July 29, 2011

A US Default or Downgrade? What if? Evidence From the Past, and Signs from the Present

First, the lower likelihood scenario: A default in the form of a missed interest payment by the US.

To see the worst possible scenarios, it is worth looking at defaults that have already transpired in the sovereign debt marketplace. Where to look? No where else better than the rating agencies. Rating agencies base their rating methodologies for sovereigns and corporations on default studies and more importantly evidence of recovery (or 1 - loss severity, in Moody's terms). Moody's ratings actually also reflect a loss given default, versus a pure default probability (i.e. the probability of losing the 1st dollar on a default) as S&P's ratings do.

In any case, some interesting historical facts and data from other sovereigns who have defaulted:

According to Moody's 27-year study:

- The highest rating held by a Sovereign 12 months before a default was Ba2.
- Cumulative default rate data for Aaa-rated Sovereigns in a 10-year window, as seen in the 1st table of Moody's below, has been non-existent (i.e. it has never happened that a Aaa rated migrates immediately to defaulted status), at least on the sovereign side.
- Most interesting, as seen in the 2nd table the lowest trading price (30 days post-default) for a defaulted sovereign is 18 points (Russia 98), with the highest being 95 for the Dominican Republic. We should note these are smaller economies and were much lower rated pre-default. For distressed bond exchanges, the worst package received on a cash flow (PV) basis was new bonds received by holders for old Argentina bonds (30% of old bonds).

Take away point: History has shown true defaults have occurred only among smaller countries that have been much lower rated. None were developed market sized as the US exemplifies. We should say though that a technical default (versus a "true default") could occur for the US with a missed interest payment, but the treatment by investors will highly likely be much better than what history has shown in previous "true defaults" - where ultimate repayment capability and access to capital markets by these nations came into question. The US has the resources to perform and, albeit possibly costlier, still should have access to the capital markets.

Sovereign Cumulative Default Rates

Issuer-Weighted Cumulative Default Rates (1983-2010)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Sovereign Issuers										
Aaa	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
Aa	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
A	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
Baa	0.000%	0.476%	0.997%	1.570%	2.207%	2.855%	2.855%	2.855%	2.855%	2.855%
Ba	0.769%	1.746%	3.433%	5.349%	7.435%	8.949%	11.118%	13.951%	16.416%	18.882%
B	3.391%	7.039%	9.204%	12.110%	15.096%	17.986%	20.095%	21.277%	22.735%	24.590%
Caa-C	23.636%	27.727%	32.823%	32.823%	32.823%	32.823%	32.823%	32.823%	32.823%	32.823%
Investment-Grade	0.000%	0.098%	0.204%	0.318%	0.442%	0.566%	0.566%	0.566%	0.566%	0.566%
Speculative-Grade	2.793%	5.035%	7.077%	9.305%	11.651%	13.625%	15.674%	17.780%	19.778%	21.924%
All	0.844%	1.581%	2.253%	2.977%	3.736%	4.380%	4.946%	5.515%	6.029%	6.549%
Corporate Issuers										
Aaa	0.000%	0.016%	0.016%	0.048%	0.086%	0.132%	0.182%	0.186%	0.186%	0.186%
Aa	0.023%	0.066%	0.116%	0.202%	0.291%	0.351%	0.388%	0.419%	0.447%	0.501%
A	0.062%	0.200%	0.414%	0.623%	0.853%	1.099%	1.371%	1.677%	1.969%	2.216%
Baa	0.202%	0.561%	0.998%	1.501%	2.060%	2.636%	3.175%	3.710%	4.260%	4.890%
Ba	1.197%	3.437%	6.183%	9.067%	11.510%	13.757%	15.760%	17.679%	19.526%	21.337%
B	4.466%	10.524%	16.526%	21.774%	26.524%	31.034%	35.301%	39.032%	42.312%	45.194%
Caa-C	18.030%	30.037%	39.612%	47.373%	53.882%	58.064%	60.978%	64.428%	68.464%	73.646%
Investment-Grade	0.095%	0.274%	0.508%	0.769%	1.054%	1.343%	1.622%	1.907%	2.185%	2.467%
Speculative-Grade	4.944%	10.195%	15.233%	19.671%	23.477%	26.820%	29.790%	32.433%	34.804%	36.967%
All	1.819%	3.717%	5.485%	6.988%	8.241%	9.303%	10.212%	11.006%	11.706%	12.344%

Source: www.moodys.com, Moody's Sovereign Default and Recovery Rates (1983-2010)

Recovery Rates on Defaulted Sovereign Bond Issuers

Year Of Default	Defaulting Country	Average Trading Price** (% Of PAR)	PV Ratio Of Cash Flows*** (Ratio In %)
1998	Russia	18	50
1999	Pakistan	52	65
1999	Ecuador	44	60
2000	Ukraine	69	60
2000	Ivory Coast*	18	NA
2001	Argentina	27	30
2002	Moldova	60	95
2003	Uruguay	66	85
2003	Nicaragua	NA	50
2004	Grenada*	65	NA
2005	Dominican Republic	95	95
2006	Belize	76	NA
2008	Seychelles*	30	NA
2008	Ecuador	28	NA
2010	Jamaica	90	80
Issuer-Weighted Recovery Rates		**53**	**67**
Value-Weighted Recovery Rates		**31**	**36**

* Not rated by Moody's at the time of default. Pricing information is not available for three other recent unrated sovereign defaults on local currency bonds - Turkey 1999, Dominica 2003, and Cameroon 2004. The PV ratio for Nicaragua is for the 2008 exchange. Appendix I describes more details.

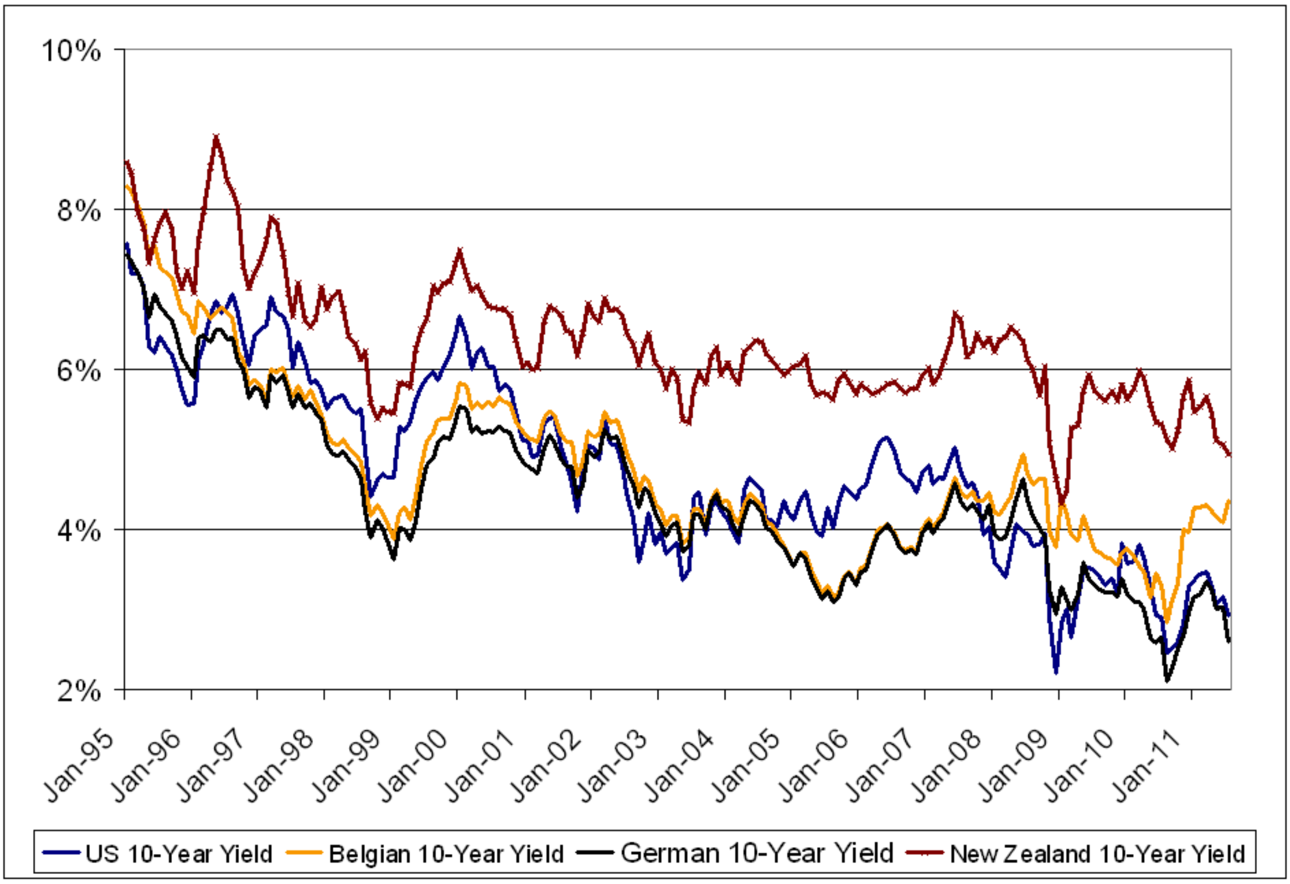
** 30-day post-default price or pre-distressed exchange trading price.

*** Ratio of the present value of cash flows received as a result of the distressed exchange versus those initially promised, discounted using yield to maturity immediately prior to default (Source: Bank of England (2005)).

Source: www.moodys.com, Moody's Sovereign Default and Recovery Rates (1983-2010)

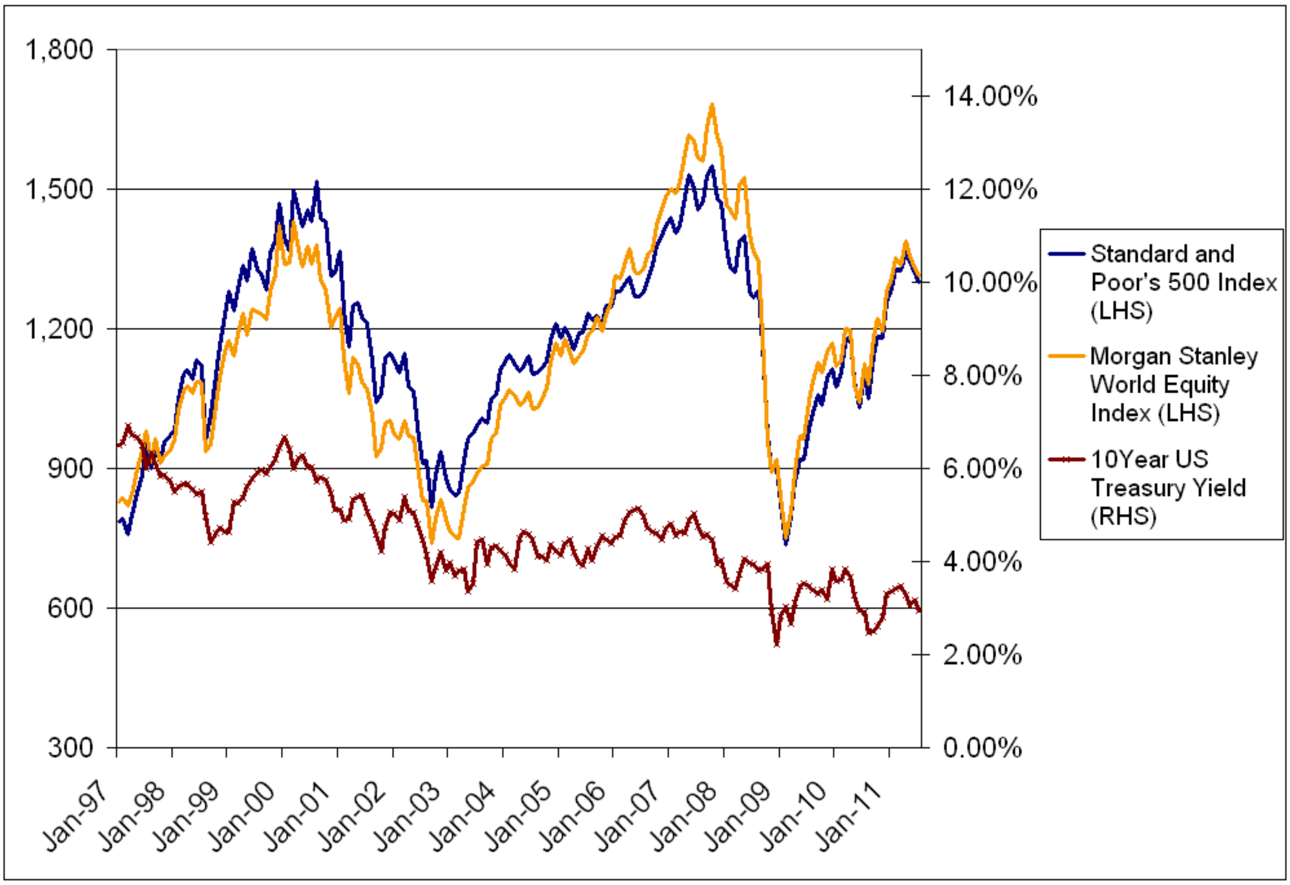
Second, the most likely scenario: A downgrade of the US to AA+.

- Regardless of a resolution to the debt ceiling issue, there is market talk that a downgrade of the US to AA+ from AAA could still occur. In fact, one rating agency, independent firm Egan Jones, has already proceeded to do so. As a baseline, worst case idea of where Treasuries could trade on a downgrade, we looked at 2 other 10-year sovereigns of AA+ rated countries to see where spreads are versus the stability of the 10-year Bund. From the chart below, we see that the selected 10-year AA+ rated sovereigns (NZ, and Belgium) trade at about a 50 to 100 basis point spread over Bunds. Though we think UST prices could trade lower and yield higher than current levels, the full effect of trading in line with these and other AAs may be milder, again, given the full resources of the US Treasury and the capital market access available to the US government. There may also be a second-order effect of natural buyers in the market for AAA sovereigns only having to offload and seek other better rated credits.



Source: Bloomberg

- Shifting to global equities shows that in periods where yields have risen significantly, equities in general have actually risen, consistent with the view that USTs have long served as safe havens in volatile equity times and in general market turmoil globally. It is important to remember that before today, none of the behavior historically was mostly likely due to credit concerns on the U.S so in this sense, being in un-chartered territory, we may see some unanticipated effect on the downside to equities in the near-term, though we expect this to be offset in the longer-term with continuing improvement in more forward-looking and critical economic fundamentals (e.g. jobs, manufacturing, consumption).



Source: Bloomberg

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In sum, a default in our view, as remote as it is, would be purely technical in nature, though causing some natural negative impact for bonds and equities globally. The US is resource and capital abundant and access to capital markets will remain, potentially keeping any sell-off contained. The greater likelihood is a downgrade from AAA to AA+, which many in the market arguably already expect, with the overall effect we perceive to be slightly higher yield premiums for US Treasuries (prices trading lower), a flow of capital to better quality (rated) sovereign credits as investors absorb the new reality, and a temporary sell-off in equities as the new reality is absorbed.