

FEDERAL REPUBLIC OF GERMANY

Rating Analysis - 4/17/13
Debt: EUR2.1T

*EJR Sen Rating(Curr/Prij) A/ A-
*EJR CP Rating: A1
EJR's 5 yr. Default Probability: 1.7%

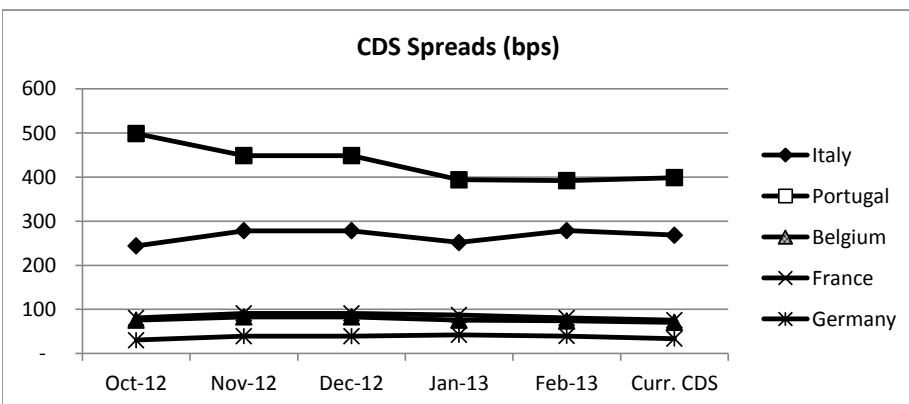
Although Germany's credit metrics are respectable, the country has exposure to its banks and the weaker EU members. Deutsche Bank has adjusted shareholders' equity to asset near 2% and might need EUR 100B of support. Via the ECB's Target 2, Germany is owed EUR700B of which perhaps 50% is collectible and then there is the banks' southern EMU exposures. Germany's debt to GDP was 80.6% as of 2011. However, increasing Germany's debt by EUR500B raises the adjusted debt to GDP to 100%. The deficit to GDP of .8% is reasonably strong. Unemployment is 6.9% but will probably rise as global economies continue to show weakness. The positive (EUR16.8B) balance of trade (per GFSO) and the positive EUR5.59B current account (per the OECD) help. Inflation has been moderate at 1.4% (per GFSO).

Chancellor Merkel continues to resist calls for EU bonds (shared liabs.) and money printing and is pushing for fiscal controls and the seniority of bailout funding. Germany is likely to be outvoted by other ECB members and therefore will have greater prospective exposure. Watch for the EFSF and the ESM morphing into banks (thereby depressing eventual recoveries) and a rise in the number of euros. Watch progress on the EU banking union. We used the IMF's data for Germany's debt which is greater than Eurostat's data. Downgrading.

INDICATIVE CREDIT RATIOS	Annual Ratios (source for past results: IMF)					
	2009	2010	2011	P2012	P2013	P2014
Debt/ GDP (%)	74.5	82.6	80.6	86.4	91.5	98.2
Govt. Sur/Def to GDP (%)	-3.1	-4.1	-0.8	-2.4	-1.4	-3.1
Adjusted Debt/GDP (%)	74.5	93.1	90.7	96.4	101.4	108.0
Interest Expense/ Taxes (%)	11.5	11.5	11.1	10.9	11.5	11.8
GDP Growth (%)	4.2	1.9	0.4	0.5	0.5	0.7
Foreign Reserves/Debt (%)	1.4	1.4	1.4	1.3	1.2	1.2
Implied Sen. Rating	A	BBB+	A-	BBB+	BBB+	BB

INDICATIVE CREDIT RATIOS	AA	A	BBB	BB	B	CCC
Debt/ GDP (%)	45.0	55.0	75.0	85.0	95.0	145.0
Govt. Sur/Def to GDP (%)	4.0	1.0	-2.0	-5.0	-8.0	-10.0
Adjusted Debt/GDP (%)	40.0	50.0	60.0	80.0	120.0	150.0
Interest Expense/ Taxes (%)	7.0	9.0	12.0	15.0	22.0	26.0
GDP Growth (%)	4.0	3.0	2.0	1.0	-1.0	-5.0
Foreign Reserves/Debt (%)	25.0	20.0	15.0	12.0	9.0	7.0

PEER RATIOS	S&P Sen.	Debt	Govt. Surp.	Adjusted	Interest	GDP	Ratio-
		as a % GDP	Def to GDP (%)	Debt/ GDP	Expense/ Taxes %	Growth (%)	Implied Rating*
Government Of Canada	AAA	31.0	-3.5	32.6	14.1	0.7	A+
French Republic	AA+	86.0	-5.2	110.5	9.7	-0.3	BB-
Kingdom Of Belgium	AA	102.0	-3.7	102.0	11.9	-0.4	BB
Republic Of Italy	BBB+	120.6	-3.9	132.0	16.7	-2.8	B
Portugal Republic	BB	107.0	-4.4	116.1	13.0	-3.8	BB-



Country (EJR Rtg*)	Current CDS	Targeted CDS
Italy (C+)	268	4,300
Portugal (CCC+)	398	1,500
Belgium (BBB-)	71	400
France (BBB)	76	300
Germany (A-)	34	120

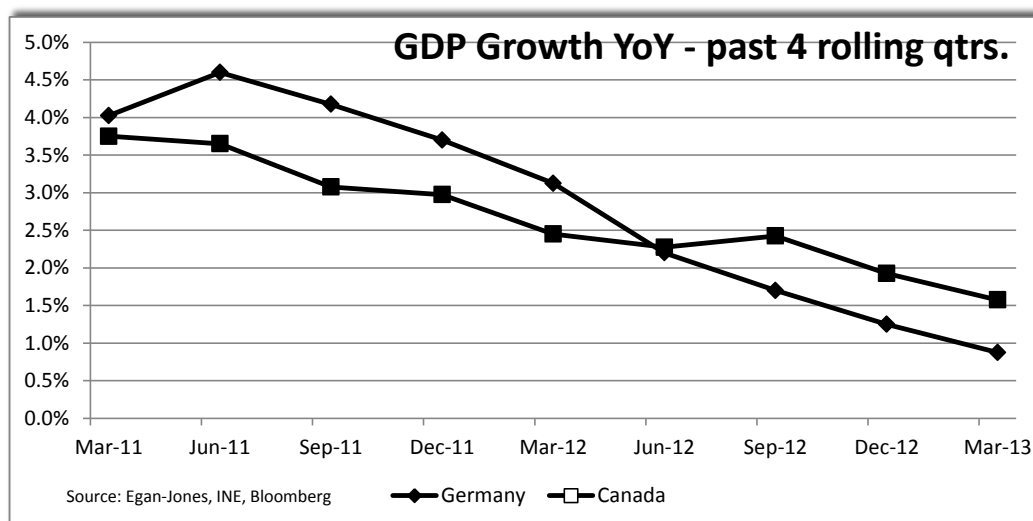
* Projected Rating
* EJR's targeted CDS based on rating

* Note, non-NRSRO rating. Copyright Egan-Jones Ratings Co.; no secondary distribution.

Economic Growth

From an economic perspective, Germany is among the strongest EU countries with GDP growth of near .3% (per GFSO) for the Dec. 2012 quarter, which is respectable in moribund Europe. The strong euro will hurt the major exporters in Germany such as the auto manufacturers, chemical and pharmaceutical firms. The sluggish to negative global economic growth and higher import costs will hurt. The economies of other EU countries are likely to remain weak and Germany will be expected to contribute support.

As can be seen from the below chart, Germany's GDP has declined since June 2011 and recent GDP growth has been below Canada's growth. We expect the GDP growth for 2013 to be positive but slower than 2012. Perhaps the more relevant factor is the growth of the weaker EU countries.



Fiscal Policy

Germany's deficit to GDP of .8% is reasonably strong for a top tier country. From 2009 to 2011, total sovereign revenues rose 3.9% because of tax increases while total expenses rose 1.3%; in prior years the country had to spend to support citizens as a result of the 2008 slowdown. As can be seen from the chart at right, Germany's deficit to GDP was .8% (because of tax increases) and its debt to GDP was 80.6% using IFS and Bloomberg data.

Note, Germany will be providing indirect support to Spain and other weak countries.

	Deficit-to-GDP (%)	Debt-to-GDP (%)	5 Yr. CDS Spreads
Germany	0.8	80.6	40
Canada	3.5	31.0	N/A
France	5.2	86.0	81
Belgium	3.7	102.0	74
Italy	3.9	120.6	278
Portugal	4.4	107.0	392

Sources: Bloomberg and IFS

Unemployment

Germany's unemployment rate has long been among the lowest in the Euro zone. As can be seen from the chart at right, Germany is at the lowest rate of the peer countries but rose by 100 basis points from 2011 to 2012. For the more recent periods, Germany's unemployment rate has been near 6.9%. With the low unemployment rates relative to other EU countries, Germany is not under a great deal of pressure to employ fiscal stimulus measures.

	Unemployment (%)	
	2011	2012
Germany	6.8	6.9
Canada	7.5	7.1
France	9.8	10.6
Belgium	7.1	8.2
Italy	9.2	11.2
Portugal	14.0	16.9

Source: Intl. Finance Statistics

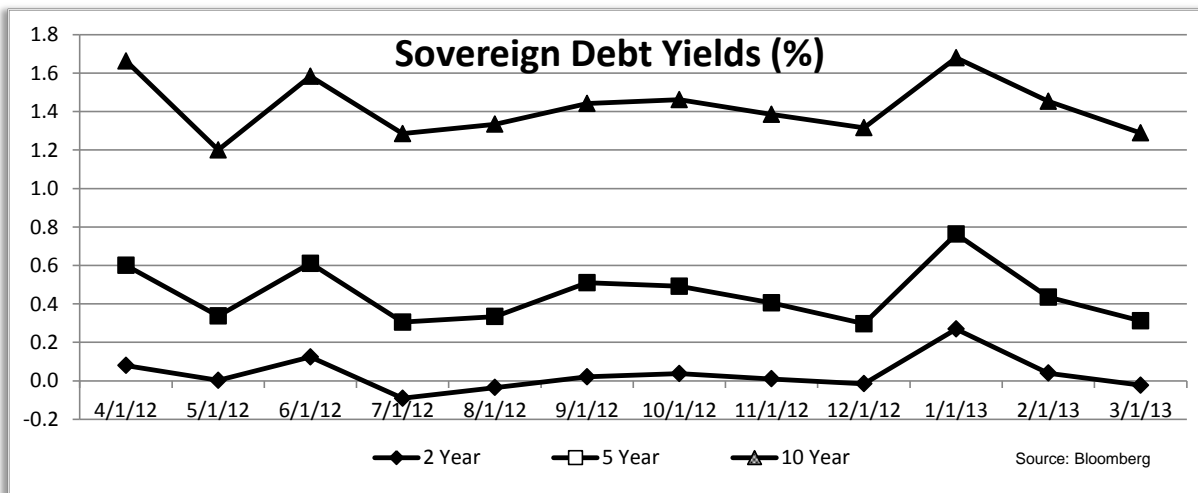
Banking Sector

History has shown that country and bank obligations are linked during times of economic distress. Germany has significantly exposure to its banking sector because the bank's large aggregate size measured in assets. The top five banks have assets equal to 116% of GDP with Deutsche Bank at 62% of GDP. Our major fear is Germany will be expected to provide indirect financial support to weaker EU banks over the next couple of years to ameliorate asset quality problems and replace fleeing deposits.

	Assets	Cap/ Assets %
DEUTSCHE BANK-RG	2,012	2.7
COMMERZBANK	636	4.3
DEUTSCHE POSTBAN	194	3.3
LANDESBANK BERLI	131	1.8
IKB DEUT INDBANK	32	1.3
Total	3,005	
EJR's est. of cap shortfall at 10% of assets less market cap		259
Germany's GDP		2,589

Funding Costs

A Flight to Supposed Quality - 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 Nov. 2011. A major issue is whether Germany belongs in the top-tier of credit quality given its exposure via the ECB.



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 34 (1 is best, 183 worst) is strong.

	2012 Rank	2011 Rank	Change in Rank
Overall Country Rank:	34	32	-2
Scores:			
Starting a Business	27	23	-4
Construction Permits	52	46	-6
Getting Electricity	42	40	-2
Registering Property	146	147	1
Getting Credit	53	52	-1
Protecting Investors	82	79	-3
Paying Taxes	53	53	0
Trading Across Borders	27	25	-2
Enforcing Contracts	8	8	0
Resolving Insolvency	43	46	3

* Based on a scale of 1 to 183 with 1 being the highest ranking.

Economic Freedom

As can be seen below, Germany is above average in its overall rank of 71 for Economic Freedom with 100 being best.

Heritage Foundation 2012 Index of Economic Freedom				
World Rank 71*				
	Rank**	2011 Rank	Change in Rank	World Avg.
Business Freedom	90.5	89.6	0.9	64.3
Trade Freedom	87.1	87.6	-0.5	74.8
Fiscal Freedom	61.3	58.5	2.8	76.3
Government Spending	32.2	42.7	-10.5	63.9
Monetary Freedom	83.5	83.9	-0.4	73.4
Investment Freedom	85.0	85.0	0.0	50.2
Financial Freedom	60.0	60.0	0.0	48.5
Property Rights	90.0	90.0	0.0	43.5
Freedom from Corruption	79.0	80.0	-1.0	40.5
Labor Freedom	41.4	40.6	0.8	61.5

*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 & Wall Street Journal

Assumptions for Projections

Income Statement	Peer	Issuer	Base Case	
	Median	Average	Yr 1&2	Yr 3,4,5
Taxes Growth%	4.9	7.3	2.0	2.0
Social Contributions Growth %	1.4	3.7	2.0	2.0
Grant Revenue Growth %	0.0	0.0		
Other Revenue Growth %	6.8	9.9	1.6	1.6
Other Operating Income Growth%	0.0	0.0		
Total Revenue Growth%	5.8	6.2	1.5	1.4
Compensation of Employees Growth%	1.6	2.3	3.0	3.0
Use of Goods & Services Growth%	1.8	4.6	4.0	4.0
Social Benefits Growth%	2.4	0.0	2.5	2.5
Subsidies Growth%	(6.1)	(3.6)		
Other Expenses Growth%	(29.1)	(29.1)	1.0	1.0
Interest Expense	0.0	3.2	3.2	
GDP Growth%			0.5	0.7
Currency and Deposits (asset) Growth%	12.5	6.0	1.8	1.8
Securities other than Shares LT (asset) Growth%	5.0	(10.0)	1.5	1.5
Loans (asset) Growth%	19.1	(2.2)	2.0	2.0
Shares and Other Equity (asset) Growth%	(1.7)	(0.8)	2.0	2.0
Insurance Technical Reserves (asset) Growth%	2.8	3.2	3.2	3.2
Financial Derivatives (asset) Growth%	0.0	3.6	0.5	0.5
Other Accounts Receivable LT Growth%	3.0	(1.7)	2.0	2.0
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%	2.4			
Currency & Deposits (liability) Growth%	2.5	6.0	6.0	6.0
Securities Other than Shares (liability) Growth%	5.3	8.5	6.0	6.0
Loans (liability) Growth%	3.1	(5.8)	0.5	0.5
Insurance Technical Reserves (liability) Growth%	0.0	0.0		
Financial Derivatives (liability) Growth%	0.0	0.0		
Addl debt. (1st Year) billion EUR	0.0	0.0		

Base Case

ANNUAL REVENUE AND EXPENSE STATEMENT (BILLIONS EUR)

	Dec-09	Dec-10	Dec-11	PDec-12	PDec-13	PDec-14
Taxes	552	553	594	606	618	630
Social Contributions	411	421	437	446	455	464
Grant Revenue	0	0	0	0	0	0
Other Revenue	109	113	124	126	128	130
Other Operating Income	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Revenue	1,072	1,087	1,155	1,177	1,201	1,224
Compensation of Employees	191	195	200	206	212	218
Use of Goods & Services	116	121	126	131	137	142
Social Benefits	623	633	633	649	665	682
Subsidies	28	28	27	27	27	27
Other Expenses	83	114	81	116	82	117
Grant Expense	0	0	0	0	0	0
Depreciation	<u>43</u>	<u>43</u>	<u>44</u>	<u>44</u>	<u>44</u>	<u>44</u>
Total Expenses excluding interest	1,084	1,135	1,112	1,173	1,167	1,230
Operating Surplus/Shortfall	-12	-47	43	4	33	-6
Interest Expense	<u>64</u>	<u>63</u>	<u>66</u>	<u>66</u>	<u>71</u>	<u>75</u>
Net Operating Balance	-75	-111	-23	-62	-38	-81

Sources: Historical - IMF, Projections - EJR

Base Case

ANNUAL BALANCE SHEETS (BILLIONS EUR)

	Dec-09	Dec-10	Dec-11	PDec-12	PDec-13	PDec-14
ASSETS						
Currency and Deposits (asset)	10	10	11	29	30	30
Securities other than Shares LT (asset)	48	147	133	135	137	139
Loans (asset)	73	128	125	128	130	133
Shares and Other Equity (asset)	247	311	308	314	321	327
Insurance Technical Reserves (asset)	1	1	1	1	1	1
Other Accounts Receivable LT	106	108	106	108	110	112
Monetary Gold and SDR's						
Additional Assets	187	225	252			
Total Financial Assets	675	915	920	951	964	978
LIABILITIES						
Other Accounts Payable						
Currency & Deposits (liability)	10	10	11	11	11	11
Securities Other than Shares (liability)	1,363	1,480	1,607	1,703	1,805	1,912
Loans (liability)	462	655	617	678	716	797
Insurance Technical Reserves (liability)						
Financial Derivatives (liability)						
Other Liabilities	<u>4</u>	<u>4</u>	<u>4</u>	<u>(62)</u>	<u>(62)</u>	<u>(62)</u>
Liabilities	<u>1,838</u>	<u>2,149</u>	<u>2,238</u>	<u>2,330</u>	<u>2,382</u>	<u>2,476</u>
Net Financial Worth	<u>(1,163)</u>	<u>(1,234)</u>	<u>(1,318)</u>	<u>(1,379)</u>	<u>(1,417)</u>	<u>(1,498)</u>
Total Liabilities & Equity	<u>675</u>	<u>915</u>	<u>920</u>	<u>951</u>	<u>964</u>	<u>978</u>

Sovereign Rating Methodology (Non-NRSRO)

Egan-Jones takes the perspective of the investor as its primary point of view when developing the ratings it issues for sovereigns. Therefore, in the case of sovereign ratings, we attempt to take a more holistic view of credit quality to include not only analytic comparisons of various sovereign issuers but also the impact on our quantitative and qualitative analyses by current global, sovereign, governmental and market events, including the effects of government investments in speculative, volatile or other high risk investment products. For example, many sovereign issuers have taken on significant exposures of major financial institutions over the past several years. Hence, we calculate the under-funding of financial institutions and include this amount in the total indebtedness of sovereigns. (We use a base assumption that no country can afford to allow its major banks to fail and therefore we believe that there will almost always be an intervention by either a host or allied nation should financial institutions or markets require support at some measurable level.)

Generally we devise modeling calculators and do an analysis that examines the debt load of a country with respect to its GDP and other economic indicators. The analysis is then adjusted to reflect the outlook on a myriad of factors that reflect the firm's overall view of the sovereign debt and the quality of the country's ability to meet and thrive under such load. Some of the qualitative factors that impact our ultimate assessment of credit quality such as the flexibility, stability and overall strength of the economy, ease of tax collection, acceptance of contract law, ease of doing business, and prospects for future growth and health. The non quant issues are generally subjective and a moving target, so each rating of a sovereign may differ because of the non-quantitative nuances being addressed. Note, debt levels for many sovereign issuers have increased over the past decade and has accelerated recently, effecting the implied ratings.

Nota Bene

History has proven that defaults on domestic public debt do occur. In fact, seventy out of three hundred twenty defaults since 1800 have been on domestic public debt (1). Egan-Jones does not view a country's ability to print its own currency as a guarantee against default. Additionally, Egan-Jones generally views cases of excessive currency devaluation as a de facto default.

1. "This Time Is Different: Eight Centuries of Financial Folly", Reinhart & Rogoff, p.111, 126