

2006-07-13

PRESS RELEASE

The response of firms' investment and financing to adverse cash flow shocks: the role of bank relationships

NBB Working Paper nr. 87 – Research Series

The paper investigates whether single bank relationships help firms to circumvent liquidity shortages in times of adverse cash flow shocks. Economic theory suggests that lending relationships are useful in overcoming asymmetric information problems between creditors and their clients. Consequently, firms with deep lending relationships (i.e. a single relationship) may benefit from better credit conditions. The paper tests whether having a single versus multiple bank relationships has an effect on the availability of bank debt and on investment spending.

We examine in particular firms' financial and investment situation in periods of adverse cash flow shocks. We define periods of large negative cash flow shocks as periods in which the cash flow of the firm drops substantially relative to the capital stock of the firm. We argue that it is especially in these times that financial constraints are more likely to be binding and that firms more strongly need external finance. If in these periods firms cannot restore liquidity, through the use of external finance, they become excessively dependant on internal liquidity (i.e. cash flow), and they have to reduce spending, including investment spending.

First, we examine whether firms experience stronger financial constraints in periods of adverse cash flow shocks. Our estimates of the cash flow sensitivity of investment suggest that financial constraints bind only in these periods. We then test whether firms' investment reacts differently in these periods as a function of having a single bank relationship. We find that single and multiple bank relationship firms show the same investment reaction to cash flow in periods of adverse cash flow shocks. This suggests that single bank relationships are not especially helpful in alleviating financial constraints problems during bad times.

Second, we analyse directly the restoration of liquidity after an adverse cash flow shock. We assess whether firms obtain extra credit from their banks, or whether they make use of trade credit (which can be considered as a more expensive substitute for bank debt). Our results indicate that firms that receive extra bank debt cut their investment spending to a much lower extent. We then show that firms that have a single bank relationship do not obtain significantly larger amounts of additional bank credit than firms with multiple bank relationships (conditional on obtaining extra bank debt).

Third and finally, we investigate the determinants of the probability of obtaining extra bank debt. We find that firms with a single bank have a lower probability of obtaining bank credit in all times; this probability is not lower in bad times. Rather, the probability of obtaining bank credit in adverse cash flow shock periods is higher the larger the firm and the lower the initial leverage.

Combining our results we conclude that what really impedes investment in adverse cash flow periods is when firms cumulate a drop in cash flow and a contraction of external bank credit. The second depends more on the size and initial leverage of the firm than on the number of bank relationships.