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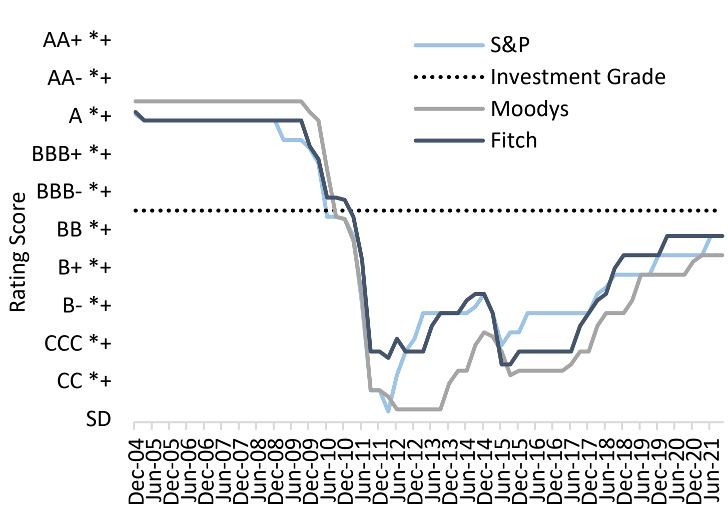
Greek Sovereign Ratings: Markets signal (and price) Investment Grade

Sovereign ratings provided by Credit Rating Agencies (CRAs) are meant as indicators about issuer countries' ability to pay back their debt in due time. As such, CRAs opinions affect institutional demand and market pricing of the debt of a country. Nevertheless, ratings published by CRAs often exhibit a systematic delay in capturing timely variations in the creditworthiness of an issuer. Despite the fact that this feature provides the markets with a certain degree of stability, avoiding abrupt market shocks caused by unexpected ratings, changes in the credit health of an issuer are often more timely reflected through Credit Default Swaps (CDS) spreads. In this sense, exploiting the high frequency credit market information through the construction of a simple market-implied rating system may prove useful as a real time indicator of a country's credit rating. Of course, one should have in mind that the ability in anticipating rating changes depends on the speed and accuracy of financial markets in pricing information about an issuer's creditworthiness as well as on their liquidity.

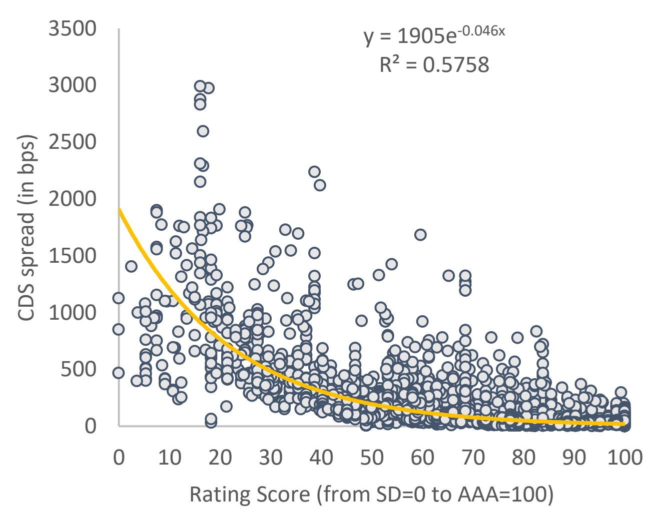
A notable example of the divergence between market expectations and credit rating agencies decisions on creditworthiness is Greece. In 2019 and up to early 2020, Moody's, S&P Global and Fitch had gradually upgraded the Greek sovereign rating to "B1" (Stable Outlook), "BB-" (Positive Outlook) and "BB" (Positive Outlook), respectively. In November 2020, Moody's upgraded the Greek sovereign rating to "Ba3" (Stable Outlook) on the basis of both the continuation of the reform orientation in 2020 and the positive economic prospects of the country in the coming years. In April 2021, S&P upgraded the Greek sovereign rating to "BB" (Positive Outlook), from "BB-". Despite these positive developments, after more than a decade in the "junk" bond rating category, Greek debt remains below the "investment grade" rating despite recent improvements in economic activity and the support given from ECB's PEPP bond-buying programme.

Figure 1
Greece Credit Ratings Evolution



Source: Bloomberg, Piraeus Bank Research

Figure 2
CDS – Credit Ratings Relationship



Source: Bloomberg, Piraeus Bank Research

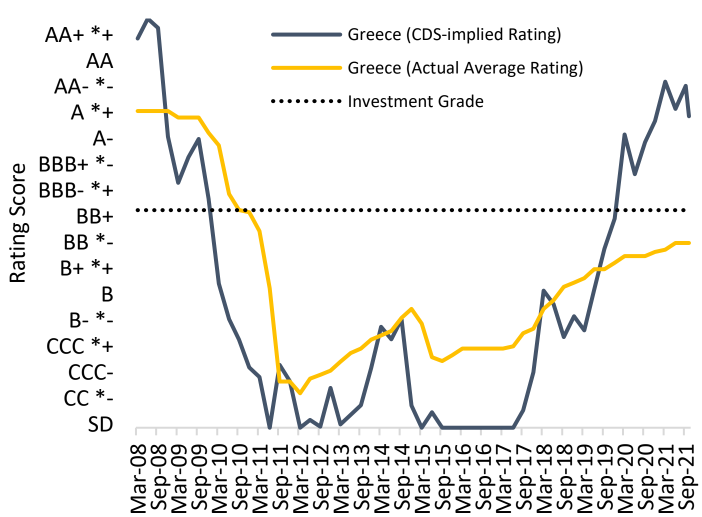
To analyse the links between investor perceptions and credit rating agencies, we investigate the relationship between CDS spreads and sovereign ratings by employing a simple regression framework. In particular, we employ a one-way fixed effects model on a panel dataset of 60 countries during the period starting from Q1:2004 until Q3:2021. We use the 3-month average of 5Y sovereign CDS in US dollars for each country and the long-term credit rating scores provided by the S&P, Moodys and Fitch rating agencies. Moreover, we control for common time effects by employing three global variables, namely, crude oil price, the VIX index and US Treasury 10-year bond rates. To account for possible heteroscedasticity and autocorrelation, we employ robust standard error clustered at the country level. Our panel regression model is given by:

$$\log(CDS_{i,t}) = \beta_0 + \beta_1 \times rating_{i,t} + \beta_2 \times \log(oil_t) + \beta_3 \times \log(vix_t) + \beta_3 \times \log(us10y_t) + \eta_\iota + \varepsilon_{i,t}$$

Given coefficient estimates of the above regression model, CDS-implied ratings are derived by mapping realized CDS spreads to an estimated rating score under the assumption that there is no mispricing errors by the CDS market. In order to translate the ordinal alphanumeric ranking of ratings into numeric values we assign a linear scaling transformation system starting from zero (indicating selective default (SD)) to 100 (indicating "AAA" rating). We opt to include the credit outlook decisions (denote by *-, *+) provided by each rating agency in order to improve the discreteness of rating agency scores and enrich the informational content of our model. The rating score used in our empirical analysis is the average numeric rating across the three rating agencies.

Figure 3

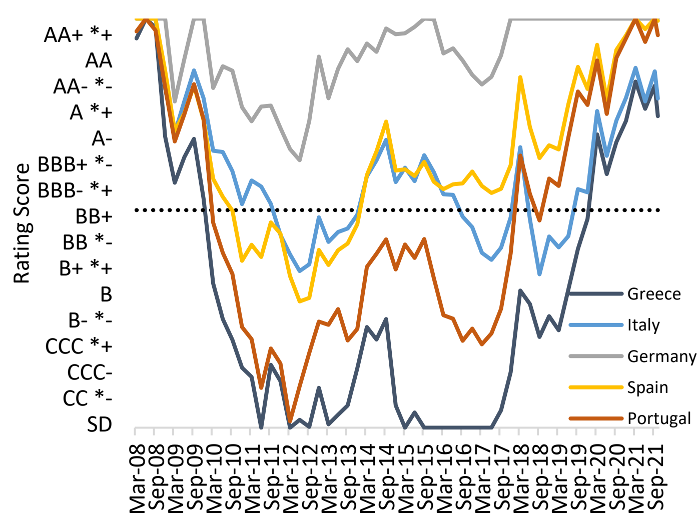
Market Implied versus Actual Ratings



Source: Bloomberg, Piraeus Bank Research

Figure 4

Implied Rating Across EU Periphery



Source: Bloomberg, Piraeus Bank Research

Expectedly, actual ratings exhibit less volatility than market implied ratings and often are led by CDS market expectations. In particular, during the global financial crisis and just before Europe's debt crisis CDS markets reflected Greece's financial health deterioration almost six months ahead of credit rating agencies. One should note however that a key assumption in our results is that CDS markets exhibit no mispricing errors, i.e. investors are always correct in accurately and timely pricing default risk in CDS spreads. Clearly, this is an oversimplification aimed mainly in helping us derive market-implied ratings. It is obvious from figure 3 that the CDS market has indeed been a leading indicator for CRAs decisions in both the downgrade (2008-2011) and the upgrade (2017-now) phase of the ratings cycle.

Currently, the deviation between market implied ratings and ratings provided by credit agencies are characterized by a large positive gap. More specifically, in the past two months CDS spreads implied that Greek debt should be assigned a rating above "A". In contrast, the average rating across the three rating agencies was BB- with positive outlook, i.e. a seven notches difference. This divergence reflects two factors. First and foremost the more conservative nature of CRA behavior who deliberately aim to lag market developments and second the positive impact on market sentiment and pricing of the inclusion of Greek Government bonds to ECB's Pandemic Emergency Programme or PEPP, which lowered Greek bond yields affecting in an indirect way the pricing in the CDS market.

CDS implied ratings also point towards a substantial change in markets' perception on sovereign risk ranking amongst EU periphery. At the start of the period, Italy and Spain were viewed as substantial less risky sovereigns, with both Portugal and Greece lagging behind. Over the course of the years though, Portugal has managed to get an implied ratings upgrade and now correlates highly with Spain while Italy has been "downgraded" to the levels of Greek sovereign risk.

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