State of the Art Review

Discouraged Borrowers: Measurement, Determinants and Impact

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In recent years increasing attention has been paid to SMEs who do not apply for bank finance for fear of rejection - so-called discouraged borrowers. To date, much of the literature has focused on the measurement of discouragement in SMEs. These firms constitute a major proportion of SMEs with some recent research suggesting they number as many as half a million UK SMEs. However, owing to the different definitions of discouragement adopted, comparisons across different studies are problematic. The growing literature on the determinants of discouragement suggests firm size and age are significant, with nascent and smaller SMEs more likely to be discouraged. Entrepreneurs who are older, female from ethnic minority backgrounds with lower levels of human capital and poorer credit ratings, are more likely to be affected. The evidence base on the potential impact of borrower discouragement is less well established. However, available evidence suggests discouragement may result in reduced investment levels and weaker firm performance. The broader and disaggregated definitions of borrower discouragement used in recent studies provide a useful basis for future comparisons and longitudinal tracking.

Background

Small and medium sized enterprises (SMEs) are informationally opaque and often lack certified financial statements and collateral required by lenders to access the finance necessary to fund day-to-day operations and longer term fixed capital investment. Extensive evidence confirms the difficulties that are faced by SMEs which seek credit and are rejected.

Recent evidence suggests that there is a significant proportion of SMEs which require finance, but do not apply for fear of rejection. To date there is limited understanding of these so-called '*discouraged borrowers'.* First identified by Levenson and Willard (2000), discouragement amongst SMEs is a relatively neglected topic. This is somewhat surprising given that some discouraged borrowers are likely to be creditworthy, and may unnecessarily forgo possible funding opportunities for investment, with potentially negative implications for their own future growth as well as job creation, innovation and economic growth.

Academics define a discouraged borrower as: '*a good firm, requiring finance, that chooses not to apply to the bank because it feels its application will be rejected'* (Kon and Storey 2003, p.47). Within this categorisation, discouraged borrowers are strictly limited to bank borrowers. However, there is a degree of ambiguity concerning the precise definition of borrower discouragement within the SME literature. Table 1 summarises various definitions of borrower discouragement. In most surveys investigating access to finance issues, questions tend to ask whether SMEs enact self-imposed credit constraints for fear of rejection. However, in some studies the definition of discouragement is much more expansive, extending to issues such as collateral requirements, credit history and the complexity of loan procedures. This suggests that the definitions of borrower discouragement require clear articulation prior to any empirical investigation.

Table 1: Definitions of Discouraged Borrowers

Study	Data Source	Technical Definition of Discouraged Borrowers
Brown et al 2018	UK Longitudinal Small Business Survey (LSBS)	SME had a need for finance but did not apply because of any of the following reasons: 'You thought you would be rejected; you thought it would be too expensive; you didn't want to take on additional risk; now is not the right time because of economic conditions; you didn't know where to find the appropriate finance you needed; poor credit history; decision would have taken too long/too much hassle'
Gama et al 2017	EDRB and World Bank Group's Business Environment and Enterprise Performance Survey (2008/09 BEEPS)	'if it does not apply for a loan for different reasons, such as tough loan prices or loan contract procedures or fear of rationing, that is, the scale of discouragement as a function of bank screening errors, application costs, and the difference in interest rates between the bank and other money lenders' (p. 35)
Moro et al 2017	ECB Survey on the access to Finance of SMES (SAFE)	'did not apply due to anticipated rejection' (p. 122)

Neville et al 2017	US Federal Reserve Board's Survey of Small Business Finances (SSBF)	'During the last three years, were there times when the firm needed credit, but did not apply because it thought the application would be turned down' (p. 21)
Tang et al 2017	Bespoke Survey in Hanan and Guangdong province, China	'Have you decided not to apply for a loan anticipating a bank rejection' (p. 529)
Rostamkalaei 2017	UK SME Finance Monitor	'thought they would be turned down, that is was not the right time to borrow, or that banks were not lending' (p.398)
Cole and Sokolyk 2016	US Federal Reserve Board's Survey of Small Business Finances (SSBF)	'is a firm that did not apply for a loan during the previous 3 years because the firm feared rejection, even though it needed credit' (p. 47)
Cowling et al 2016	UK SME Business Barometer Surveys	'demand for but not applying for any finance either because the firm feared rejection or the owner thought the finance was too expensive' (p. 1054)
Mac an Bhaird et al 2016	ECB Survey on the access to Finance of SMES (SAFE)	'With respect to banks' loans (either new or renewal): did you apply for them over the past 6 months, or not? 1. Applied. 2: No, because of possible rejection' (p. 49)
Chakravarty and Xiang 2013	World Bank Enterprise Surveys	'as firms with a need for a loan who nevertheless choose to not apply for a bank loan because (1) the loan procedure was too complicated; (2) interest rates were too high; (3) collateral requirement were too high; and (4) there was corruption in allocation' (p. 67)
Freel et al 2012	UK biennial survey by the Federation of Small Businesses	'in the past two years has the fear of rejection stopped you from seeking a bank loan for your business' (p. 407)
Study	Data Source	Technical Definition of Discouraged Borrowers

Evidence

The growing literature on discouraged borrowers focuses on the measurement of borrower discouragement and its determinants. Evidence regarding the extent of borrower discouragement finds varying levels of borrower discouragement. These stark differences may owe to the different definitions adopted in different data sets and empirical studies. As a consequence, considerable caution should be exercised when comparing the empirical findings across different studies of discouraged borrowers. For example, Fraser (2004) and Freel et al, (2012) find that 8% of UK SMEs can be classified as discouraged. Cowling et al, (2016) find that only 2.65% of UK SMEs could be classified as discouraged borrowers post global financial crisis (GFC). Using a different data set Rostamkalaei (2017) confirms low levels of borrower discouragement post-GFC. However, the latest empirical evidence suggests levels of discouragement to be much higher at 9.1% of SMEs (Brown et al, 2018). This is similar to earlier UK studies and levels of (8% to 14%) borrower discouragement observed in the US (Cole and Sokolyk, 2016).

Evidence related to the determinants of borrower discouragement examines the nature and characteristics of entrepreneurs and SMEs that become discouraged (see Table 2 below). Ethnic minorities (Fraser, 2009; Neville et al 2017), female entrepreneurs (Moro et al, 2017), older, less well-educated and entrepreneurs with lower levels of personal wealth are significant determinants of discouragement (Cole and Sokolyk, 2016). Gender appears a strong predictor of borrower discouragement with female entrepreneurs almost twice as likely to be discouraged borrowers relative to male counterparts (Freel, 2012). Serial entrepreneurs are also much more likely to be discouraged borrowers (Freel et al, 2012) as well as borrowers with a high credit risk (Han et al, 2009).

Table 2: Characteristics and Impact of Discouragement

Entrepreneurial Characteristics	***Firm-Level Characteristics***	***Potential Impacts***
Older	Young	Underinvestment
Female	Small	Reduced growth
Ethnic minorities	Knowledge-intensive/service-sector	Lower employment
Low levels of human capital	Non-family-owned firms	Reduced innovation
Serial Entrepreneurs	Fewer sources of banking relationships	Take-up of costlier or unsuitable sources of finance
Poor credit history	Trust-based banking relationship	Increased reliance on equity rather than debt sources of finance

Source: Brown et al (2018)

Firm characteristics also affect borrower discouragement (see Table 2). Larger and more mature SMEs are less likely to be discouraged borrowers (Freel et al, 2012; Chakravarty and Xiang 2013; Cowling et al, 2016; Mac an Bhaird et al, 2016; Rostamkalaei, 2017). These findings hold irrespective of geographic location and methods utilised (Chakravarty and Xiang 2013; Mac an Bhaird et al, 2016). In other words, in line with theoretical expectations, the smallest most informationally opaque firms encounter higher levels of borrower discouragement (Berger and Udell, 1998). Other evidence suggests that discouraged borrowers have fewer sources of finance (Freel et al, 2012; Cole and Sokolyk, 2016; Cowling et al, 2016). A recent study in China finds that borrowers with high levels of trust in their banks are less likely to be discouraged borrowers (Tang et al, 2017).

In terms of the longer-term impact of borrower discouragement, recent evidence by Ferrando and Mulier (2017) suggests that in the two-years following their decision to not seek finance, investment growth is on average 4.7% lower for discouraged borrowers relative to their non-discouraged counterparts. Another recent study finds that growth-oriented firms are the most affected by borrower discouragement (Brown et al, 2018). Recent estimates suggest that a lack of funding for discouraged borrowers could result in sub-optimal levels of investment within the UK economy to the tune of £1.5 billion (Cowling et al, 2016).

Evidence gaps

Given it could affect as many as half a million UK SMEs, borrower discouragement is a growing area of interest to policy makers. To date definitional differences and different measurement techniques have made it difficult to compare borrower discouragement across different geographic locations and over time. The broader and disaggregated definitions of borrower discouragement used in recent studies provide a useful basis for future comparisons and longitudinal tracking.

Prior evidence suggests that firm size and age are significant determinants of borrower discouragement. However, there remains a paucity of evidence regarding other possible firm-level determinants of borrower discouragement, including industry sector, geographic location and business orientation (growth orientation, internationalisation, innovativeness). Evidence regarding the impact of borrower discouragement on real economic outcomes also remains scant. However, given the differential impact of borrower discouragement on growth-oriented SMEs noted above, estimates of the potential impact on SMEs may under-estimate the consequences of borrower discouragement on real economic outcomes.

Sources

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