The Damaging Bias of Sovereign Ratings

Global Themes Paper

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Much of the variation in ratings can be explained by just ten economic and political fundamentals – we call this the “**objective**” component of ratings.

The "objective" component is a good predictor of sovereign default. The residual “**subjective**” component is at best **distortionary** one or more years prior to default.

The Eurozone periphery is on average rated almost **five** notches below what their fundamentals signal.

**Policy implications:**

- Strip rating agencies of their regulatory power and transfer this to an international body.
- Failing that, rating agencies should be forced to substantially increase transparency.
Road map

I. Motivation
II. The methodology of the CRAs
III. Quantifying subjectivity
IV. Is subjectivity useful in predicting default?
V. A look back at the EMU debt crisis
VI. Current misalignments
I. Ratings really matter

- Investors the world over rely on sovereign credit ratings - either because they have to for regulatory reasons, or because they want to.

- More than USD 50 trillion in outstanding sovereign debt is guided by the credit rating agencies' assessments.

- Just three firms, Moody's, S&P and Fitch - the so-called Big Three - have a market share of about 95%.

- Sovereign ratings provide the benchmark for all other ratings.

- “Benchmarking rating performance against actual default experience constitutes the strongest possible test of a rating system.” Moody’s (2013, p.29), Rating Methodology: Sovereign Bond Ratings

- Our paper: Does the subjective component of ratings help to rank-order sovereign default risk?
II. Subjectivity in ratings

- Economic and Political Fundamentals
  - The “Objective” component
- Rating Committees
  - The “Subjective” component

Sovereign Credit Rating
III. Quantifying subjectivity

- To ‘reveal’ the average **weights** that the rating agency attaches to our 10 fundamentals we estimate the following equation for the credit rating of country i in year t:

  \[ \text{Rating}_{it} = \text{weights}'(\text{fundamentals}_{it}) + \text{year}_t + \text{country}_i + \text{error}_{it} \]

- Define:

  - "subjective" component = residual
  - "objective" component = rating – "subjective" component

- The Data:

  Long-term FX ratings: 1,569 from Moody’s; 1,719 from S&P; 1,339 from Fitch.

  10 Fundamentals: Nominal GDP, income per capita, GDP growth, public debt, current account, external debt; government effectiveness; rule of law; past default; advanced country.
The “objective” component

percent of countries rated

Speculative grade

Investment grade

number of rating notches

Source: UniCredit research
The “subjective” component

Source: UniCredit research
IV. "Subjectivity" does a bad job of predicting default 3 years ahead ...

Source: UniCredit research
... it's distortionary two years out ...
... and only gets it right when default is imminent

Source: UniCredit research
The “Objective” component is a good predictor

Source: UniCredit research
V. A sudden strong dislike for the Eurozone periphery

Subjective component, in rating notches

Source: UniCredit research
Favouring the Fragile 5

subjective component, in rating notches

Source: UniCredit research
### VI. Misalignments as of end-2013

<table>
<thead>
<tr>
<th>Country</th>
<th>Moody's rating</th>
<th>Objective rating</th>
<th>Overvaluation (in notches)</th>
<th>Error band (in notches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>Baa2</td>
<td>Ba2</td>
<td>+3</td>
<td>± 0.9</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Baa3</td>
<td>Ba3</td>
<td>+3</td>
<td>± 1.0</td>
</tr>
<tr>
<td>Turkey</td>
<td>Baa3</td>
<td>Ba2</td>
<td>+2</td>
<td>± 0.8</td>
</tr>
<tr>
<td>Finland</td>
<td>Aaa</td>
<td>Aa1</td>
<td>+1</td>
<td>± 0.9</td>
</tr>
<tr>
<td>India</td>
<td>Baa3</td>
<td>Ba1</td>
<td>+1</td>
<td>± 1.2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Aaa</td>
<td>Aa1</td>
<td>+1</td>
<td>± 1.1</td>
</tr>
<tr>
<td>South Africa</td>
<td>Baa1</td>
<td>Baa2</td>
<td>+1</td>
<td>± 0.9</td>
</tr>
<tr>
<td>UK</td>
<td>Aa1</td>
<td>Aa2</td>
<td>+1</td>
<td>± 1.1</td>
</tr>
<tr>
<td>US</td>
<td>Aaa</td>
<td>Aa1</td>
<td>+1</td>
<td>± 2.3</td>
</tr>
<tr>
<td>Austria</td>
<td>Aaa</td>
<td>Aaa</td>
<td>0</td>
<td>± 4.9</td>
</tr>
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<td>France</td>
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<td>Aa1</td>
<td>0</td>
<td>± 1.1</td>
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<tr>
<td>Germany</td>
<td>Aaa</td>
<td>Aaa</td>
<td>0</td>
<td>± 1.0</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>Aaa</td>
<td>Aaa</td>
<td>0</td>
<td>± 2.1</td>
</tr>
<tr>
<td>Belgium</td>
<td>Aa3</td>
<td>Aa1</td>
<td>-2</td>
<td>± 1.2</td>
</tr>
<tr>
<td>Italy</td>
<td>Baa2</td>
<td>A1</td>
<td>-4</td>
<td>± 1.4</td>
</tr>
<tr>
<td>Greece</td>
<td>Caa3</td>
<td>B1</td>
<td>-5</td>
<td>± 2.6</td>
</tr>
<tr>
<td>Ireland</td>
<td>Ba1</td>
<td>A2</td>
<td>-5</td>
<td>± 1.5</td>
</tr>
<tr>
<td>Portugal</td>
<td>Ba3</td>
<td>Baa1</td>
<td>-5</td>
<td>± 1.4</td>
</tr>
<tr>
<td>Spain</td>
<td>Baa3</td>
<td>A1</td>
<td>-5</td>
<td>± 1.1</td>
</tr>
</tbody>
</table>

Source: UniCredit research
Ratings changes since end-2013:
Starting to correct recent years' mistakes...

- **Upgrades:**
  - January 17: Ireland: From Ba1 to Baa3 (Moody's)
  - January 17: Portugal: Removed negative watch (S&P)
  - February 14: Italy: From negative outlook to stable (Moody's)
  - February 21: Spain: From Baa3 to Baa2 and positive outlook (Moody's)
  - April 25: Spain: From BBB to BBB+ (Fitch)
  - April 25: Italy: From negative outlook to stable (Fitch)
  - April 11: Portugal: From stable outlook to positive (Fitch)
  - May 9: Portugal: From Ba3 to Ba2 and positive watch (Moody's)
  - May 9: Portugal: From negative outlook to stable (S&P)
  - May 16: Ireland: From Baa3 to Baa1 (Moody's)
  - May 23: Spain: From BBB- to BBB (S&P)
  - May 23: Greece: From B- to B (Fitch)

- **Downgrades:**
  - February 7: Turkey: From stable outlook to negative (S&P)
  - March 24: Brazil: From BBB to BBB- (S&P)
  - April 11: Turkey: From stable outlook to negative (Moody's)
Objective rating & market valuation – Western countries

ASW and our objective credit rating measure

Source: Bloomberg, UniCredit Research
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