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Information and bank credit allocation ☆

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Abstract

Private information obtained by lenders leads to borrower capture to the extent that such information cannot be communicated credibly to outsiders. We analyze how this capture affects the loan portfolio allocation of informed lenders. First, we show that banks charge higher interest rates and finance relatively less creditworthy borrowers in market segments with greater information asymmetries. Second, when faced with greater competition from outside lenders, banks reallocate credit toward more captured borrowers (flight to captivity). Third, if borrower quality and captivity are sufficiently correlated, an increase in the competitiveness of uninformed lenders can worsen the informed lender's overall loan portfolio. The model explains observed consequences of financial liberalizations.

JEL classification: G21; D43; F36

Keywords: Bank competition; Credit allocation; Cross-border liberalization

1. Introduction

Over the last two decades, bank activities, which traditionally had been heavily regulated and protected from competition, have been progressively liberalized.

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Financial sector reforms have eased legal barriers to entry and enlarged the scope of the activities of banks and other financial intermediaries. This process has fostered cross-border lending and foreign entry, reshaping the competitive structure of local credit markets and changing the allocation of bank credit. These changes have important economic consequences as bank lending is an important source of funding not only for individuals and for smaller businesses, but also for large businesses, which make heavy use of bank borrowing as a form of short-term financing. This paper presents a theoretical framework to understand how the allocation of credit responds to shocks to the banking system, such as the entry of a low-cost competitor. It also provides new insights for understanding the observed effects of financial liberalization and cross-border deregulation on bank competition.

We focus on the important role information plays in shaping bank competition. Private information obtained by banks generates a lender-client specificity to the extent that such information cannot be communicated credibly to outsiders. James (1987) is among the first to provide evidence that bank lending is indeed special relative to other sources of finance. He shows that the announcement of a bank loan leads to a positive stock price response for the firm obtaining the loan. Lummer and McConnell (1989) provide similar evidence for the case of loan renewals. We present a model where a lender with an informational advantage competes for borrowers with an outside lender with worse information, but potentially with a cost advantage in extending a loan. We show that the informed lender's informational advantage provides it with some degree of market power and leads to borrower capture, as adverse selection makes it difficult for borrowers to obtain credit from outside lenders. This basic intuition allows us to derive three main results.

First, the degree of borrower capture and spreads on bank loans are higher in markets subject to larger information asymmetries. This allows informed lenders to profitably finance borrowers that are less creditworthy in these markets. An important implication of this result is that the average quality of borrowers obtaining financing from the informed lender is decreasing in its informational advantage. Hence, there are compositional differences in banks' portfolios across market sectors characterized by different degrees of asymmetric information about borrowers.

The second result is that when faced with greater competition from outside lenders, informed banks shift their credit allocation towards sectors where their competitors face greater adverse selection problems. More generally, when forced to curtail their loan portfolio, informed banks reduce lending to a greater extent in less captive sectors, and retain larger market shares in the more captive but more profitable sectors. We refer to this reallocation as a *flight to captivity*, since it implies that banks reallocate their portfolio towards more captive borrowers when shocks to their balance sheet, or to their competitive environment, force them to alter their lending patterns. Loans to borrowers in more competitive sectors are also the most liquid in banks' portfolios, since they could be sold at a price closer to their actual value. In this vein, we show that increases in the competitiveness of outside lenders leads to greater interest-rate reductions for borrowers in low information-asymmetry