

# HELLENIC REPUBLIC (GREECE)

Rating Analysis - 11/27/19

\*EJR Sen Rating(Curr/Prj) CCC+/ NR

\*EJR CP Rating: C

Although Greece has recorded lower GDP declines recently and some actual growth last year, the growth rate of 1.5% for H1 2019 is still low compared to other EU countries. The Debt-to-GDP ratio of 173.3% remains at its historical high.

The recovery which had begun in 2017 had continued last year, but at a slower pace of 1.9%, and a 1.5% growth year on year in the first half of 2019. Greece expects its economy to grow by 2.8% next year, driven by higher investments, improving domestic demand and tax cuts as the country recovers from a decade-long debt crisis. Data from the 2020 budget also forecast a primary surplus of 3.56% of gross domestic product next year, with debt falling to 167% of GDP from 173.3% this year. The Greek economy has been improving slowly. Based on Greece's accessing the market, and the recent repayment of IMF debt (€2.7 billion repaid in Nov 2019 off the €289 billion bail-out) we are upgrading Greece to the rating of "CCC+" with a developing watch. Other raters are likely to take pos. actions.

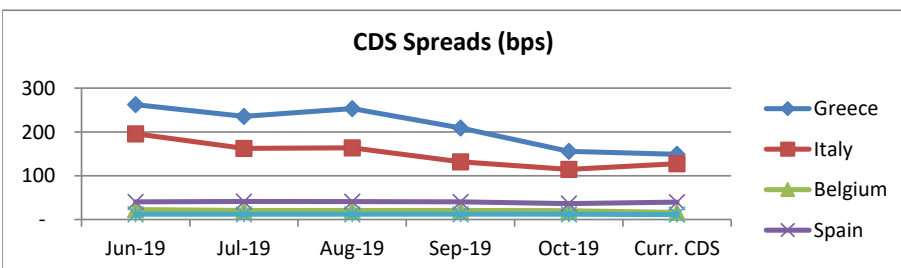
## CREDIT POSITION

	Annual Ratios (source for past results: IMF)					
	2016	2017	2018	P2019	P2020	P2021
Debt/ GDP (%)	185.7	188.0	192.0	185.4	177.8	168.8
Govt. Sur/Def to GDP (%)	0.1	-0.2	-0.2	1.2	2.5	3.8
Adjusted Debt/GDP (%)	185.7	188.0	192.0	185.4	177.8	168.8
Interest Expense/ Taxes (%)	11.6	11.6	12.3	12.1	12.0	11.8
GDP Growth (%)	-0.4	2.1	2.5	2.3	2.3	2.5
Foreign Reserves/Debt (%)	0.6	0.6	0.5	0.5	0.5	0.6
Implied Sen. Rating	CCC	CCC+	CCC	CCC+	CCC+	CCC+

## 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

	Other NRSRO Sen.	Debt as a % of GDP	Govt. Surp. Def to GDP (%)	Adjusted Debt/ GDP	Interest Expense/ Taxes %	GDP Growth (%)	Ratio-Implied Rating*
<b>PEER RATIOS</b>							
Austria	AA+	91.6	0.6	91.6	6.1	4.2	AA+
French Republic	AA	122.1	-2.4	122.1	5.6	2.5	BBB
Kingdom Of Belgium	AA	119.9	-0.4	119.9	7.2	2.6	A+
Kingdom Of Spain	BBB	113.9	-2.7	113.9	10.8	3.5	A
Republic Of Italy	BBB-	147.3	-2.7	147.3	12.9	1.7	BB

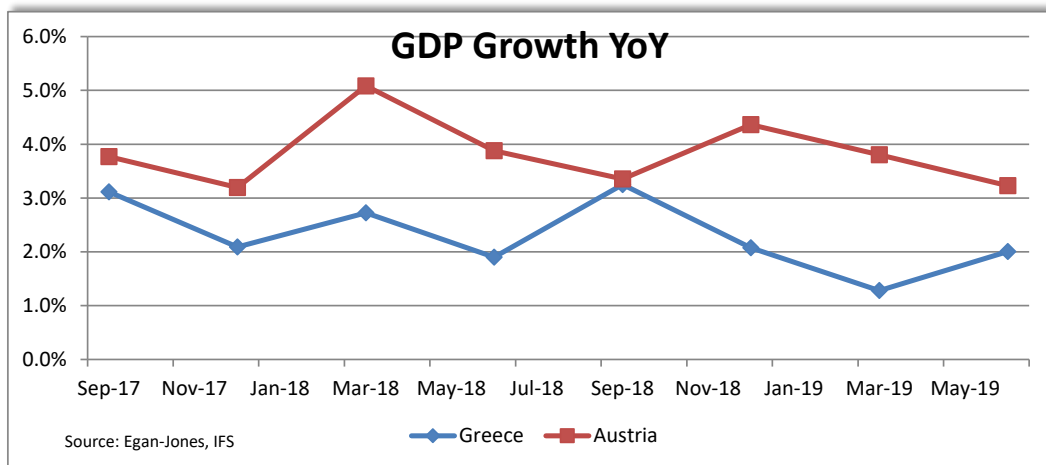


Country	CDS
Greece	149
Italy	127
Belgium	16
Spain	40
Austria	11

**Economic Growth**

Greece emerged from international bailouts supervised by its lenders in August 2018. But it still needs to meet fiscal targets, including a primary budget surplus - which excludes interest payments on its debt - of 3.5% of GDP up to 2022.

Greece's euro zone lenders project that Greece's economy will remain resilient next year, forecasting 2.3% economic growth in 2020, more than the euro area average of 1.2%.



**Fiscal Policy**

Greece is on course to overachieve the agreed primary surplus target of 3.5% of GDP in 2019, the fifth year in a row when targets would be exceeded. This dissipates concerns that surfaced earlier this year that the adoption of fiscal measures worth 0.7% of GDP in May 2019 would pose a risk for the achievement of the primary surplus target. The European institutions currently estimate the fiscal cost of the measures in 2019 at 0.7% of GDP, compared with 1.1-1.4% of Q2'19 GDP.

	Surplus-to-GDP (%)	Debt-to-GDP (%)	5 Yr. CDS Spreads
Greece	-0.16	192.00	148.84
Austria	0.56	91.58	11.17
France	-2.35	122.14	18.06
Belgium	-0.40	119.91	16.18
Spain	-2.71	113.89	39.68
Italy	-2.67	147.31	127.18

Sources: Thomson Reuters and IFS

**Unemployment**

The labour market shows further improvements and unemployment continues to decline at a steady pace. Employment is forecast to grow above 2% in 2019 and 2020, driving the unemployment rate down from 19.3% in 2018 to around 17% this year and close to 15% in 2020. Inflation is expected to be muted in the short term on the back of the recent cuts in indirect taxes and oil price developments, and to increase moderately in the medium term.

	Unemployment (%)	
	2017	2018
Greece	21.42	19.27
Austria	5.52	4.86
France	9.43	9.11
Belgium	7.10	5.90
Spain	17.23	15.26
Italy	11.23	10.62

Source: Intl. Finance Statistics

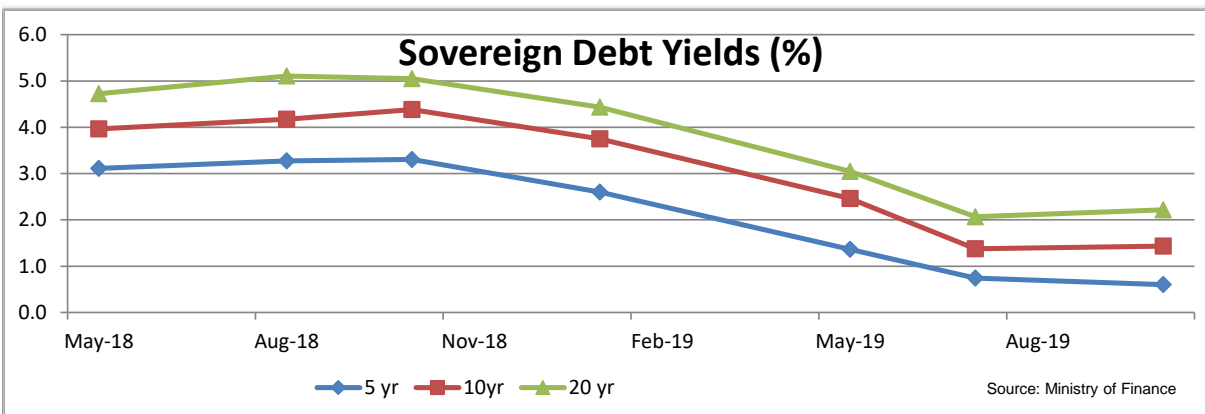
**Banking Sector**

The liquidity situation of Greek banks has improved and there are signs that the banks' market access is gradually re-established but legacy risks and challenges remain high. In the first nine months of 2019, banks' private sector deposits have increased by about 3.5% and the emergency liquidity assistance was fully repaid in the beginning of the year. The pace of decline in non-performing loans has accelerated since 2018, reaching 45.4% and 43.6% of total customer loans at end-2018 and mid-2019.

Bank Assets (billions of local currency)		
	Assets	Mkt Cap/ Assets %
NATL BANK GREECE	65.1	4.37
EUROBANK ERGASIA	58.0	6.12
ALPHA BANK A.E.	61.0	4.78
PIRAEUS BANK	61.9	2.18
ATTICA BANK SA	3.4	5.92
Total	249.3	
EJR's est. of cap shortfall at 10% of assets less market cap		14.1
Greece's GDP		184.7

**Funding Costs**

Greece maintained its presence on the government bond market by issuing bonds in July and re-opening the books of an earlier issuance in October. The bond reached a 1.9% reoffered yield with a coupon of 1.875% - the lowest yield ever achieved by the Greek government for a euro-denominated benchmark syndication up to that day. The government bond yield spreads started to slowly moderate after the successful conclusion of the ESM programme in 2018. State cash reserves remained high at around €20.3 bn as of end-September 2019.



**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*			
	2019	2018	Change in
	Rank	Rank	Rank
<b>Overall Country Rank:</b>	<b>79</b>	<b>67</b>	<b>-12</b>
<b>Scores:</b>			
Starting a Business	11	37	26
Construction Permits	86	58	-28
Getting Electricity	40	76	36
Registering Property	156	145	-11
Getting Credit	119	90	-29
Protecting Investors	37	43	6
Paying Taxes	72	65	-7
Trading Across Borders	34	29	-5
Enforcing Contracts	146	131	-15
Resolving Insolvency	72	57	-15

\* 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 57.7 for Economic Freedom with 100 being best.

<b>Heritage Foundation 2019 Index of Economic Freedom</b>				
<b>World Rank 57.7*</b>				
	<b>2019 Rank**</b>	<b>2018 Rank</b>	<b>Change in Rank</b>	<b>World Avg.</b>
<b>Property Rights</b>	<b>52.4</b>	<b>52.3</b>	<b>0.1</b>	<b>52.3</b>
<b>Government Integrity</b>	<b>49.5</b>	<b>37.9</b>	<b>11.6</b>	<b>44.9</b>
<b>Judicial Effectiveness</b>	<b>37.7</b>	<b>59.0</b>	<b>-21.3</b>	<b>41.5</b>
<b>Tax Burden</b>	<b>59.1</b>	<b>60.4</b>	<b>-1.3</b>	<b>77.2</b>
<b>Gov't Spending</b>	<b>23.3</b>	<b>20.9</b>	<b>2.4</b>	<b>64.2</b>
<b>Fiscal Health</b>	<b>79.0</b>	<b>70.5</b>	<b>8.5</b>	<b>66.0</b>
<b>Business Freedom</b>	<b>74.1</b>	<b>74.4</b>	<b>-0.3</b>	<b>63.5</b>
<b>Labor Freedom</b>	<b>52.5</b>	<b>54.4</b>	<b>-1.9</b>	<b>59.4</b>
<b>Monetary Freedom</b>	<b>79.1</b>	<b>81.0</b>	<b>-1.9</b>	<b>75.1</b>
<b>Trade Freedom</b>	<b>81.0</b>	<b>81.9</b>	<b>-0.9</b>	<b>74.3</b>

\*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 3.2% per annum in the last fiscal year which is disappointing. We expect tax revenues will grow approximately 3.2% per annum over the next couple of years and 3.2% per annum for the next couple of years thereafter.

**Credit Quality Driver: Total Revenue Growth:**

HELLENIC REPUBLIC (GREECE)'s total revenue growth has been less 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%	5.1	3.2	3.2	3.2
Social Contributions Growth %	4.2	1.4	1.4	1.4
Grant Revenue Growth %	0.0	NMF		
Other Revenue Growth %	0.0	NMF		
Other Operating Income Growth%	0.0	(1.6)	(1.6)	(1.6)
Total Revenue Growth%	3.4	2.0	2.0	1.8
Compensation of Employees Growth%	2.7	1.0	1.0	1.0
Use of Goods & Services Growth%	1.8	(10.6)	(10.6)	(10.6)
Social Benefits Growth%	2.9	(0.3)	(0.3)	(0.3)
Subsidies Growth%	0.7	(8.6)		
Other Expenses Growth%	0.0			
Interest Expense	1.8	1.7	1.7	1.7
Currency and Deposits (asset) Growth%	8.1	0.0		
Securities other than Shares LT (asset) Growth%	3.5	0.0		
Loans (asset) Growth%	(0.6)	(1.4)	(1.4)	(1.4)
Shares and Other Equity (asset) Growth%	1.1	(11.0)	2.0	2.0
Insurance Technical Reserves (asset) Growth%	0.0	0.0		
Financial Derivatives (asset) Growth%	0.0	0.0		
Other Accounts Receivable LT Growth%	0.8	1.9	1.9	1.9
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	(11.8)	3.0	3.0
Currency & Deposits (liability) Growth%	3.5	1.6	1.6	1.6
Securities Other than Shares (liability) Growth%	1.2	(5.5)	(3.9)	(3.9)
Loans (liability) Growth%	(2.4)	7.8	7.8	7.8
Insurance Technical Reserves (liability) Growth%	0.0	5.6	2.0	2.0
Financial Derivatives (liability) Growth%	(10.0)	(3.4)	(3.4)	(3.4)
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)					
	2015	2016	2017	2018	P2019	P2020
Taxes	45,520	48,092	48,502	50,051	51,653	53,306
Social Contributions	24,422	24,908	25,972	26,329	26,691	27,058
Grant Revenue						
Other Revenue						
Other Operating Income	14,892	14,171	12,154	11,954	11,954	11,954
Total Revenue	84,834	87,171	86,628	88,334	90,298	92,317
Compensation of Employees	21,530	21,429	21,516	21,727	21,940	22,155
Use of Goods & Services	8,795	9,054	9,053	8,096	7,240	6,475
Social Benefits	39,051	38,944	38,426	38,296	38,166	38,037
Subsidies	1,739	1,802	1,701	1,554	1,554	1,554
Other Expenses				6,191	6,191	6,191
Grant Expense						
Depreciation	6,760	6,709	6,611	6,611	6,611	6,611
Total Expenses excluding interest	87,110	81,445	81,294	82,475	81,703	81,024
Operating Surplus/Shortfall	-2,276	5,726	5,334	5,859	8,595	11,294
Interest Expense	<u>6,195</u>	<u>5,572</u>	<u>5,629</u>	<u>6,158</u>	<u>6,265</u>	<u>6,374</u>
Net Operating Balance	-8,471	154	-295	-299	2,330	4,920

**ANNUAL BALANCE SHEETS**

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

Base Case	ANNUAL BALANCE SHEETS (MILLIONS EUR)					
	2015	2016	2017	2018	P2019	P2020
<b>ASSETS</b>						
Currency and Deposits (asset)	15,648	21,331	24,507	43,556	43,556	43,556
Securities other than Shares LT (asset)	956	795	776	1,849	1,849	1,849
Loans (asset)	4,745	4,470	4,211	4,154	4,098	4,042
Shares and Other Equity (asset)	30,646	27,488	29,610	26,348	26,875	27,412
Insurance Technical Reserves (asset)	45	179	96	120	120	120
Financial Derivatives (asset)						
Other Accounts Receivable LT	18,374	19,520	18,718	19,083	19,455	19,834
Monetary Gold and SDR's						
<b>Other Assets</b>						
Additional Assets		<u>-1</u>				
<b>Total Financial Assets</b>	<b>70,414</b>	<b>73,782</b>	<b>77,918</b>	<b>95,110</b>	<b>95,953</b>	<b>96,814</b>
<b>LIABILITIES</b>						
Other Accounts Payable	19,911	18,399	16,283	14,363	14,794	15,238
Currency & Deposits (liability)	5,546	5,987	6,008	6,107	6,107	6,107
Securities Other than Shares (liability)	46,810	44,250	52,139	49,251	47,341	45,506
Loans (liability)	250,378	258,019	263,441	283,918	281,588	276,668
Insurance Technical Reserves (liability)	47	38	54	57	58	59
Financial Derivatives (liability)	3,939	4,221	3,936	3,801	3,671	3,545
Other Liabilities	<u>995</u>	<u>997</u>	<u>930</u>	<u>950</u>	<u>950</u>	<u>950</u>
<b>Liabilities</b>	<b>327,626</b>	<b>331,911</b>	<b>342,791</b>	<b>358,447</b>	<b>356,960</b>	<b>352,902</b>
<b>Net Financial Worth</b>	<b><u>-257,212</u></b>	<b><u>-258,129</u></b>	<b><u>-264,872</u></b>	<b><u>-263,337</u></b>	<b><u>-261,007</u></b>	<b><u>-256,087</u></b>
<b>Total Liabilities &amp; Equity</b>	<b>70,414</b>	<b>73,782</b>	<b>77,919</b>	<b>95,110</b>	<b>95,953</b>	<b>96,814</b>

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

**Changes in Indicative Ratios**

The industry has recovered over the past couple of years and we have adjusted the ratios to reflect the improvement. Nonetheless, we prefer to smooth the results so if the business conditions deteriorate, the industry ratios can be adjusted at a more measured pace.



**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 CCC+. 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](http://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%	3.2	7.2	(0.8)	CCC+	CCC+	CCC
Social Contributions Growth %	1.4	4.4	(1.6)	CCC+	CCC+	CCC+
Other Revenue Growth %		3.0	(3.0)	CCC+	CCC+	CCC+
Total Revenue Growth%	2.0	4.0	(0.0)	CCC+	CCC+	CCC+
Monetary Gold and SDR's Growth %	5.0	7.0	3.0	CCC+	CCC+	CCC+

**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.

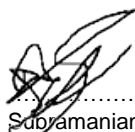
**ATTESTATION FORM**

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**

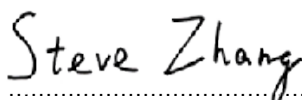


Subramanian NG  
Senior Rating Analyst

November 27, 2019

**Reviewer Signature:**

**Today's Date**



Steve Zhang  
Senior Rating Analyst

November 27, 2019