

## **1. Asymmetric Information and Imperfect Competition in Lending Markets**

1.1 Crawford, Pavanini and Schivardi's paper analyzes the interaction between imperfect competition and asymmetric information in the Italian market for small business lines of credit.

Different from previous paper, the paper conducts research of adverse selection in imperfect competition, which mitigate the bias due to assumptions of perfect completion in small business loans.

The paper proposes a structural model that incorporates firms' demand for credit, loan use, and default, as well as banks' pricing, where imperfect competition and asymmetric information between borrowers and lenders are considered, which is the key difference compared with previous papers.

The key finding is that different banks' interest rate reactions to an increase in adverse selection depend on the level of competition. With simulated effects of a credit crunch, it is proved that equilibrium prices rise in more competitive markets and decline in more concentrated markets, suggesting that market power has little mitigation effect on the constrain of adverse selection. This leads to an increase in the share of borrowing firms in concentrated markets and lower default rates.

## **2. Screening Using a Menu of Contracts**

2.1 The second paper focused on lender's screening approach and adverse selection. In terms of examining whether lender could screen borrowers by default rate, the paper has relied on simulations to quantify the default rate by borrowers' preferences.

Besides, a new tool is introduced for analysing screening effect on product and price distortions in the credit market. The equilibrium interest rate is decomposed into fair price, perfect information markup and asymmetric information premium/discount. With this approach, the paper examines the cost of borrowers by premium/discounts due to screening.

The main finding is that maintaining borrowers' incentives to self-select, as lenders provide menu of contracts, requires distorting contract terms away from their perfect information value. In other words, borrowers' suffer from asymmetric information premium due to the menu of contracts provided. Because high default-low price elastic borrowers have a high willingness to pay for loan-to-value ratio, low default-high price elastic borrowers get a lower loan-to-value ratio, and thus a lower house size, under imperfect information.

Lastly, policies are proved to have theoretically ambiguous effect on screening. For example, deposit insurance could lead banks to underestimate the risk of lending via higher loan-to-value ban. This may further lead to high leverage in the mortgage market.