Probability to default and banking efficiency. How does the market respond

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Extended Abstract

While regulators focus on book values for scrutinizing financial fragility, the financial crisis has shown that market value are more useful indicator of bank fragility. Calomiris and Nissim (2014) suggest that the fact that the banks after the crisis display franchise value (or market to book value ratio) below one indicates that some of those banks' investments are projected to generate negative economic profits in the future, concluding that attention to market values and their drivers is important for analyzing the vulnerability for banks.

Since bank's capital structures based on the market view are the outcome of pressures emanating from shareholders, debt holders and depositors and franchise value is related with bank efficiency (Demsetz et al., 1996), we investigate in this paper whether

bank efficiency and bank capital structure drive bank market value. Additionally, we analyze whether the market value and such drivers affect the fragility of the banks.

We apply recently developed non-parametric methods with bootstrap to estimate group bank efficiency, to test for differences across groups with similar market value and finally to analyze the link between bank market value, bank efficiency and bank capital structure. In addition, using the probability to default (PoD) as proxy of the fragility of the banks by define a unique framework, the impact of the bank market value and its drivers is analyzed. We applied our empirical exercise for the banks belonging to 15 countries of the European Union during the period 2002-2016.

The results suggest that bank market value is explained by bank efficiency and capital structure where the bank leverage plays an important role before the financial crisis. Additionally, bank fragility is affected by bank market value and its drivers. So it seems that regulators should pay attention to market value in place to book value in order to inspect bank stability.