

Discussion: Credit Rating Dynamics: Evidence from a Natural Experiment

Olivier Toutain - Banque de France

01/03/2019

Mechanistic reliance on CRAs

Following the Great Financial Crisis of 2007-2008, much has been said about CRAs conflict of interest and the mechanistic reliance of investors on CRA's rating.

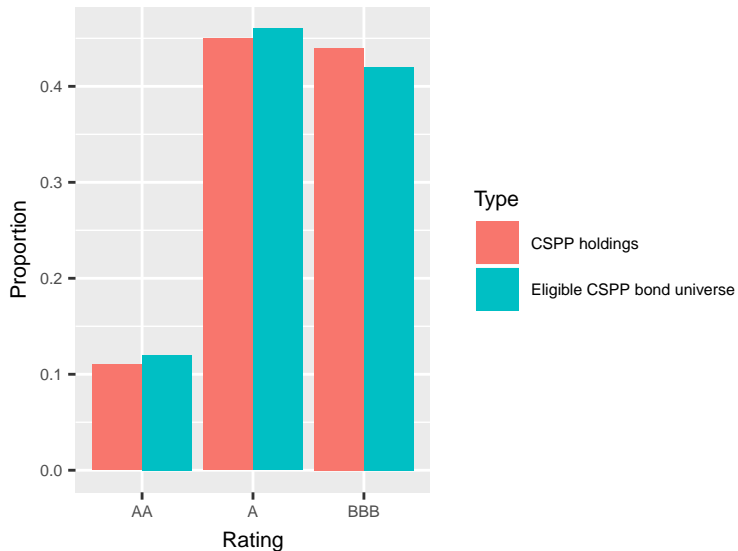
- ▶ the Financial Crisis Inquiry Commission, which documented the CRA's behaviour relative to the subprime crisis, highlighting their conflict of interest;
- ▶ the 'Principles for Reducing Reliance on CRA Ratings' published by the Financial Stability Board.

The Paper investigates such mechanistic reliance and the potential distortion of CRAs behaviour it creates using the introduction of the CSPP as an experiment.

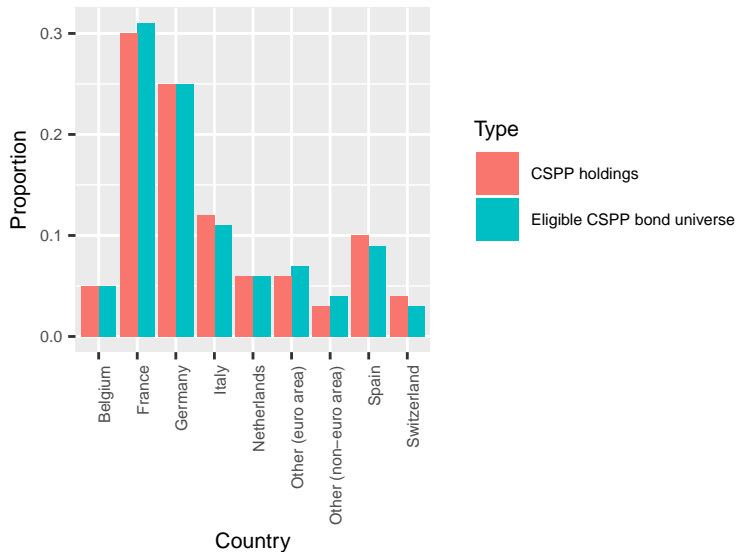
Two key elements are highlighted by the research presented here:

- ▶ **CRAs behaviour** and conflict of interest due to the issuer-pay model;
- ▶ **Institutional Reliance on CRAs** in its most mechanistic and sensitive aspect (First Best rule).

CSPP: First Best Rating composition



CSPP: Country composition



Dataset used

The CSPP eligibility is assessed here at issue-level according to 6 conditions: three of whom are static, two dynamic (Min/Max Maturity and Minimum Yield), and one related to a minimum rating level. The frozen dataset consists of 1 750 securities, to be compared with 250 issuers effectively purchased and with ~2 500 collateral-eligible securities.

Question: Why using the bond level rating and not the firm-level rating ? It creates unnecessary dependencies between rating evolutions, jeopardizing the robustness of the analysis. In the CSPP case, we should have 'Bond Rating = Issuer Rating':

- ▶ Subordinated bonds are not eligible;
- ▶ A very small proportion of purchased secured bond: less than 0.8%.

Even using firm rating there is the question of the links versus the sovereign rating in some cases: see Portugal first best upgrade to IG in september 2017.

Testing the relationship

$$QE_{eligible} = F(\alpha + \beta \Pi_{CSPP-Intro} + \dots) + \epsilon$$

where F is either the identity function, a logit or probit function.

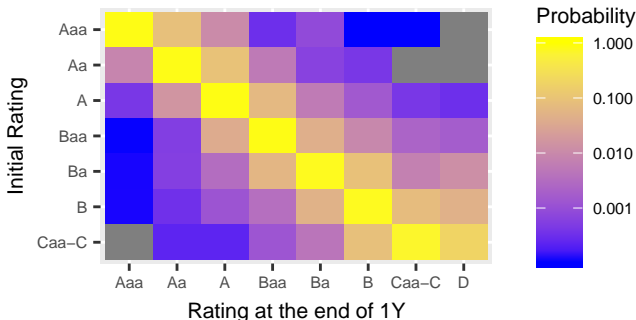
The impact of the introduction of the CSPP has an impact on the proportion of QE-eligible bonds from an increase of 2.9% - 4.5%.

Cross-Sectional effects I

The Paper also analyse the rating activity around the QE threshold, looking at

The likelihood of upgrade to IGrade status as a function of the initial rating:

- ▶ the conclusion is in line with classical studies on Rating Transition Matrix (see Rating Transition Matrices by Lando in the Encyclopedia of Quantitative Finance), the furthest from the diagonal the lower the transition probabilities. This is not a distortion of the CRAs behaviour.



Cross-Sectional effects II

The likelihood of rating changes depending on the initial rating:

- ▶ The analysis shows clearly a different rating activity between BB and BB+ which is unusual: using the average one-year European transition matrix (from Moody's 1985-2016) we have the following probability of upgrades: 14.95% for BB / 13.09% for BB+ / 13.59% for BBB-.
- ▶ However the core of such activity is on BB+ rated issuers, such difference in activity is not seen when looking at upgrade probabilities from BB to BBB (source CEREP-ESMA on European non-financials):

Year	Fitch	Moody's	S&P
2015	4.30%	6.14%	2.80%
2016	3.85%	3.09%	8.51%
2017	4.67%	2.46%	4.61%

- ▶ *What was the trend of the rating transition ? Or in other words is it consistent with the rating momentum ?*

Distortion of CRAs behaviour

If indeed as described in the paper, CRAs have modified their behaviour in order to facilitate IG rating, two potential dynamics:

- ▶ **Rating Shopping:** An issuer seeks to obtain an additional rating from another CRA if such is Investment Grade (see Metro AG obtaining a BBB- rating mid 2017 or Fresenius receiving an IG rating soon after incorporation);
- ▶ **Rating Upgrades:** An existing rating is upgraded by one of the CRAs to Investment Grade status (see Leonardo Spa in 2017).

Here several of the references provided by the paper are related to the rating of deals (Structured Finance 'transactions') versus the rating of corporate entities.

Question: Which one of the two dynamic is the most preponderant here ?