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Information sharing, lending and defaults: Cross-country evidence

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Abstract

Theory predicts that information sharing among lenders attenuates adverse selection and moral hazard, and can therefore increase lending and reduce default rates. Using a new, purpose-built data set on private credit bureaus and public credit registers, we find that bank lending is higher and credit risk is lower in countries where lenders share information, regardless of the private or public nature of the information sharing mechanism. We also find that public intervention is more likely where private arrangements have not arisen spontaneously and creditor rights are poorly protected.

JEL classification: D82; G21; G28
Keywords: Information sharing; Credit market; Default rate

1. Introduction

A large body of literature shows that asymmetric information between borrowers and lenders can prevent the efficient allocation of credit. Lenders are often unable to observe the characteristics of borrowers, including the riskiness of their investment projects, and this induces adverse selection problems. Lenders may also be unable to control the actions that borrowers take after receiving a loan. A borrower may relax his effort to prevent default or hide the proceeds of his investment to keep from

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having to repay his debts. Even a solvent borrower may try to avoid repayment if the lender cannot observe or sanction his actions. The consequence is that lenders may ration credit or charge high borrowing rates.

It is often assumed that the only way lenders can overcome these informational problems is to produce information about their customers via screening and monitoring. For instance, they can interview applicants, visit their business before and after granting the loan, and gather information from public records. If lenders operate on a large scale, they can use these data for statistical risk management to grant and price loans on the basis of past performance.

Most of the literature neglects exchange of information with other lenders as an alternative way to learn about one's own customers. This exchange can be voluntary or imposed by regulation. When it occurs spontaneously, it is effected by information brokers, known as "credit bureaus", which operate on the principle of reciprocity, collecting, filing and distributing the information supplied voluntarily by their members. In many countries a great deal of informational exchange also occurs via "public credit registers". These are generally managed by central banks, with compulsory reporting of data on borrowers, which are then processed and returned to the lenders.

Previous theoretical research, summarized in Section 2, shows that information sharing between lenders can foster credit activity and increase borrowers' incentives to repay, but no empirical investigation of such effects exists to this date. To fill this gap, in this paper we use a new international database to document the correlations between the presence of credit bureaus or public credit registers, lending activity and default rates.

Sections 3 and 4 describe our data set, which we collected via questionnaires directed to private credit bureaus and central banks. Borrower coverage and the type of data exchanged vary considerably over time and between countries. Lenders commonly exchange data about past defaults or arrears. Sometimes they also share data about customers' outstanding liabilities, maturities, and details about borrowers' credit history. In Sections 5 and 6 we correlate information sharing with lending and credit risk, considered as a proxy for the default rate. Private and public information sharing is associated with broader credit markets and lower credit risk. The empirical analysis reveals that private and public information sharing arrangements have no differential correlation on credit market performance. One way to interpret this finding is that public credit registers and private credit bureaus are substitutes. This leads us to investigate directly whether the absence of private credit bureaus prompts regulators to establish public credit registers or to widen the scope of their operation. Probit and Tobit regressions reported in Section 7 show that these hypotheses are consistent with the data. Section 8 summarizes our main findings.

2. Review of theoretical models

Recent theoretical research suggests a threefold effect of lenders' exchange of information about borrowers. First, credit bureaus improve banks' knowledge of ap-