Discussion "The Economic Effects of a Borrowers Bailout: Evidence from an Emerging Market" by Xavier Gine and Martin Kanz

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Summary of the paper

- This paper exploits a natural experiment to test the effects of debt forgiveness on credit markets and on real outcomes
- Important topic:
  - Debt overhang (Mian and Sufi, among others)
  - Fiscal policy
  - *"...the efficient functioning of credit markets might be impaired were creditors to anticipate that downturns would lead to intervention."* (Bolton and Rosenthal 2002)

Setting

- 2008, bailout program for rural borrowers in India that were in default
- Eligibility rules based on size of land holdings pledged as collateral at the time loan was issued
  - 100% forgiveness for land holdings smaller than 2 hectares
  - 25% forgiveness for larger land holdings, conditional on repayment of the full balance
- Authors exploit variation in the share of borrowers affected by the program ("exposure") across Indian districts, and variation within banks across districts

Results

- Bank debt **decreases** and debt repayment is **worse** in districts with **more exposure to bailout**
- **No effect** on agricultural productivity, wages, or employment

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- I like this paper
  - Intriguing results
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  - Informs a very relevant policy question

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- Study trade-off for debt bailouts
  - Informs a very relevant policy question
- Main comments:
  - Identification: district-level
  - Interpretation: economics?

First comments: identification

- How do you test the effects of debt forgiveness on borrower-level outcomes?
- Lets imagine the best possible dataset together with the best possible setting
  - Borrower-level panel
  - Debt relief/bailout program that is unexpected, and eligibility is based on some pre-determined rule

Implementation

- Consider rural borrowers who were in default in their debt, and define $treatment_i = 1\,(landpledged_i \leq c)$
  - Borrowers above 2 ha could choose to participate, this reduces power (to zero if everybody above cutoff chose to participate) and identifies a local effect
- Limit sample to $|landpledged_i - c| \leq d$ with d sufficiently small, and run a diffs-in-diffs,

$$default_{i,t} = \alpha_i + \delta_t + \beta post_t \times treatment_i + \epsilon_i$$

  for other debts (or control non-parametrically as in an RDD)
- Also use the fraction of the loan in default, log debt as outcomes, real outcomes, include district x time dummies, etc

District-level

- Big difference: authors observe district level data
  - We don't see who's debt is increasing, who defaults...
- What assumption allows identification of a causal effect?
  - District-level exposure to the program is correlated with future repayment behavior and loan growth and economic outcomes **only** through the bailout program
- How plausible is this?

ID assumption

- Authors exploit variation induced by rainfall (correlated with default) and distribution of land holdings (not only of borrowers, of entire district)

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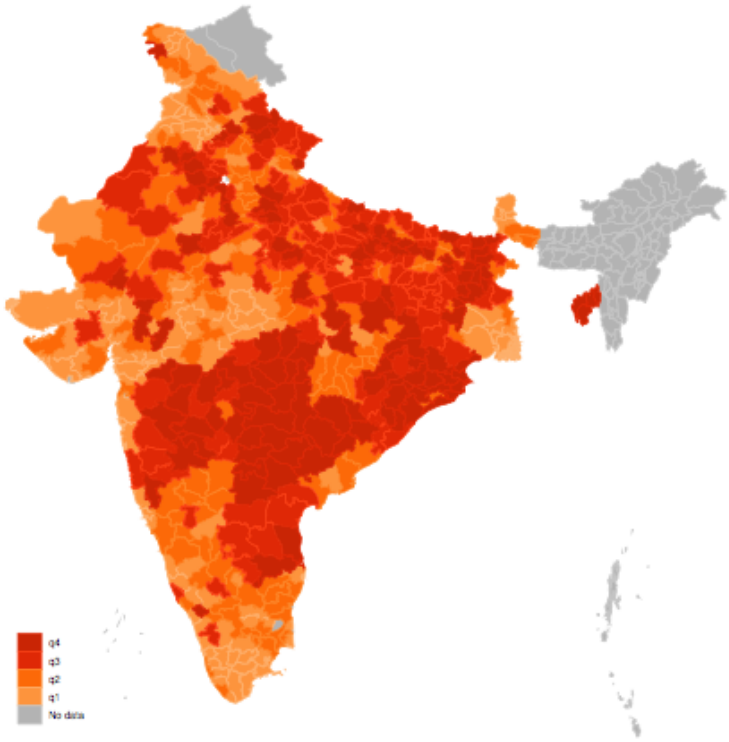
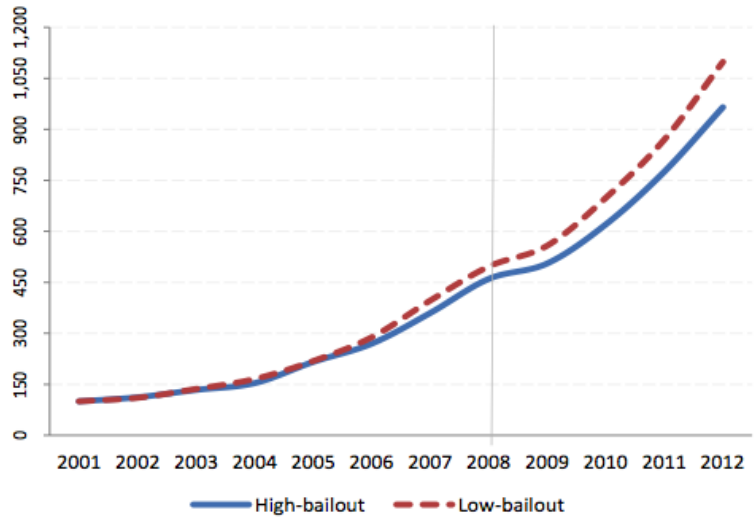
- Would districts with small land holdings where it hasn't rained much have less debt and repay worse, irrespective of the bailout?
- In particular: droughts may affect districts in different manners based on the distribution of land holdings
  - E.g., suppose districts A and B experience a drought, but A has more small land holdings and so drought shock is more persistent
  - A would have more exposure to program, but credit growth would remain lower while repayment would be worse

Some graphs



(b) Program exposure [share of total ag credit]

(b) Total Credit [2001=100]



Suggestion

- We need to better understand differences at the district-level (Appendix B good, but...)
  - Geographic clustering? How persistent are droughts at the district level? How persistent are shocks from droughts? Would droughts change the growth paths in different manners depending on distribution of land?

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- We need to better understand differences at the district-level (Appendix B good, but...)
  - Geographic clustering? How persistent are droughts at the district level? How persistent are shocks from droughts? Would droughts change the growth paths in different manners depending on distribution of land?
- Magnitudes: high exposure districts get \$0.04 for every dollar of credit written off, while low exposure districts get \$4 (100x)!
  - Can we attribute the full effect to the bailout?

Second comment: economics

- Lending is lower, defaults are higher in high exposure districts
- Authors argue banks shift lending away from high exposure districts
  - Kills incentive to evergeen? Perhaps
  - However, if banks let more borrowers default in anticipation of the bailout, this compromises the identification strategy

Second comment: economics

- Lending is lower, defaults are higher in high exposure districts
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  - However, if banks let more borrowers default in anticipation of the bailout, this compromises the identification strategy
- More importantly, is this supply or demand? Can't really tell
- Bank by district regressions help, but we still only observe equilibrium lending at the bank-district level
  - Alternative: less lending because these are districts with worse(ning) economic conditions?
  - Or, these are worse districts because of the bailout, i.e. moral hazard

Moral hazard?

- Paper claims that borrowers in high exposure districts stopped paying their debts after the bailout
  - Expectation of a future bailout reduces incentive to repay
- Not clear how this operates: network effects? information, i.e., same districts will get more bailout?
  - ID strategy does not allow us to look "under the hood"

Real economy

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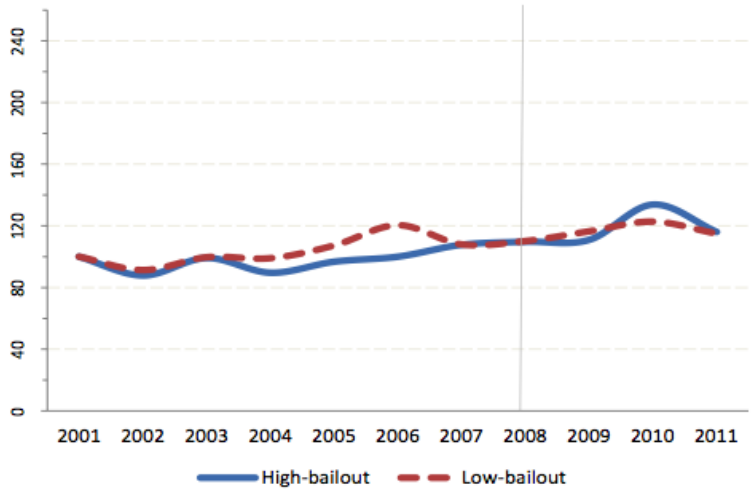
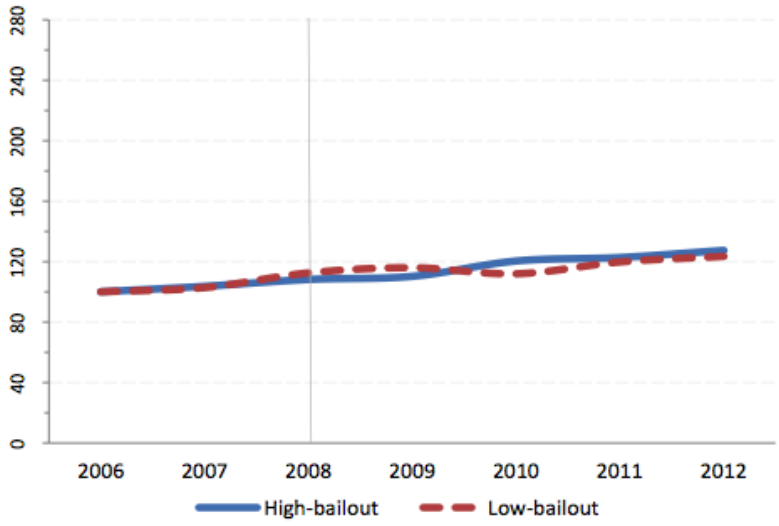
- Interesting results, but recall these guys were all in default to start with!
- Further, should we expect a boost in productivity or real wages? What about migration?
- What about total output?
  - Paper mentions employment but results are not there (Table VII)

More graphs

(b) Productivity [2001=100]



(a) Rural wage [2006=100]



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  - Is it moral hazard that causes worse repayment, which causes banks to reduce lending?
  - Why does eliminating the debt overhang result in no measurable real effects?

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  - Is it moral hazard that causes worse repayment, which causes banks to reduce lending?
  - Why does eliminating the debt overhang result in no measurable real effects?
  - Banks?

Conclusion

- An interesting paper to inform a very relevant policy discussion
- ID strategy is not optimal, but authors aknowledge this
  - Paper would improve with more discussion about the across-district comparison
- Lacks a cohesive story that ties an interesting set of results together
- You should all read it!

Thanks

Thank you!