

Interest Rate Cap, Relationship Lending and Bank Competition in Bangladesh

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Interest rate caps on loans are unarguably important policy tools in both developed and developing countries. In this project I attempt to empirically test whether this policy tool is effective in Bangladesh. I find significant and persistent increase in credit supply, indicating that the policy helped solving market power of banks and helping to build new borrower-lender relationships.

Introduction

Interest rate caps on loans, or setting the upper-bound of the interest rate that commercial banks can charge borrowers, are unarguably important policy tools in both developed and developing countries. Maimbo and Gallegos (2014) find that at least 76 countries around the world currently use some form of interest rate caps on loans. Despite its importance, there is relatively scarce evidence on how such policy would affect the loan market, particularly in developing countries.

In this project, I analyse the interest rate cap policy in Bangladesh. Bangladesh Bank (the central bank of Bangladesh) introduced an interest rate cap at 13% on April 19, 2009 on loans for working capital and term loans to LMEs (large and medium enterprises) as well as in some other categories. The cap on working capital to LMEs was lifted on March 9, 2011, and that of term loans to LMEs was lifted on January 4, 2012. This policy change allows me to analyse the short-term impact of the cap as well as the persistent impact of the cap after the policy is lifted on the size and quantity of outstanding loans for LMEs.

Data and methodology

The data necessary to conduct this research project is provided by the Bangladesh Bank. I mainly use SBS-3 (Scheduled Bank Statistics-3), which records quarterly credit supply information at the bank branch level.

The main empirical strategy applies a difference in difference methodology using the branch-level pre-regulation interest rate variation. In other words, the study will compare outstanding loan's trends (size and quantities) before and after the regulation between two groups of bank branches, interpreting the difference between trends as the effect of the policy. This is possible because bank branches which used to charge higher interest rate above the cap rate of 13% before the regulation incurred larger reduction of the average interest rate during the regulation period, allowing to generate two different groups, i.e. bank branches charging higher and those charging lower than 13%. It is this differential reduction of interest rate that can be used to identify the impact of the interest rate cap on branch-level credit supply.

The analysis is complemented by a placebo exercise with loans for consumer goods, which are not subject to the cap. Namely, we confirm that there are no impacts on the interest rate and the credit supply of loans for consumer goods. This alleviates the concern that our results are driven by some other factors rather than the interest rate cap policy, which would undermine the difference in difference estimation.

Findings

Figure 1 and 2 summarize the main findings. Figure 1 plots the average interest rates for LMEs over the period ranging from 2008 to 2013, each line constituting the trend of a bank branch-level average interest rate. Bank branches which used to charge higher interests before the regulation (i.e. in the first quarter of 2009) decreased the interest rate more after the second quarter of 2009 (the first red vertical line). Furthermore, these branches increased the interest rate more after the cap is lifted in 2011 and 2012 (second and third red vertical lines).

Figure 1: Differential Impacts of the Interest Rate Cap on Branch-level Average Interest Rate for LMEs

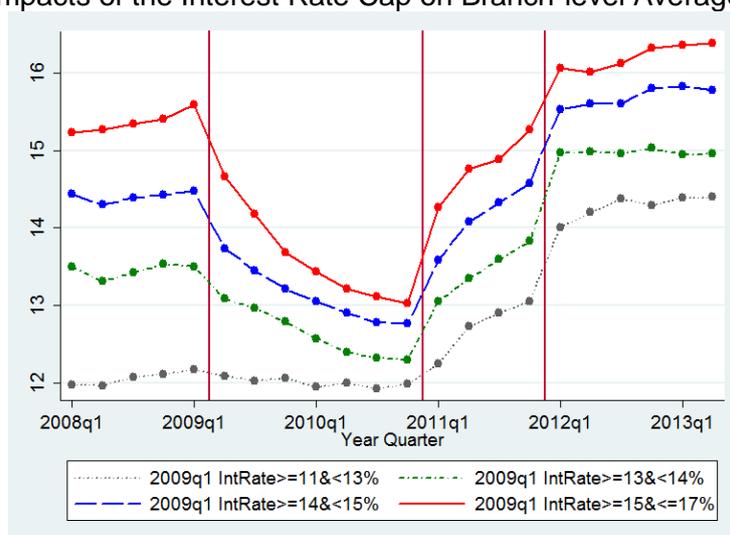


Figure 2: Differential Impacts of the Interest Rate Cap on Branch-level Log Outstanding Loan Amount for LMEs

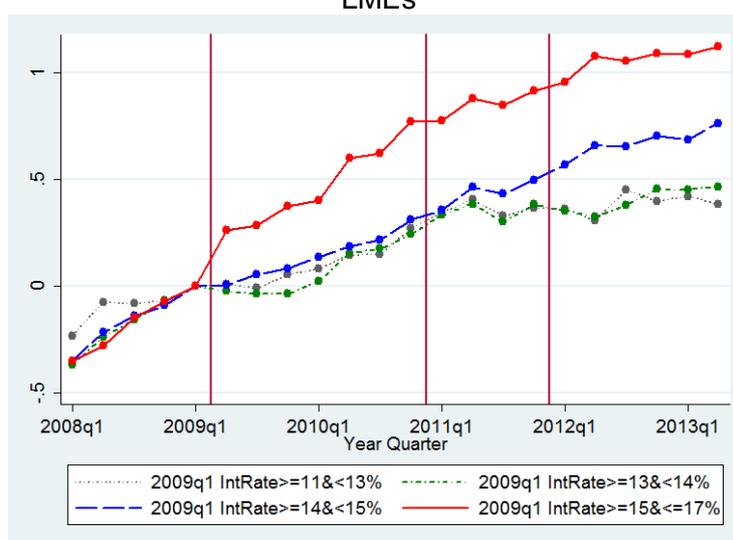


Figure 2 reports the differential change of credit supply in response to the interest rate change. Each line reports the logarithm of outstanding amount (normalized by the level in the first quarter of 2009 – this transformation allows us to interpret the figures in the graph as percentage deviations from the trend), again stratified by the branch-level average interest rate in the first quarter of 2009. Two things are noteworthy. First, branches which used to charge higher interest rate increased the credit supply more right after the introduction of the cap. The magnitude is big: 1 percentage point increase of the pre-regulation interest rate induced 17% increase of the outstanding amount and 11% increase of the number



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of loans one year after the introduction of the cap. Second, the increased credit supply did not dissipate even after the cap was removed, implying the persistent impact of the cap on the credit supply.

Policy implications

What can explain the persistent positive impact of the interest rate cap? The positive impact of the interest rate cap on credit supply can be explained by the market power of banks. That is, banks were making some profit margin before the cap was introduced and the introduction of the cap did not discourage banks to keep supplying the credit. The persistent impact is consistent with the story that the cap enhanced the relationship between banks and borrowers. During the capped period, new borrowers started to borrow from banks, and banks built relationship with these new borrowers so that they find it optimal to keep lending even after the policy is lifted. This story suggests that the cap was effective in solving market power of banks and helping to build new borrower-lender relationships.

Moving Forward...

I am currently working on finalizing the draft of the paper. The paper will include the results of the placebo exercise, as well as the formal economic model of the story illustrated above.

One important caveat of the analysis so far is the impact of the cap on wider economy outside credit market. For example, during the period of the interest rate cap, the return on bonds stayed relatively low. This is potentially because banks reallocated the asset from lending market to bond market, due to the low return in the lending market. Careful analysis should be conducted for more comprehensive understanding of the policy impact and future policy recommendations.