Borrowing Culture and Debt Relief: Evidence from a Policy Experiment

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This paper

- Investigates the effects of the *Debt Relief and Debt Waiver Scheme for Small and Marginal Farmers, 2008* on
  - Debt repayment culture of the borrowers: full waiver recipients (small and marginal farmers), partial waiver recipients (big farmers), and no waiver recipients (middle farmers)
  - Lending practices of the creditors
- Finds that the number of days taken to repay debt increases for all borrowers in the post-waiver period
- The effects are most negative for the no-waiver recipients
- Rationalises the result by saying that this group enjoys the longest extension granted by the creditors due to their credit records.
- This is interpreted as pervasive deterioration of loan repayment culture
The sequence of events

- Loans are overdue at $t_1$.
- All these loans are waived off.
- Bank has to give new loans, even if the borrower is a defaulter at $t_1$.
- Bank changes the terms of contract - allows a larger grace period ($n$ more than $m$) for those who were not in default at $t_1$.
- Loans are due at $t_2$, but everyone can take upto the grace period allowed.
- If loans overdue after $t_2 + n(m)$, then bank can withdraw credit.
The two decision makers

- **Bank**
  - How many days grace period?
  - Whether to give the next loan? How many days grace period for this loan? Does it depend on when the previous loan (but after the debt waiver) was repaid?
  - Test whether borrower profile changed?

- **Borrower**
  - How much time to wait to see if a new debt waiver is announced? Repay just before the end of the grace period? How does that impact the grace period for the next loan?
  - If not paid after the m (or n) days, then it makes sense to not repay at all, in the hope that a waiver will be announced at some point.
  - Test if the data shows a $m$ or a $n$ threshold for both groups.
How independent is the bank?

- Cole (2009) suggests:
  - Greater lending closer to election years
  - Politicians reward their supporters immediately following elections by causing banks to write off loans to borrowers in constituencies in which politicians enjoyed the greatest support.

- If the bank threat of withholding the next loan is not credible, then the borrower has a different set of incentives to default.

- The data-set (2005-2012) does include an election year (2009), and may induce a change in expectation of a debt-waiver.

- The expectation of a debt-waiver may also change the risk profile of investments - if the data shows the purpose of the loan, this could be used.
Definition of deterioration of credit?

- The lender has given a grace period of $n$ days to the no-waiver group, larger than the $m$ days given to the waiver group.
- If $m < n$, then the results might be reflecting the decision to repay just before the grace period runs out.
- Does this constitute deterioration of credit culture? It is by design.
The cost of waiting to see if there is a waiver

- The model shows that the pay-off for the Default - No waiver - Repay tree is $V_{bi}$, which is the same as the payoff for the No default tree (regardless of the waiver).

- There is a cost to waiting for the waiver. Not sure it is adequately reflected in the model.
Some clarity on waivers

<table>
<thead>
<tr>
<th>Date loan taken (Date loan due)</th>
<th>Days overdue as of 31 December 2007</th>
<th>Total days overdue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Dec-2006 (31-Oct-2007)</td>
<td>60 days</td>
<td>120 days</td>
</tr>
<tr>
<td>1 Jan-2007 (31-Nov-2007)</td>
<td>30 days</td>
<td>90 days</td>
</tr>
<tr>
<td>1-Feb-2007 (31-Dec-2007)</td>
<td>1 day</td>
<td>61 days</td>
</tr>
<tr>
<td>2-Feb-2007 (1-Jan-2008)</td>
<td>0 days</td>
<td></td>
</tr>
</tbody>
</table>

- Debt overhang will affect different farmers differently
- Uncomfortable with the assumption that all farmers are strengthened by the debt write-off and will achieve a higher productivity in the post-waiver period
- If loan dates, and days overdue are available, can be used to differentiate between repayment of farmers in the post debt-waiver period who just managed to get the waiver (or not).
The dependent variable

- The dependent variable is the number of days a loan remains outstanding.
- Censoring of data for those farmers who have not repaid till the end of the data-set.
- Useful to see loan repayment statistics as well.
Comparing all loans after waiver

- The second and third loan after waiver may be endogenous to the repayment of the first loan after the waiver.
- The bank can decide to not extend a new loan: this needs to be accounted for in the regressions. The later regressions do show a differential rejection rate for waiver and no-waiver farmers. So this is an important issue.
- The bank can also change $t_2$, $m$ and $n$, and if these are driving the results, then default is even harder to define.
- The number of new loan accounts after the waiver - this may reflect that the pool has changed considerably.
Use of the panel data

- Use panel data models to also control for individual heterogeneity
- Condition results on the probability of being offered a loan post the waiver, and offered subsequent loans post each loan cycle.
Conclusion

- Very important topic
- A long data-set with years before and after the debt waiver
- Not fully persuaded by the empirical work
- Focus more on selection effects: who is getting the loan?