



Sovereign Debt Ratings and Stock Returns

In early August 2011, Standard & Poor's downgraded US government debt from a top-rated AAA to AA+.¹ In the weeks preceding the event, some market observers expected a downgrade to result in higher interest rates and lower stock returns.

After the downgrade, yields on US government securities fell across the term spectrum as investors around the world fled to the safe haven of US bonds. US stocks experienced negative returns in the following weeks but logged positive performance from the day of the downgrade to month end.²

These events raise questions about whether changes in sovereign debt ratings impact the financial markets. The short answer is that results are mixed, and that many other factors affect a country's cost of capital and stock market returns.

Regarding bond markets, history offers examples of major developed countries that experienced a credit downgrade without a significant rise in interest rates.³ Examples include Australia, Canada, and Japan, which lost their top ratings in 1986, 1992, and 1998, respectively.

Other research suggests that countries with high credit ratings may withstand a downgrade better than countries with lower ratings. One study looked at sovereign credit rating downgrades since 1990 and found that bond yields changed little among countries downgraded from the highest triple-A rating. However, countries with lower credit ratings (single A or below) experienced significant interest rate increases following their downgrade.⁴

Stock market impact

Another question is whether the US downgrade has played a role in the US market downturn—and research does not provide convincing evidence.

Below is a chart that summarizes stock market performance of respective countries before and after a ratings change. It is based upon a study of ratings changes made by Moody's from 1983 to 2009. During the twenty-seven-year period, the ratings agency made seventy-one upgrades and twenty-five downgrades to governments in the developed and emerging markets tracked by MSCI.

The study identified the date of each change and logged each country’s market performance in the twelve months before and twelve months after the event. Each country’s market returns were compared to the respective market index and the excess return averaged for all events. (Excess return refers to performance above or below the respective market index, either MSCI EAFE or MSCI Emerging Markets, as appropriate.)

**Figure 1. Equity market performance before and after Moody’s ratings changes
1983–2009**

Sovereign Bond Rating Change	Cumulative Return in Excess of Market	
	12 Months Before	12 Months After
Upgrade	13.83%	3.87%
Downgrade	–6.56%	3.73%

Analysis conducted by Dimensional Fund Advisors using sovereign bond rating data from Moody’s Investors Services, “Sovereign Default and Recovery Rates, 1983–2009.” Returns are in US dollars and represent performance in excess of MSCI EAFE Index for developed markets and MSCI Emerging Markets Index for emerging markets. A positive excess return indicates market outperformance; a negative excess return indicates underperformance. The table reports the return of an equal-weighted, event-time portfolio. Past performance is no guarantee of future results.

The aggregate results show that stock markets of upgraded countries outperformed their respective market index in the twelve months before the rating change (13.83%), while stocks in downgraded countries aggregately underperformed the market index before the event. However, cumulative returns in the twelve months following a ratings change were almost the same for the upgraded and downgraded countries (3.87% vs. 3.73%).⁵

These results suggest that market prices reflect all available information and expectations about a country’s economic prospects—including the possibility of a ratings change. By the time a country’s debt rating is upgraded or downgraded, the market has already integrated the news into prices. Stock markets reflected positive economic developments prior to a ratings upgrade and negative developments before a ratings downgrade. After the event, markets did not appear to perform much differently, in aggregate.

Conclusion

This research underscores the importance of looking to market prices for signals about the fiscal health and prospects of a country or a company. Based on the foregoing analysis, markets appear to work faster and more accurately than ratings firms to assess a country’s financial condition and evaluate the potential impact on its cost of capital and equity market.

Endnotes:

1. A sovereign credit rating is an assessment of a government's ability to pay its debts. The US had held S&P's top rating since 1941. S&P made the announcement after business hours on Friday, August 5, but word of the downgrade leaked during the day. Although timing of the announcement was a surprise, the downgrade was mostly expected, as S&P had issued a negative long-term outlook for the US in April and July. The other top credit agencies, Moody's Investors Service and Fitch Ratings, have maintained top ratings for the US.
2. Two weeks following the downgrade, the US market, as measured by the Russell 3000 Index, logged a negative 6.82% return (August 5– 19). However, from the day of the announcement to month end, the market returned a positive 1.6%. Russell data copyright © Russell Investment Group 1995–2011, all rights reserved.
3. Tom Lauricella, "Lessons of Lower Ratings," *Wall Street Journal*, July 30, 2011.
4. Ivan Rudolph-Shabinsky and Dennis Shen, "When 'Risk-Free' Isn't Risk Free: The Impact of a US Treasury Downgrade" (white paper, Alliance Bernstein, June 2011), www.alliancebernstein.com/CmsObjectABD/PDF/Research_WhitePaper/Treasury-Downgrade_110706.pdf.
5. The twelve-month aggregate excess performance prior to the ratings change was statistically significant, while the twelve-month returns after the ratings change were not.

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