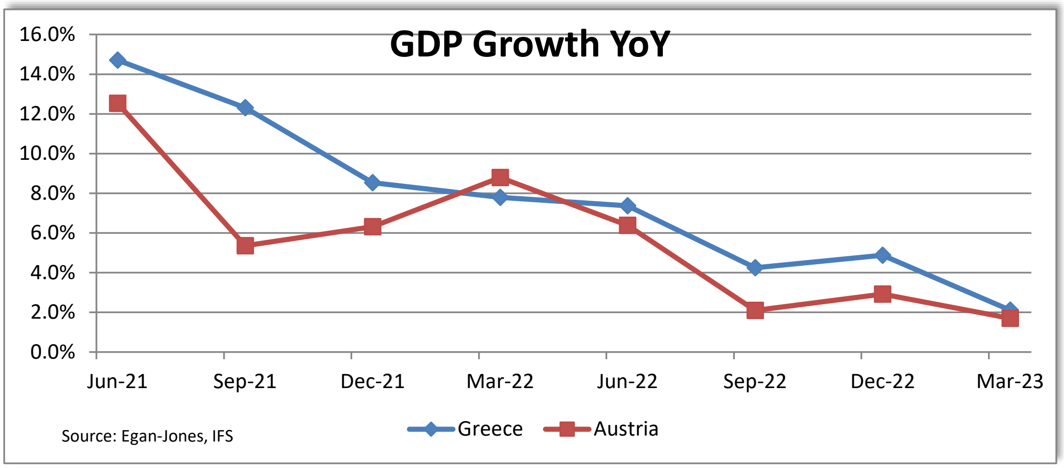


Country	EJR Rtg.	CDS
Greece	D	77
Italy	BBB-	95
Belgium	BBB	20
Spain	BBB+	45
Austria	A+	15

Egan-Jones Ratings Company

Economic Growth

Despite facing headwinds, Greece's economy showed remarkable resilience in 2022, with strong economic growth partially offsetting the negative impact of exceptionally high inflation, which reached 9.3% compared to 0.6% in the previous year, driven by the energy crisis and escalating food prices. Investment growth remained robust in the fourth quarter of 2022, despite rising costs and labor shortages. Business confidence saw a notable increase from October 2022, nearly reaching pre-pandemic levels by April 2023, and purchasing managers anticipated expanding demand.



Fiscal Policy

According to the 2023 Stability Programme, Greece is projected to achieve a primary surplus of 1.1% of GDP, surpassing the target of 0.7% of GDP set in the 2023 Budget. Additionally, the debt-to-GDP ratio is expected to decrease to 162.6% in 2023. These improved forecasts are attributed to a positive carry-over effect from 2022 on tax revenue and social security contributions. However, it's worth noting that tightening monetary policy in the euro area has led to higher borrowing costs. Private sector borrowing costs reached their highest level since October 2016 in January 2023.

	Surplus-to-GDP (%)	Debt-to-GDP (%)	5 Yr. CDS Spreads
Greece	-1.85	191.51	77.33
Austria	-1.82	82.97	15.11
France	-4.25	117.11	22.50
Belgium	-3.36	103.79	20.17
Spain	-4.24	117.70	45.32
Italy	-7.83	151.26	95.04

Sources: Thomson Reuters and IFS

Unemployment

In May 2023, Greece witnessed a notable improvement in its labor market, as the unemployment rate decreased to 10.80%, down from 11.30% in April of the same year. The positive trend in employment continued throughout 2022, with overall employment seeing a significant increase of 5.4%, compared to a mere 1.4% growth in 2021. Several sectors experienced a surge in employment, particularly in tourism, education, manufacturing, and construction.

Unemployment (%)	2021	2022
Greece	14.79	12.46
Austria	6.20	4.76
France	7.88	7.32
Belgium	6.28	5.58
Spain	14.79	0.00
Italy	9.56	8.08

Source: Intl. Finance Statistics

Banking Sector

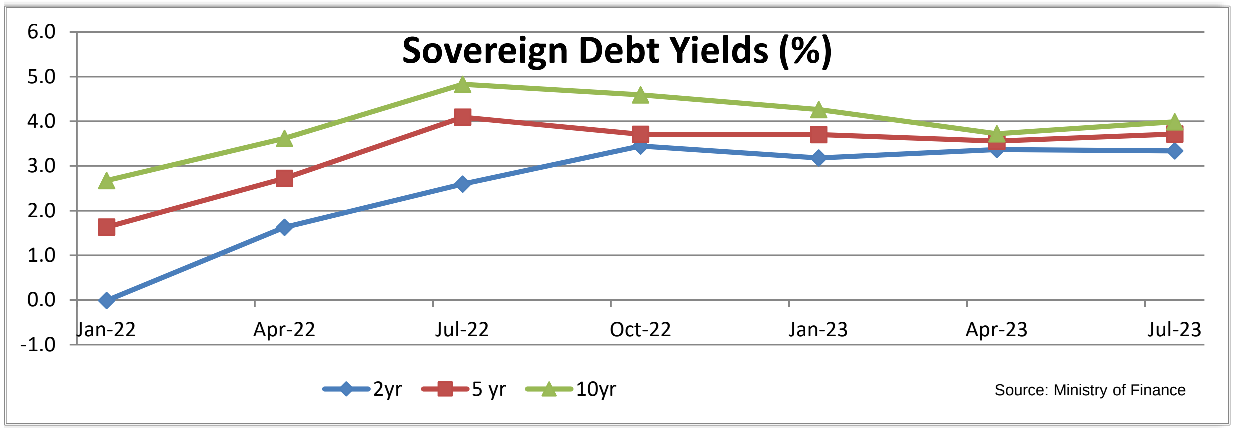
Liquidity conditions improved on the back of Greek banks' unimpeded access to money and capital markets,3 increased resident deposits (December 2022: EUR 196.7 billion), as well as participation in the Eurosystem's refinancing operations, in the context of the implementation of the ECB Governing Council's decisions. The banking sector's capital adequacy improved further to a satisfactory level, above the regulatory minimum.

Bank Assets (billions of local currency)

	Assets	Mkt Cap/ Assets %
NATL BANK GREECE	84.0	3.11
EUROBANK ERGASIA	77.9	3.76
ALPHA BANK A.E.	73.4	2.38
PIRAEUS BANK	79.8	1.17
ATTICA BANK SA	3.7	2.63
Total	318.6	
EJR's est. of cap shortfall at 10% of assets less market cap		23.5
Greece's GDP		208.0

Funding Costs

Currently, the Greece 10Y Government Bond has a yield of 3.705%, with a 30.3 basis points spread between 10-year and 2-year bond yields, showcasing normal convexity in long-term versus short-term maturities. According to the global macro model from Trading Economics, the Interest Rate in Greece is anticipated to reach 2.50% by the end of this quarter. Looking further ahead, the projected trend indicates an Interest Rate of around 3.50% in 2023, followed by 2.75% in 2024.



Ease of Doing Business

Major factors for growing an economy are the ease of doing business and economic freedoms. 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 an overall rank of 79 (1 is best, 189 worst) is mediocre.

The World Bank's Doing Business Survey*

	2021 Rank	2020 Rank	Change in Rank
Overall Country Rank:	**79**	**79**	**0**
Scores:			
Starting a Business	11	11	0
Construction Permits	86	86	0
Getting Electricity	40	40	0
Registering Property	156	156	0
Getting Credit	119	119	0
Protecting Investors	37	37	0
Paying Taxes	72	72	0
Trading Across Borders	34	34	0
Enforcing Contracts	146	146	0
Resolving Insolvency	72	72	0

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

Economic Freedom

As can be seen below, Greece is mediocre in its overall rank of 56.9 for Economic Freedom with 100 being best.

Heritage Foundation 2023 Index of Economic Freedom
World Rank 56.9*

	2023 Rank**	2022 Rank	Change in Rank	World Avg.
Property Rights	76.7	76.0	0.7	53.3
Government Integrity	52.9	52.3	0.6	44.4
Judical Effectiveness	69.9	69.9	0.0	48.3
Tax Burden	60.8	59.9	0.9	78.1
Gov't Spending	9.7	17.9	-8.2	64.3
Fiscal Health	18.1	67.6	-49.5	54.5
Business Freedom	70.3	70.3	0.0	59.8
Labor Freedom	60.7	61.1	-0.4	55.5
Monetary Freedom	79.6	78.6	1.0	72.1
Trade Freedom	78.6	79.2	-0.6	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:
HELLENIC REPUBLIC (GREECE) has grown its taxes of 22.2% per annum in the last fiscal year which is more than the average for its peers. We expect tax revenues will grow approximately 22.2% per annum over the next couple of years and 20.0% per annum for the next couple of years thereafter.

Credit Quality Driver: Total Revenue Growth:
HELLENIC REPUBLIC (GREECE)'s total revenue growth has been more than its peers and we assumed no 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%	8.5	22.2	**22.2**	**20.0**
Social Contributions Growth %	6.1	6.5	**6.0**	**6.0**
Grant Revenue Growth %	0.0	NMF		
Other Revenue Growth %	0.0	NMF		
Other Operating Income Growth%	0.0	(0.2)	**(0.2)**	**(0.2)**
Total Revenue Growth%	8.1	13.7	**13.7**	**12.3**
Compensation of Employees Growth%	4.3	0.7	**0.7**	**0.7**
Use of Goods & Services Growth%	6.6	11.1	**11.1**	**11.1**
Social Benefits Growth%	2.7	5.3	**5.3**	**5.3**
Subsidies Growth%	0.9	29.8		
Other Expenses Growth%	0.0			
Interest Expense	1.8	1.3	**1.3**	
Currency and Deposits (asset) Growth%	(11.5)	0.0		
Securities other than Shares LT (asset) Growth%	(3.8)	0.0		
Loans (asset) Growth%	(65.3)	31.2	**22.2**	**20.0**
Shares and Other Equity (asset) Growth%	57.9	15.4	**15.4**	**13.9**
Insurance Technical Reserves (asset) Growth%	0.0	(5.0)	**2.0**	**2.0**
Financial Derivatives (asset) Growth%	0.0	0.0		
Other Accounts Receivable LT Growth%	3.3	22.0	**22.0**	**19.8**
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	7.9	**5.0**	**5.0**
Currency & Deposits (liability) Growth%	2.4	6.4	**6.4**	**6.4**
Securities Other than Shares (liability) Growth%	(13.2)	(12.0)	**(8.4)**	**(8.4)**
Loans (liability) Growth%	0.4	(0.3)	**0.5**	**0.5**
Insurance Technical Reserves (liability) Growth%	2.8	80.5	**2.0**	**2.0**
Financial Derivatives (liability) Growth%	(60.0)	(80.2)	**(10.0)**	**(10.0)**
Additional ST debt (1st year)(millions EUR)	0.0	0.0		

ANNUAL INCOME STATEMENTS
Below are HELLENIC REPUBLIC (GREECE)'s annual income statements
with the projected years based on the assumptions listed on page 5.

ANNUAL REVENUE AND EXPENSE STATEMENT
(MILLIONS EUR)

	2019	2020	2021	2022	P2023	P2024
Taxes	49,799	43,505	48,711	59,528	72,743	88,892
Social Contributions	26,654	25,438	27,273	29,037	30,779	32,626
Grant Revenue						
Other Revenue						
Other Operating Income	13,433	14,344	15,871	15,845	15,845	15,845
Total Revenue	89,886	83,287	91,855	104,410	119,367	137,363
Compensation of Employees	21,902	22,318	22,554	22,712	22,871	23,031
Use of Goods & Services	8,750	9,125	10,519	11,684	12,978	14,415
Social Benefits	39,648	39,608	41,103	43,290	45,593	48,019
Subsidies	2,475	6,343	8,685	11,276	11,277	11,278
Other Expenses				7,667	7,667	7,667
Grant Expense						
Depreciation	6,600	6,507	6,629	6,629	6,629	6,629
Total Expenses excluding interest	84,853	95,622	100,247	103,258	107,016	111,040
Operating Surplus/Shortfall	5,033	-12,335	-8,392	1,152	12,352	26,323
Interest Expense	5,503	4,950	4,524	5,000	5,063	5,126
Net Operating Balance	-470	-17,285	-12,916	-3,848	7,289	21,197

ANNUAL BALANCE SHEETS

Below are HELLENIC REPUBLIC (GREECE)'s balance sheets with the projected years based on the assumptions listed on page 5.

			ANNUAL BALANCE SHEETS			
Base Case			(MILLIONS EUR)			
ASSETS	2019	2020	2021	2022	P2023	P2024
Currency and Deposits (asset)	43,907	35,716	38,351	33,753	33,753	33,753
Securities other than Shares LT (asset)	2,370	3,269	3,521	4,060	4,060	4,060
Loans (asset)	-237	2,809	-797	-1,046	-1,278	-1,562
Shares and Other Equity (asset)	15	-18	-571	-659	-761	-878
Insurance Technical Reserves (asset)	119	117	120	114	116	119
Financial Derivatives (asset)				8,217	8,217	8,217
Other Accounts Receivable LT	19,536	22,228	25,705	31,363	38,266	46,689
Monetary Gold and SDR's						
Other Assets					37,352	37,352
Additional Assets	38,895	36,564	39,121	37,352		
Total Financial Assets	104,605	100,685	105,450	113,154	119,726	127,750
LIABILITIES						
Other Accounts Payable	20,069	24,081	26,855	28,974	30,423	31,944
Currency & Deposits (liability)	6,634	6,655	6,757	7,190	7,190	7,190
Securities Other than Shares (liability)	64,485	82,309	92,859	81,691	74,814	68,515
Loans (liability)	275,973	277,606	277,098	276,368	269,079	247,882
Insurance Technical Reserves (liability)	3	64	159	287	293	299
Financial Derivatives (liability)	7,518	8,975	5,119	1,014	913	821
Other Liabilities	966	926	3,848	3,897	3,897	3,897
Liabilities	375,648	400,616	412,695	399,421	398,704	385,531
Net Financial Worth	-271,043	-299,931	-307,245	-286,267	-278,978	-257,781
Total Liabilities & Equity	104,605	100,685	105,450	113,154	119,726	127,750

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 "B" whereas the ratio-implied rating for the most recent period is "B+"; 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 HELLENIC REPUBLIC (GREECE) with the ticker of 1004Z GA we have assigned the senior unsecured rating of B. 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%	22.2	26.2	18.2	BB-	BB-	BB-
Social Contributions Growth %	6.0	9.0	3.0	BB-	BB-	BB-
Other Revenue Growth %		3.0	(3.0)	BB-	BB-	BB-
Total Revenue Growth%	13.7	15.7	11.7	BB-	BB-	BB-
Monetary Gold and SDR's Growth %	5.0	7.0	3.0	BB-	BB-	BB-

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.