

# FEDERAL REPUBLIC OF GERMANY

Rating Analysis - 6/30/16

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

\*EJR CP Rating: A1+

EJR's 3 yr. Default Probability: 1.0%

As a result of tight budget controls and record low borrowing costs, Germany has recorded a budget surplus since 2014. We expect debt to GDP to drop further to 70%. The Quantitative Easing program that started in March 2016 will push the yields further down to the south of 0.1%. However, Germany's dependence on stability of Eurozone increases the risk. Balance of trade increased 13% and the current account increased by 43.65%. These are positive indicators for the economy.

Political headwinds such as the migration crisis and the Brexit continue to affect the ruling party and must be factored in. Dependence on exports exposes Germany to external downturns. Private consumption has increased by 1.9% from last year on an inflated adjusted basis. A major concern remains the health of the banking sector; Deutsche Bank's assets are equal to 53.89% of GDP. Upgrading to "AA". Note, to reflect the propensity of central banks to support sovereign obligors, we have eased our indicative credit ratios, resulting in some upgrades.

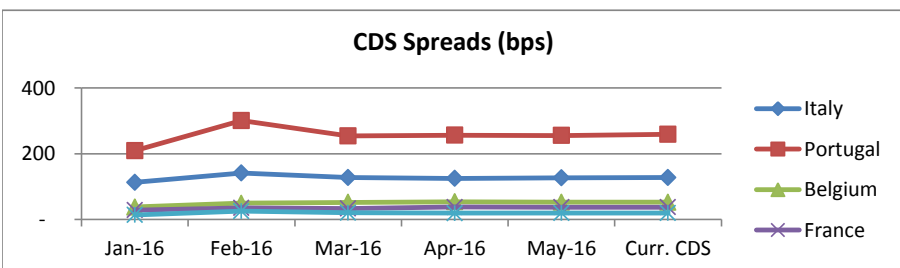
## Annual Ratios (source for past results: IMF)

CREDIT POSITION	2013	2014	2015	P2016	P2017	P2018
Debt/ GDP (%)	77.5	75.0	71.2	68.9	67.2	65.3
Govt. Sur/Def to GDP (%)	-0.2	0.2	0.6	0.2	-0.2	-0.5
Adjusted Debt/GDP (%)	77.5	75.0	71.2	69.1	67.3	65.5
Interest Expense/ Taxes (%)	8.7	7.7	7.0	6.9	6.9	6.8
GDP Growth (%)	2.2	3.4	4.1	2.5	2.5	3.0
Foreign Reserves/Debt (%)	1.4	1.5	1.5	1.7	1.7	1.7
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 % GDP	Govt. Surp. Def to GDP (%)	Adjusted Debt/ GDP	Interest Expense/ Taxes %	GDP Growth (%)	Ratio-Implied Rating*
Kingdom Of Belgium	AA	106.0	-2.6	106.0	9.6	1.9	A
French Republic	AA	96.0	-3.4	96.0	7.0	2.4	AA-
United Kingdom	AAA	89.2	-3.5	89.2	8.7	4.0	AA
Republic Of Italy	BBB-	132.9	-3.0	132.9	13.9	1.1	BBB
Portugal Republic	BB+	129.0	-5.1	129.0	18.0	3.4	BBB+

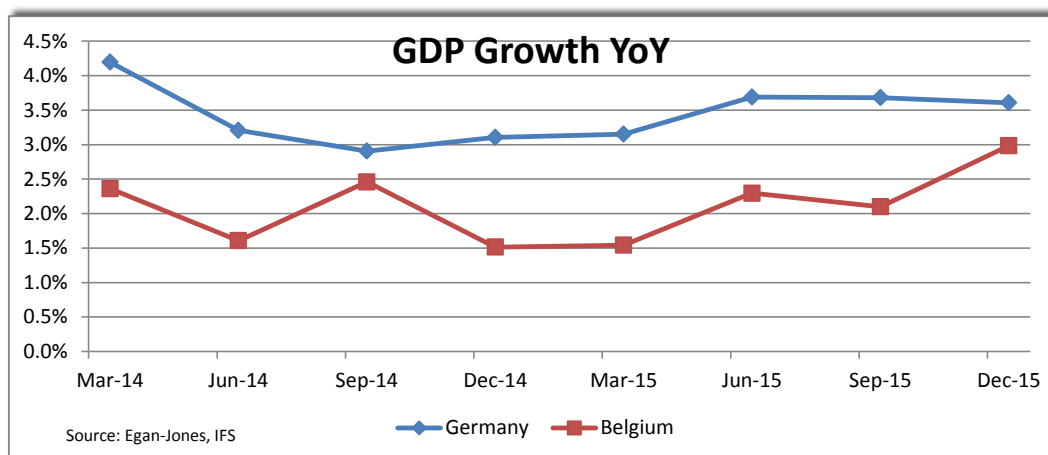


Country	CDS
Italy	128
Portugal	259
Belgium	53
France	37
Germany	20

**Economic Growth**

Germany's nominal GDP is growing at a steady pace of 3.6% (Dec'15 YoY) and is expected to grow at 3% for the next two years by the OECD. Strong labor market and low oil price will boost private consumption. Low interest rates along with housing needs of refugees (est. 2 million) will result in a surge of residential investments. Domestic demand will be the main driver of growth.

Strong tax revenue growth and declining debt servicing costs are expected to keep the government budget in surplus, notwithstanding rising spending. However a sharp slowdown of activity in emerging market economies and protracted weak demand in the euro area would weaken exports and investments.



**Fiscal Policy**

Germany's surplus to GDP has increased from 0.17% in 2013 to 0.59% in 2015. These are reasonably strong numbers. In our opinion government spending to integrate immigrants into the labor force is expected to increase by 0.3% of GDP in each of 2016 and 2017, spending for child benefits, child tax allowances and long-term care benefits will rise by 0.2% of GDP. Household saving ratio as a percentage of disposable income has increased from 9.1% in 2013 to 9.7% in 2015.

	Surplus-to-GDP (%)	Debt-to-GDP (%)	5 Yr. CDS Spreads
Germany	0.59	71.22	19.80
Belgium	-2.62	105.96	52.60
France	-3.40	95.96	37.34
UK	-3.46	89.22	33.47
Italy	-2.96	132.89	127.50
Portugal	-5.10	128.97	259.08

Sources: Thomson Reuters and IFS

**Unemployment**

Germany's jobless rate hit a record low since the fall of the Berlin wall. Despite the influx of immigrants, jobless claims in May dropped for 8th consecutive month. The unemployment data supports strong economic momentum as indicated by Q1's GDP growth rate (fastest in the last two years), an improving inflation rate and robust business confidence.

	Unemployment (%)	
	2014	2015
Germany	6.70	6.01
Belgium	8.50	8.50
France	10.30	10.40
UK	6.19	5.37
Italy	12.65	11.89
Portugal	14.10	12.60

Source: Intl. Finance Statistics

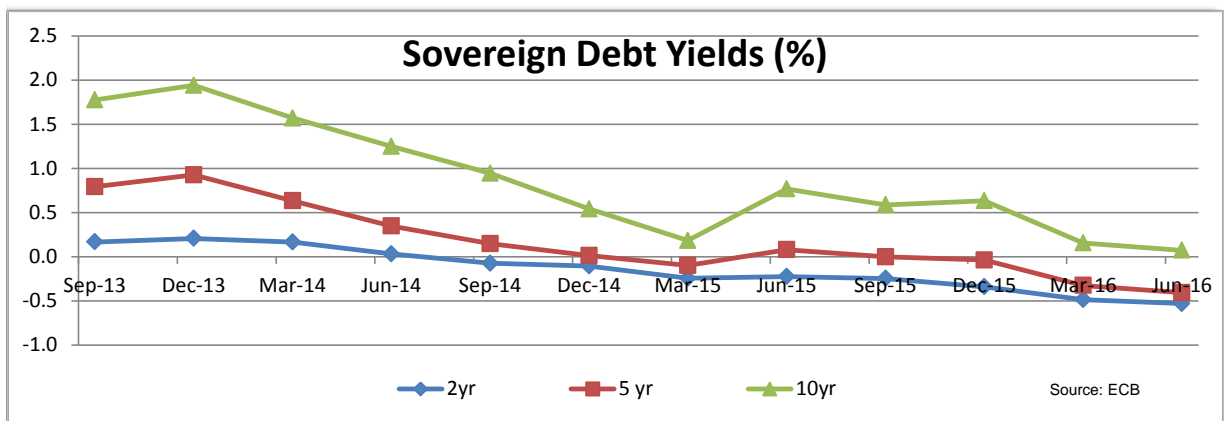
**Banking Sector**

As seen from the chart to the right, Germany has moderate exposure to its banking sector regarding the banks' aggregate size of assets. The top four banks have assets equal to 101.4% of the GDP while Deutsche Bank has assets which are 53.89% of the GDP. In an effort to boost the economy, the central bank has, over the years slashed interest rates to record lows.

Bank Assets (billions of local currency)		
	Assets	Cap/ Assets %
DEUTSCHE BANK-RG	1629.13	1.26
COMMERZBANK	532.64	1.73
Kfw Bankgruppe	493.21	4.44
DZ Bank	409.00	3.67
<b>Total</b>	<b>3,064.0</b>	
EJR's est. of cap shortfall at 10% of assets less market cap		239.8
Germany's GDP		3,023.0

**Funding Costs**

With the problems of the periphery EU countries, capital has migrated to the supposed safe havens. As can be seen in the below graph, the bond yields have plunged particularly since December 2013. Current 5-year CDS spread of Germany is 19 bps, which is among the lowest in the EU.



**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 15 (1 is best, 189 worst) is extremely strong.

The World Bank's Doing Business Survey*			
	2015	2014	Change in
	Rank	Rank	Rank
<b>Overall Country Rank:</b>	<b>15</b>	<b>15</b>	<b>0</b>
<b>Scores:</b>			
Starting a Business	107	110	3
Construction Permits	13	13	0
Getting Electricity	3	3	0
Registering Property	62	62	0
Getting Credit	28	24	-4
Protecting Investors	49	46	-3
Paying Taxes	72	68	-4
Trading Across Borders	35	34	-1
Enforcing Contracts	12	11	-1
Resolving Insolvency	3	3	0

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

**Economic Freedom**

As can be seen below, Germany is strong in its overall rank of 73.8 for Economic Freedom with 100 being best.

<b>Heritage Foundation 2015 Index of Economic Freedom</b>				
<b>World Rank 73.8*</b>				
	<b>2015 Rank**</b>	<b>2014 Rank</b>	<b>Change in Rank</b>	<b>World Avg.</b>
<b>Property Rights</b>	<b>90</b>	<b>90</b>	<b>0</b>	<b>42.2</b>
<b>Freedom from Corruption</b>	<b>78</b>	<b>80.1</b>	<b>-2.1</b>	<b>41.9</b>
<b>Fiscal Freedom</b>	<b>60.8</b>	<b>61.2</b>	<b>-0.4</b>	<b>77.4</b>
<b>Government Spending</b>	<b>40.1</b>	<b>38.2</b>	<b>1.9</b>	<b>61.7</b>
<b>Business Freedom</b>	<b>88.2</b>	<b>89.9</b>	<b>-1.7</b>	<b>64.1</b>
<b>Labor Freedom</b>	<b>51.2</b>	<b>46.4</b>	<b>4.8</b>	<b>61.3</b>
<b>Monetary Freedom</b>	<b>81.5</b>	<b>80.8</b>	<b>0.7</b>	<b>75.0</b>
<b>Trade Freedom</b>	<b>88</b>	<b>87.8</b>	<b>0.2</b>	<b>75.4</b>
<b>Investment Freedom</b>	<b>90</b>	<b>90</b>	<b>0</b>	<b>54.8</b>
<b>Financial Freedom</b>	<b>70</b>	<b>70</b>	<b>0</b>	<b>48.6</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

**Valuation Driver: Taxes Growth:**

FEDERAL REPUBLIC OF GERMANY has grown its taxes of 4.8% per annum in the last fiscal year which is more than the average for its peers. We expect tax revenues will grow approximately 2.7% per annum over the next couple of years and 3.5% per annum for the next couple of years thereafter.

**Valuation Driver: Total Revenue Growth:**

FEDERAL REPUBLIC OF GERMANY's total revenue growth has been more than its peers and we assumed a 4.0% growth in total revenue growth over the next two years.

Income Statement	Peer Median	Co. Avg.	Assumptions	
			Yr 1&2	Yr 3,4,5
Taxes Growth%	2.7	4.8	2.7	3.5
Social Contributions Growth %	1.7	4.0	2.7	3.5
Grant Revenue Growth %	0.0	NMF		
Other Revenue Growth %	0.0	NMF		
Other Operating Income Growth%	0.0	(0.6)	(0.6)	(0.6)
Total Revenue Growth%	1.9	3.9	4.0	3.6
Compensation of Employees Growth%	0.9	2.7	2.7	2.7
Use of Goods & Services Growth%	0.9	3.7	3.7	3.7
Social Benefits Growth%	1.8	4.4	4.4	4.4
Subsidies Growth%	0.8	5.2		
Other Expenses Growth%	0.0			
Interest Expense	0.0	2.3	2.3	
Currency and Deposits (asset) Growth%	0.0	0.0		
Securities other than Shares LT (asset) Growth%	0.0	0.0		
Loans (asset) Growth%	(1.1)	(1.5)	(1.5)	(1.5)
Shares and Other Equity (asset) Growth%	(0.2)	2.9	2.9	2.9
Insurance Technical Reserves (asset) Growth%	0.0	0.0		
Financial Derivatives (asset) Growth%	0.0	0.0		
Other Accounts Receivable LT Growth%	(0.2)	(8.0)	(8.0)	(8.0)
Monetary Gold and SDR's Growth %	0.0	0.0	2.5	2.5
Other Assets Growth%	0.0	0.0		
Other Accounts Payable Growth%	0.0			
Currency & Deposits (liability) Growth%	2.4	17.7	3.0	3.0
Securities Other than Shares (liability) Growth%	2.4	(1.2)	(0.9)	(0.9)
Loans (liability) Growth%	0.0	(3.2)	0.5	0.5
Insurance Technical Reserves (liability) Growth%	0.0	0.0		
Financial Derivatives (liability) Growth%	0.0	0.0		
Additional ST debt (1st year)(billions EUR)	0.0	0.0		

**ANNUAL INCOME STATEMENTS**

Below are FEDERAL REPUBLIC OF GERMANY's annual income statements with the projected years based on the assumptions listed on page 3.

**ANNUAL REVENUE AND EXPENSE STATEMENT  
(BILLIONS EUR)**

	2012	2013	2014	2015	P2016	P2017
Taxes	624	642	665	697	716	735
Social Contributions	454	465	482	501	515	529
Grant Revenue						
Other Revenue						
Other Operating Income	144	145	153	152	152	152
Total Revenue	1,222	1,252	1,300	1,350	1,382	1,415
Compensation of Employees	213	219	225	231	237	243
Use of Goods & Services	131	135	139	144	149	155
Social Benefits	644	666	691	722	754	787
Subsidies	24	24	25	27	27	27
Other Expenses				93	93	93
Grant Expense						
Depreciation	61	63	65	67	67	67
Total Expenses excluding interest	1,162	1,201	1,243	1,283	1,327	1,372
Operating Surplus/Shortfall	60	51	56	66	55	43
Interest Expense	<u>63</u>	<u>56</u>	<u>51</u>	<u>49</u>	<u>50</u>	<u>51</u>
Net Operating Balance	-3	-5	5	18	6	-8

**ANNUAL BALANCE SHEETS**

Below are FEDERAL REPUBLIC OF GERMANY's balance sheets with the projected years based on the assumptions listed on page 3.

	<b>ANNUAL BALANCE SHEETS (BILLIONS EUR)</b>					
<b>Base Case</b>	2012	2013	2014	2015	P2016	P2017
<b>ASSETS</b>						
Currency and Deposits (asset)	-18	260	-15	305	305	305
Securities other than Shares LT (asset)						
Loans (asset)	173	172	165	162	160	158
Shares and Other Equity (asset)	342	362	370	381	392	403
Insurance Technical Reserves (asset)	1	1	1	135	135	135
Financial Derivatives (asset)						
Other Accounts Receivable LT	109	109	108	99	91	84
Monetary Gold and SDR's						
Other Assets					-13	-13
Additional Assets	<u>411</u>	<u>109</u>	<u>432</u>	<u>-13</u>		
<b>Total Financial Assets</b>	<b>1,019</b>	<b>1,012</b>	<b>1,061</b>	<b>1,068</b>	<b>1,069</b>	<b>1,071</b>
<b>LIABILITIES</b>						
Other Accounts Payable						
Currency & Deposits (liability)	10	11	12	14	14	14
Securities Other than Shares (liability)	1,739	1,682	1,792	1,770	1,755	1,740
Loans (liability)	635	611	591	572	567	574
Insurance Technical Reserves (liability)						
Financial Derivatives (liability)						
Other Liabilities	<u>4</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
<b>Liabilities</b>	<b>2,387</b>	<b>2,307</b>	<b>2,399</b>	<b>2,360</b>	<b>2,355</b>	<b>2,364</b>
<b>Net Financial Worth</b>	<b><u>-1,369</u></b>	<b><u>-1,295</u></b>	<b><u>-1,338</u></b>	<b><u>-1,292</u></b>	<b><u>-1,286</u></b>	<b><u>-1,294</u></b>
<b>Total Liabilities &amp; Equity</b>	<b>1,019</b>	<b>1,012</b>	<b>1,061</b>	<b>1,068</b>	<b>1,069</b>	<b>1,071</b>

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**Comments on the Difference between the Model and Assigned Rating**



## 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 FEDERAL REPUBLIC OF GERMANY with the ticker of 3413Z GR 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 available in our Form NRSRO Exhibit #2 dated May 10, 2015 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, 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%	2.7	6.7	(1.3)	AA	AA-	AA
Social Contributions Growth %	2.7	(0.3)	5.7	AA	AA	AA-
Other Revenue Growth %		(3.0)	3.0	AA	AA	AA
Total Revenue Growth%	4.0	2.0	6.0	AA	AA	AA
Monetary Gold and SDR's Growth %	2.5	0.5	4.5	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.

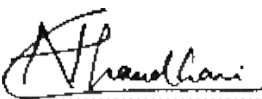
**ATTESTATION FORM**

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**

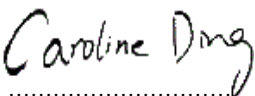


June 30, 2016

Nikhil Chaudhari  
Rating Analyst

**Reviewer Signature:**

**Today's Date**



June 30, 2016

Caroline Ding  
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.*