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The international evidence on discouraged small businesses ☆

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ABSTRACT

We use a unique firm-level survey database compiled by the World Bank to examine the drivers of discouraged small businesses in various developing economies around the world. We confirm that older and larger firms are less likely to be discouraged and that the level of competition and the relationships of the firms with banks have a significant impact on the probability of a firm in being discouraged. Further analysis suggests that the drivers of borrower discouragement might work differently for firms operating in relatively developed versus underdeveloped economies.

1. Introduction

The informational wedge between insiders and outsiders is most acute for relatively smaller borrowers (like small businesses and even consumer loans) where the potential lender is unable to readily verify project quality (an adverse selection problem).[1] Not surprisingly, a significant body of empirical research exists in documenting the various ways that such adverse selection can be attenuated.[2] However, to examine the borrower-lender loan dynamics in its fullest sense requires the inclusion of those potential

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[1] Stiglitz and Weiss (1981) are the first to illustrate how the problem of asymmetric information between a borrower and a potential lender could impede the flow of credit to an otherwise qualified borrower.

[2] See, for example, Ang (1991), Berger et al. (2001), Berger and Udell (1995, 1998, 2002), Cole (1998), Duca and VanHoose (1998), Lehmann and Neuberger (2001), Petersen (1999), and Petersen and Rajan (1994, 1997, 2002).

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borrowers who might want a loan for their businesses but choose to not formally apply because they are sure they will be refused by the bank — otherwise known as "discouraged" borrowers.

While the current body of bank lending research, exemplified by the citations in footnote 2, have not included discouraged borrowers in their analysis, there is now a growing body of evidence that appears to suggest that owners of small businesses from certain demographic groups are systematically discouraged from applying for a loan (see, for example, Blanchflower et al., 2003; and Cavalluzzo et al., 2002).[3] Given the significant numbers of discouraged borrowers in the population, they cannot be thought of as mere random draws and, simply discarded from the analysis. Rather, ignoring such significant numbers of discouraged borrowers from any analysis of credit availability or the cost of credit is, in fact, likely to bias the relevant parameter estimates since the self-selection of applicants may induce lenders to adopt different screening rules than those that would prevail if the discouraged borrowers were to apply.[4]

Even as recent studies have started incorporating discouraged borrowers in examining the loan dynamics (see, for example, studies focusing on the US markets like Chakravarty and Yilmazer, 2009 and Han et al., 2009; and those focusing on the European markets, like Brown et al., 2011; Popov and Ongena, 2011; and Popov and Udell, 2010), there is sparse research investigating the anatomy of discouraged borrowers itself and, certainly, less so for discouraged small businesses in emerging economies — economies where adverse selection issues are even more paramount than they are in the United States and other developed nations.[5] Specifically, we study the determinants of small business discouragement within various emerging economies around the globe.

We use data from the 2002/2003 wave of the Enterprise Surveys launched by the World Bank to examine discouraged borrowing with an international panorama. As a unique firm-level survey database, the Enterprise Surveys provide information on discouraged firms based on individual firm interviews conducted either by World Bank staffers or by organizations sub-contracted by the World Bank. The Enterprise Surveys also provide information on firms with different sizes (particularly a large number of small and medium size firms) in various countries. Hence, unlike previous studies that only focus on firms of a certain size (for example, large or publicly traded firms as in Demirgüç-Kunt and Maksimovic, 1998) or on firms in developed countries like the United States, Canada or other European countries (for example, Angelini and Generale, 2008[6]; Blanchflower et al., 2003; and Orser et al., 2006), our data allow us to study discouraged firms based not only on firm size, but also on other firm characteristics, as well as across many different emerging economies around the world. In particular, we focus on ten countries spanning four continents: Brazil, China, Eritrea, Ethiopia, Honduras, India, Kenya, Pakistan, Tanzania, and Uganda.[7,8]

Our main findings can be summarized as follows. Older and larger firms are less likely to be discouraged. The greater the number of competitors a firm faces, the more likely it is that the firm would be discouraged. We also find that relationships with banks and other financial institutions are a key determinant of a firm being discouraged.[9] Specifically, the greater the number of banks with whom the firm has relationships, the less likely it is that such a firm would be discouraged. These variables not only enter significantly in all of the regressions, but also explain large variations in the probability of a firm being discouraged.

We uncover significant differences between discouraged borrowers in relatively developed economies versus those in less developed ones within our data.[10] For firms in relatively developed economies, firm size, the number of banks that firms have ongoing relationships with, and the level of firm liability are the main characteristics associated with the probability of a firm being discouraged. However, for firms in relatively underdeveloped economies, additional factors like firm age and the level of

[3] Thus, for example, Cavalluzzo et al. (2002) state that almost half of the small businesses in the 1993 National Survey of Small Business Finances that desired credit do not apply for a loan because they fear that the loan application would be turned down due to poor credit history, prejudice, or for some other reason(s). Additionally, Levenson and Willard (2000) report that there are twice as many small firms that are discouraged, relative to firms that are actually turned down by financial institutions, based on their credit applications. Chakravarty and Yilmazer (2009) discuss that about one-third of small businesses that have credit needs avoid applying for a bank loan for fear of being turned down. An important conclusion from these studies is that, within the United States itself, discouraged small businesses form a significant block of potential borrowers who fall outside the rubric of conventional borrower–lender models; they cannot, and should not, be excluded from any formal analysis of determinants of availability and/or the cost of credit.

[4] Jappelli (1990) makes a similar point with regard to discouraged individual borrowers within the United States. Besides direct screening, firms also screen applicants indirectly by not locating branch offices in certain districts or neighborhoods (see Avery, 1981).

[5] Beck et al. (2006) investigate the determinants of general financing obstacles faced by small businesses. Using survey data similar to ours, involving various emerging economies around the world, the authors report that firm age, size, and ownership are the main drivers of financing obstacles faced by these firms. They, however, do not deal with discouraged borrowers.

[6] Note, however, that Angelini and Generale (2008) use two databases: one focusing on firms in Italy while the other comprises of data from 80 countries compiled by the World Bank Enterprise Survey (WBES).

[7] Our choice of countries is driven largely by the availability of small firm discouragement data in our database, since not all questions were asked in all of the countries surveyed by the World Bank. Our conversations with World Bank officials reveal no biases in terms of firms in specific countries being asked specific questions.

[8] Chakravarty and Xiang (2011a, 2011b) use a data set similar to the current paper in investigating the key factors of profits reinvestment decisions of small businesses in 36 developing countries.

[9] The term "relationships" captures the interaction between borrower and lender leading to a reduction in adverse selection. There is an active stream of literature that has reported such relationships to be beneficial toward improving loan efficiencies (see, for example, Berger and Udell, 1995; Chakravarty and Scott, 1999; Chakravarty and Yilmazer, 2009; Cole, 1998; and Petersen and Rajan, 1994).

[10] According to the World Development Indicators, by using the World Bank Atlas Method, all of the economies are categorized into four groups (low income, lower middle, upper middle, and high income groups). By this method of categorization, we have seven countries in our data falling in the low income category while the remaining three are grouped either in the upper middle or lower middle category. Accordingly, in the current study, we group the seven countries as relatively underdeveloped economies while the remaining three form the relatively developed economies.