

# UNITED KINGDOM

Rating Analysis - 12/19/19

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

\*EJR CP Rating: A1

The outlook is uncertain given the risks around exit from the European Union. Assuming there is a smooth transition ending after 2021, activity is expected to grow at around 1% in the next two years. Brexit-related uncertainty will keep holding back investment until there is clarity about future trading arrangements. Weak global economic prospects will slow the recovery in exports. Inflation is projected to slow to below 2%.

Persistent weakness in investment is starting to erode long-term prospects. The unemployment rate has ticked upward and the number of vacancies has started falling. Net migration from the European Union has decelerated markedly since 2017 and has been only partly compensated for by more migrants from non-EU countries. Inflation has recently fallen below target. Exit from the European Union without an agreed deal would significantly damage the economy, especially if it triggers turbulence in financial markets. We are affirming with a devlp. watch.

## CREDIT POSITION

	2016	2017	2018	P2019	P2020	P2021
Debt/ GDP (%)	119.1	116.5	113.2	110.7	107.8	104.5
Govt. Sur/Def to GDP (%)	-1.9	-0.7	-0.4	0.0	0.3	0.6
Adjusted Debt/GDP (%)	119.1	116.5	113.2	110.7	107.8	104.5
Interest Expense/ Taxes (%)	9.0	9.9	9.0	8.8	8.7	8.5
GDP Growth (%)	3.9	4.1	3.3	2.3	2.3	2.5
Foreign Reserves/Debt (%)	3.7	3.7	4.6	4.7	5.6	5.8
Implied Sen. Rating	A+	A+	A+	A+	A+	A+

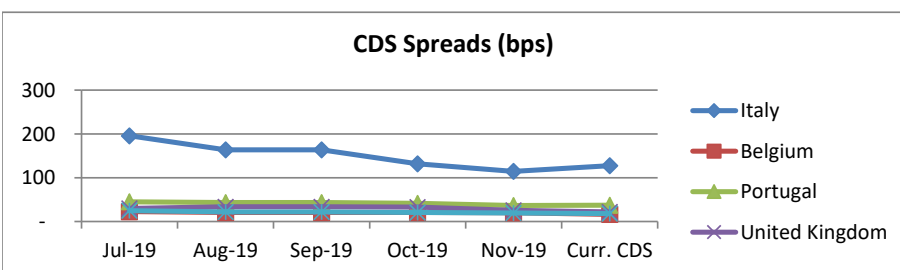
## Annual Ratios (source for past results: IMF)

## 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

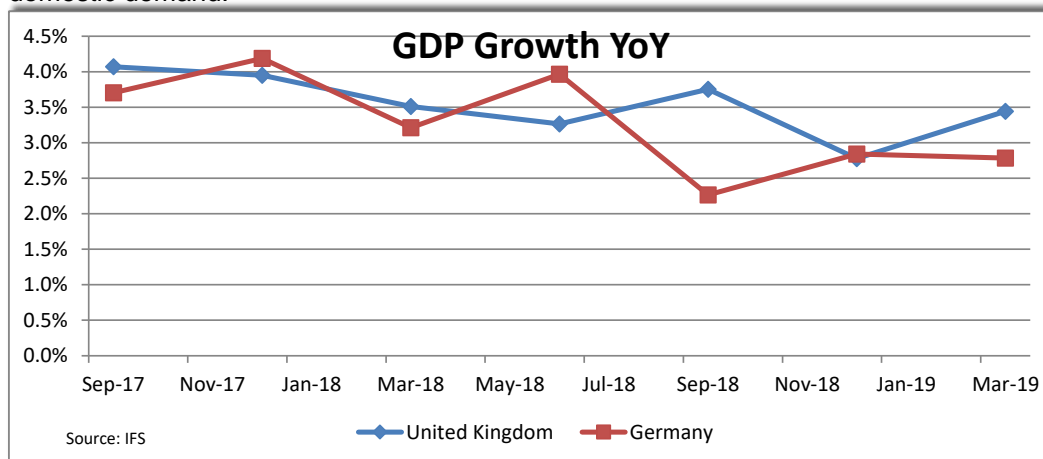
	Other NRSRO Sen.	Debt as a % GDP	Govt. Surp. Def to GDP (%)	Adjusted Debt/ GDP	Interest Expense/ Taxes %	GDP Growth (%)	Ratio-Implied Rating*
Federal Republic Of Germany	AAA	69.2	1.8	69.2	3.9	3.1	AA
French Republic	AA	122.1	-2.4	122.1	5.6	2.5	BBB+
Kingdom Of Belgium	AA	119.9	-0.4	119.9	7.2	2.6	A
Republic Of Italy	BBB-	147.3	-2.7	147.3	12.9	1.7	BB+
Portugal Republic	BB+	139.0	-1.2	139.0	13.4	4.1	A-



Country	EJR Rtg.	CDS
Italy	BBB-	127
Belgium	BBB	16
Portugal	BBB	37
United Kingdom	A+	22
France	A+	18

**Economic Growth**

The UK economy grew 1% YOY in Q3'19 - the slowest annual rate since the beginning of 2010. The country managed to dodge a recession, with quarterly growth rebounding to 0.3% after a negative reading in the second quarter. Years of confusion over Brexit have taken a toll on investment and productivity, leading some economists to call for more stimulus from Britain's central bank. Manufacturing was flat over the third quarter, while the trade deficit narrowed on growing exports of goods and services. If political risks can fade a little, household spending is likely to underpin a healthy rebound in domestic demand.



**Fiscal Policy**

The monetary policy stance has appropriately remained accommodative in the context of high uncertainty. If there were to be a disruptive exit, the Bank of England should stimulate the economy by cutting interest rates and buying bonds, although this would be insufficient to fully offset the sizeable output loss in such an event. The aim will be to reduce the counter-cyclical capital buffer rate to preserve banks' capacity to lend to households and firms in case of financial turbulence. The government has announced a significant increase in spending for the fiscal year 2020-21 and has also signalled future tax cuts and additional spending increases.

	Surplus-to-GDP (%)	Debt-to-GDP (%)	5 Yr. CDS Spreads
United Kingdom	-0.39	113.24	21.92
Germany	1.77	69.18	9.61
France	-2.35	122.14	18.06
Belgium	-0.40	119.91	16.18
Italy	-2.67	147.31	127.18
Portugal	-1.18	139.04	36.94

Sources: Thomson Reuters and IFS

**Unemployment**

UK wage growth slowed down in the three months to September, with unemployment dropped by 23,000 to 1.31M over the same period. Average earnings excluding bonuses increased by 3.6%, compared with 3.8% growth in the previous month. The figures also showed the biggest annual drop in the number of job vacancies in nearly 10 years. The ninth consecutive monthly fall in available jobs saw advertised positions fall by 18,000 to 800,000. Pay growth continues to outstrip inflation, as it has done for over 18 months now. Although the UK has had a good run of strong employment and wage growth, more recent data suggest that uncertainty is starting to bite.

	Unemployment (%)	
	2017	2018
United Kingdom	4.40	4.09
Germany	3.76	3.40
France	9.43	9.11
Belgium	7.10	5.90
Italy	11.23	10.62
Portugal	9.02	7.05

Source: Intl. Finance Statistics

**Banking Sector**

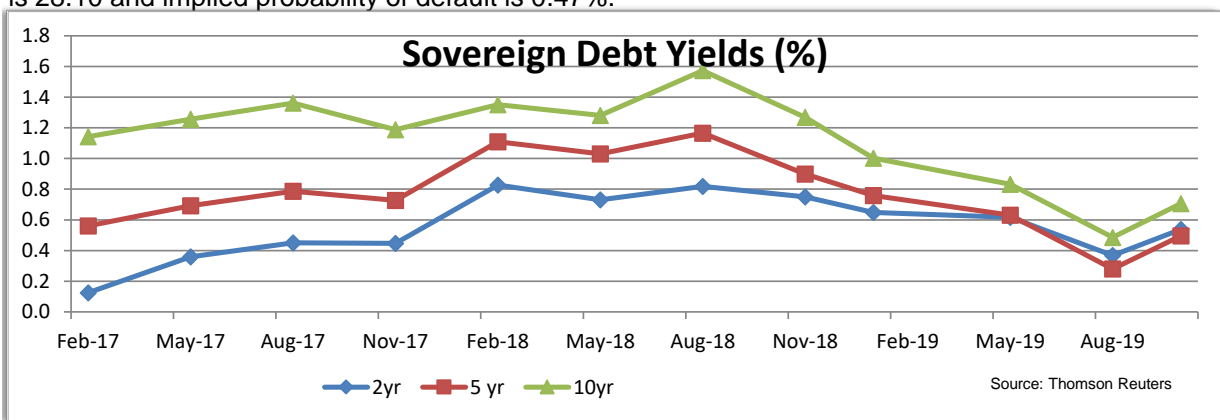
The domestic UK banking outlook largely depends on the Brexit trajectory which remains highly uncertain. Aside from the Brexit overhang, stated earnings have come under significant pressure due to the decline in SWAP rates impacting NII and the spike in PPI costs impacting capital generation.

The Bank of England wrote to the Treasury Committee and provided it with an updated Hard Brexit, Disorderly exit scenario analysis that showed a peak-to-trough GDP decline of 5.5%, unemployment of 7% and inflation at 5.25%.

<b>Bank Assets (billions of local currency)</b>		
	Assets	Mkt Cap/ Assets %
HSBC HLDGS PLC	2,558.1	460.38
ROYAL BK SCOTLAN	694.2	391.79
BARCLAYS PLC	1,133.3	257.96
LLOYDS BANKING	797.6	525.01
STANDARD CHARTER	<u>688.8</u>	<u>320.29</u>
Total	5,872.0	
EJR's est. of cap shortfall at 10% of assets less market cap		NMF
United Kingdom's GDP		2,117.7

**Funding Costs**

In Nov 2019, UK public sector net debt was £1,790.9B equivalent to 80.3% of GDP. One potential confusion is that politicians may say the budget deficit is coming down. But, at the same time, national debt is rising. Although 80% of GDP is high by recent UK standards, other countries have a much bigger problem. Japan, for example, has a National debt to GDP ratio of 225% and Italy's is over 120%, suggesting that the UK's level is manageable. United Kingdom 10-year Government Bond has a 0.670% yield with Central Bank Rate is 0.75% and the current 5-Year Credit Default Swap quotation is 28.10 and implied probability of default is 0.47%.



**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 8 (1 is best, 189 worst) is extremely strong.

<b>The World Bank's Doing Business Survey*</b>			
	2019	2018	Change in
	Rank	Rank	Rank
<b>Overall Country Rank:</b>	<b>8</b>	<b>7</b>	<b>-1</b>
<b>Scores:</b>			
Starting a Business	18	14	-4
Construction Permits	23	14	-9
Getting Electricity	8	9	1
Registering Property	41	47	6
Getting Credit	37	29	-8
Protecting Investors	7	10	3
Paying Taxes	27	23	-4
Trading Across Borders	33	28	-5
Enforcing Contracts	34	31	-3
Resolving Insolvency	14	14	0

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

**Economic Freedom**

As can be seen below, United Kingdom is strong in its overall rank of 78.9 for Economic Freedom with 100 being best.

<b>Heritage Foundation 2019 Index of Economic Freedom</b>				
<b>World Rank 78.9*</b>				
	<b>2019</b>	<b>2018</b>	<b>Change in</b>	<b>World</b>
	<b>Rank**</b>	<b>Rank</b>	<b>Rank</b>	<b>Avg.</b>
<b>Property Rights</b>	<b>92.3</b>	<b>92.2</b>	<b>0.1</b>	<b>52.3</b>
<b>Government Integrity</b>	<b>85.9</b>	<b>79.0</b>	<b>6.9</b>	<b>44.9</b>
<b>Judicial Effectiveness</b>	<b>83.8</b>	<b>93.8</b>	<b>-10.0</b>	<b>41.5</b>
<b>Tax Burden</b>	<b>64.7</b>	<b>65.2</b>	<b>-0.5</b>	<b>77.2</b>
<b>Gov't Spending</b>	<b>48.2</b>	<b>44.4</b>	<b>3.8</b>	<b>64.2</b>
<b>Fiscal Health</b>	<b>68.6</b>	<b>53.5</b>	<b>15.1</b>	<b>66.0</b>
<b>Business Freedom</b>	<b>92.9</b>	<b>91.1</b>	<b>1.8</b>	<b>63.5</b>
<b>Labor Freedom</b>	<b>73.5</b>	<b>74.4</b>	<b>-0.9</b>	<b>59.4</b>
<b>Monetary Freedom</b>	<b>81.2</b>	<b>85.2</b>	<b>-4.0</b>	<b>75.1</b>
<b>Trade Freedom</b>	<b>86.0</b>	<b>86.9</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:**

UNITED KINGDOM has grown its taxes of 3.9% per annum in the last fiscal year which is disappointing. We expect tax revenues will grow approximately 3.9% per annum over the next couple of years and 3.9% per annum for the next couple of years thereafter.

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

UNITED KINGDOM'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%	4.6	3.9	3.9	3.9
Social Contributions Growth %	4.2	3.5	3.5	3.5
Grant Revenue Growth %	0.0	NMF		
Other Revenue Growth %	0.0	NMF		
Other Operating Income Growth%	0.0	3.1	3.1	3.1
Total Revenue Growth%	3.4	3.8	3.8	3.4
Compensation of Employees Growth%	2.2	3.0	3.0	3.0
Use of Goods & Services Growth%	3.5	4.1	4.1	4.1
Social Benefits Growth%	2.8	2.4	2.4	2.4
Subsidies Growth%	0.7	15.9		
Other Expenses Growth%	0.0			
Interest Expense	1.8	2.2	2.2	2.2
Currency and Deposits (asset) Growth%	3.0	0.0		
Securities other than Shares LT (asset) Growth%	3.5	0.0		
Loans (asset) Growth%	(1.3)	11.8	3.9	3.9
Shares and Other Equity (asset) Growth%	1.1	(2.5)	2.0	2.0
Insurance Technical Reserves (asset) Growth%	0.0	0.0		
Financial Derivatives (asset) Growth%	0.0	19.1	3.9	3.9
Other Accounts Receivable LT Growth%	0.8	(1.2)	(1.2)	(1.2)
Monetary Gold and SDR's Growth %	0.0	31.9	31.9	28.7
Other Assets Growth%	0.0	0.0		
Other Accounts Payable Growth%	(0.4)	6.8	3.9	3.9
Currency & Deposits (liability) Growth%	2.5	1.0	1.0	1.0
Securities Other than Shares (liability) Growth%	1.2	(0.1)	(0.1)	(0.1)
Loans (liability) Growth%	(2.4)	26.9	26.9	24.2
Insurance Technical Reserves (liability) Growth%	0.0	(40.7)	3.0	3.0
Financial Derivatives (liability) Growth%	0.0	(7.0)	(7.0)	(7.0)
Additional ST debt (1st year)(millions GBP)	0.0	0.0		

**ANNUAL INCOME STATEMENTS**

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

	<b>ANNUAL REVENUE AND EXPENSE STATEMENT</b>					
	<b>(MILLIONS GBP)</b>					
	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>P2019</b>	<b>P2020</b>
<b>Taxes</b>	<b>505,408</b>	<b>532,872</b>	<b>561,889</b>	<b>584,040</b>	<b>606,818</b>	<b>630,483</b>
<b>Social Contributions</b>	<b>142,880</b>	<b>151,790</b>	<b>160,571</b>	<b>166,237</b>	<b>172,103</b>	<b>178,176</b>
<b>Grant Revenue</b>						
<b>Other Revenue</b>						
<b>Other Operating Income</b>	<b>72,187</b>	<b>73,553</b>	<b>79,815</b>	<b>82,275</b>	<b>82,275</b>	<b>82,275</b>
<b>Total Revenue</b>	<b>720,475</b>	<b>758,215</b>	<b>802,275</b>	<b>832,552</b>	<b>861,195</b>	<b>890,934</b>
<b>Compensation of Employees</b>	<b>172,678</b>	<b>178,334</b>	<b>184,257</b>	<b>189,817</b>	<b>195,545</b>	<b>201,445</b>
<b>Use of Goods &amp; Services</b>	<b>159,597</b>	<b>159,867</b>	<b>161,728</b>	<b>168,413</b>	<b>175,374</b>	<b>182,623</b>
<b>Social Benefits</b>	<b>306,645</b>	<b>311,946</b>	<b>315,102</b>	<b>322,561</b>	<b>330,197</b>	<b>338,013</b>
<b>Subsidies</b>	<b>11,641</b>	<b>13,150</b>	<b>15,683</b>	<b>18,174</b>	<b>18,176</b>	<b>18,178</b>
<b>Other Expenses</b>				<b>58,424</b>	<b>58,424</b>	<b>58,424</b>
<b>Grant Expense</b>						
<b>Depreciation</b>	<b>29,129</b>	<b>29,705</b>	<b>30,390</b>	<b>30,927</b>	<b>30,927</b>	<b>30,927</b>
<b>Total Expenses excluding interest</b>	<b>736,929</b>	<b>748,180</b>	<b>761,989</b>	<b>788,316</b>	<b>808,642</b>	<b>829,610</b>
<b>Operating Surplus/Shortfall</b>	<b>-16,454</b>	<b>10,035</b>	<b>40,286</b>	<b>44,236</b>	<b>52,553</b>	<b>61,324</b>
<b>Interest Expense</b>	<b><u>43,886</u></b>	<b><u>48,030</u></b>	<b><u>55,415</u></b>	<b><u>52,391</u></b>	<b><u>53,536</u></b>	<b><u>54,705</u></b>
<b>Net Operating Balance</b>	<b>-60,340</b>	<b>-37,995</b>	<b>-15,129</b>	<b>-8,155</b>	<b>-983</b>	<b>6,619</b>

**ANNUAL BALANCE SHEETS**

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

Base Case	ANNUAL BALANCE SHEETS (MILLIONS GBP)					
	2015	2016	2017	2018	P2019	P2020
<b>ASSETS</b>						
Currency and Deposits (asset)	76,087	80,273	95,529	97,650	97,650	97,650
Securities other than Shares LT (asset)	71,255	88,706	84,200	91,381	91,381	91,381
Loans (asset)	153,110	168,867	172,086	192,438	199,943	207,741
Shares and Other Equity (asset)	187,121	182,259	187,626	182,908	186,566	190,297
Insurance Technical Reserves (asset)	639	654	634	623	623	623
Financial Derivatives (asset)	2,073	-6,470	-3,043	-3,624	-3,765	-3,912
Other Accounts Receivable LT	83,005	89,026	92,433	91,288	90,157	89,040
Monetary Gold and SDR's	55	-1,397	1,231	1,624	2,142	2,826
<b>Other Assets</b>					18,803	18,803
Additional Assets	<u>16,160</u>	<u>19,655</u>	<u>16,817</u>	<u>18,803</u>		
<b>Total Financial Assets</b>	<b>589,505</b>	<b>621,573</b>	<b>647,513</b>	<b>673,091</b>	<b>683,501</b>	<b>694,450</b>
<b>LIABILITIES</b>						
Other Accounts Payable	74,075	71,542	70,464	75,269	78,204	81,254
Currency & Deposits (liability)	154,736	172,617	188,328	190,254	190,254	190,254
Securities Other than Shares (liability)	1,771,067	2,036,071	2,062,415	2,060,209	2,058,666	2,057,125
Loans (liability)	34,565	33,970	41,326	52,441	53,424	46,805
Insurance Technical Reserves (liability)	25,931	20,704	15,064	8,927	9,195	9,471
Financial Derivatives (liability)	2,216	1,680	1,466	1,364	1,269	1,181
Other Liabilities	<u>9,476</u>	<u>11,074</u>	<u>10,681</u>	<u>11,102</u>	<u>11,102</u>	<u>11,102</u>
<b>Liabilities</b>	<b>2,072,066</b>	<b>2,347,658</b>	<b>2,389,744</b>	<b>2,399,566</b>	<b>2,410,958</b>	<b>2,415,289</b>
<b>Net Financial Worth</b>	<b><u>-1,482,561</u></b>	<b><u>-1,726,085</u></b>	<b><u>-1,742,231</u></b>	<b><u>-1,726,475</u></b>	<b><u>-1,727,458</u></b>	<b><u>-1,720,839</u></b>
<b>Total Liabilities &amp; Equity</b>	<b>589,505</b>	<b>621,573</b>	<b>647,513</b>	<b>673,091</b>	<b>683,501</b>	<b>694,450</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 adjustment which are reflected in the results for the projected ratings. We have assigned a rating of "A+" whereas the ratio-implied rating for the recent period is "A+"; we expect results to remain approximately the same.

**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 UNITED KINGDOM with the ticker of 6152Z LN we have assigned the senior unsecured rating of A+.

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%	3.9	7.9	(0.1)	A+	AA-	A
Social Contributions Growth %	3.5	6.5	0.5	A+	A+	A+
Other Revenue Growth %		3.0	(3.0)	A+	A+	A+
Total Revenue Growth%	3.8	5.8	1.8	A+	A+	A+
Monetary Gold and SDR's Growth %	31.9	33.9	29.9	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.

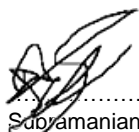
**ATTESTATION FORM**

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**

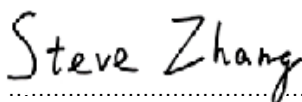


December 19, 2019

Subramanian NG  
Senior Rating Analyst

**Reviewer Signature:**

**Today's Date**



December 19, 2019

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.*