Saving Behavior in India: Understanding the Differences across Castes

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Introduction

- Preceding 30 years have seen narrowing gaps between SC/STs and the rest
- In recent work we find:
  - narrowing education gaps
  - narrowing occupational gaps
  - narrowing wage gaps
  - narrowing intergenerational mobility rates

Household behavior

- How have households been responding to changing economic circumstances?
  - saving behavior is insightful
- Are there differences between castes in these?

This paper

- Examine differences in behavior between castes
- Have their saving rates responded similarly?
  - Patterns of spending on durable goods?
- Can we explain the differences using standard channels?
  - perceptions of temporary versus permanent changes in income

Data

- National Sample Survey (NSS) of India
- 6 rounds: R38 (1983), R43 (1987-88), R50 (1993-94), R55 (1998-99), R61 (2004-05), R66 (2009-10)
- Include individuals in all male-led households who are
  - 16 to 65 y.o.
  - not enrolled in any education institutions
  - working full-time
  - have occupation and education information
- Sample size: 150,000 to 220,000 individuals per survey round

Measuring saving

- Focus of analysis is on household saving behavior
- NSS reports consumption but not household income
  - it only reports wage income
  - no data on income of self-employed
- Measuring saving is a problem

Our approach

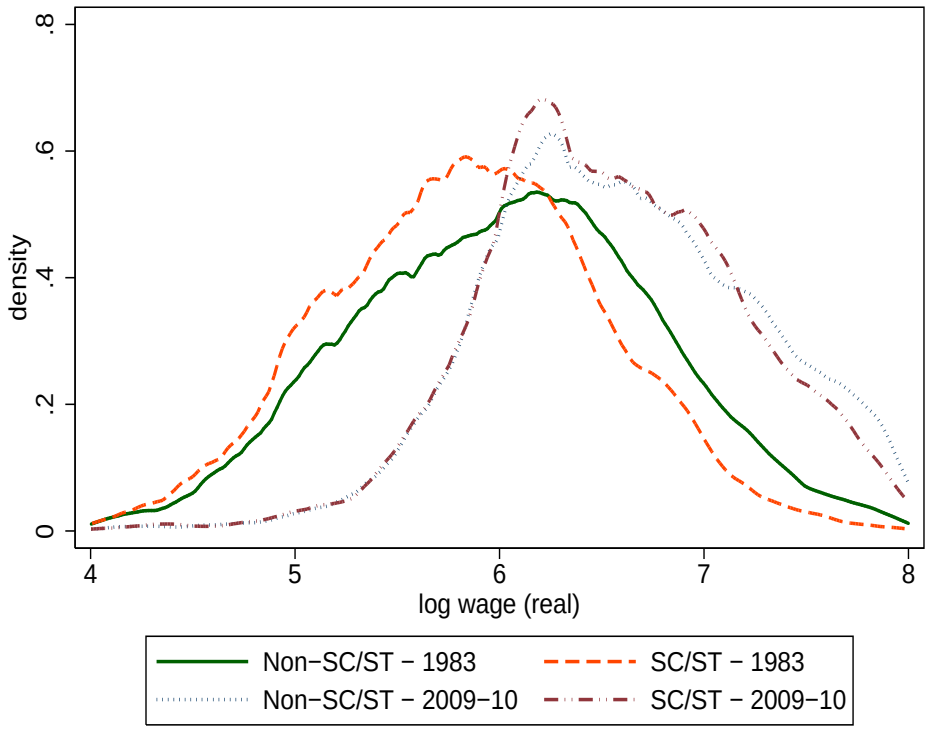
- Multiple approaches to computing household income
  - aggregate wage incomes of households reporting wages
  - impute incomes of self-employed
  - use REDS data which contains income
    - only available for rural areas
    - limited sample
- Multiple approaches should provide robustness

Aggregate household wage income

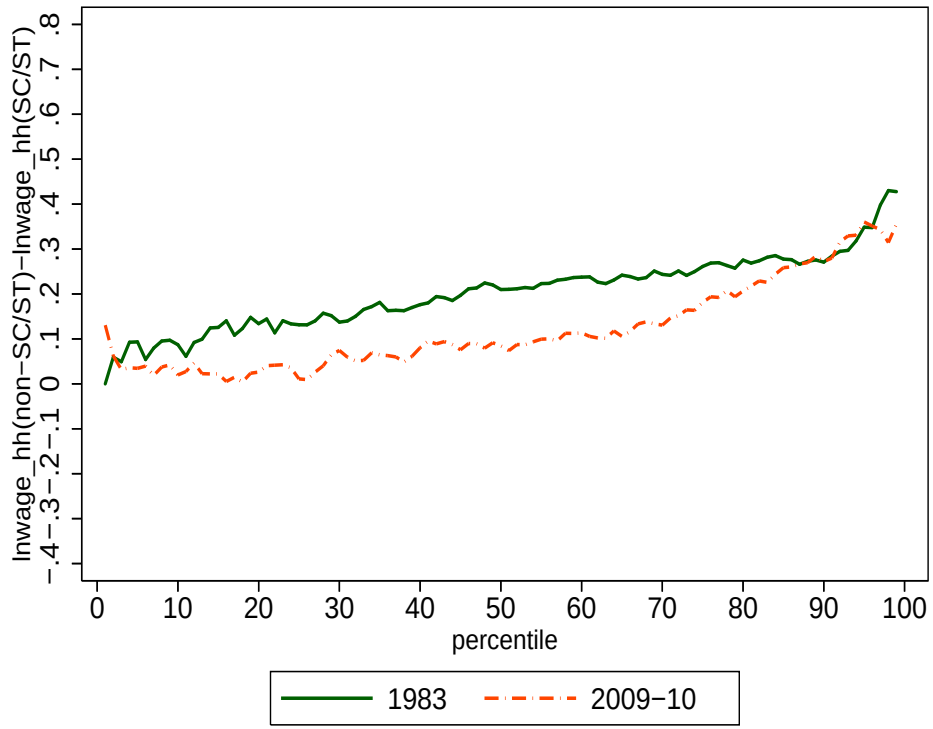
- Add up average daily wage income received by all household members
- Multiply it by 30 to obtain a monthly equivalent
- Compute household saving by subtracting monthly household consumption expenditure
- Measures misses self-employed income

Household wage distributions

(a) densities

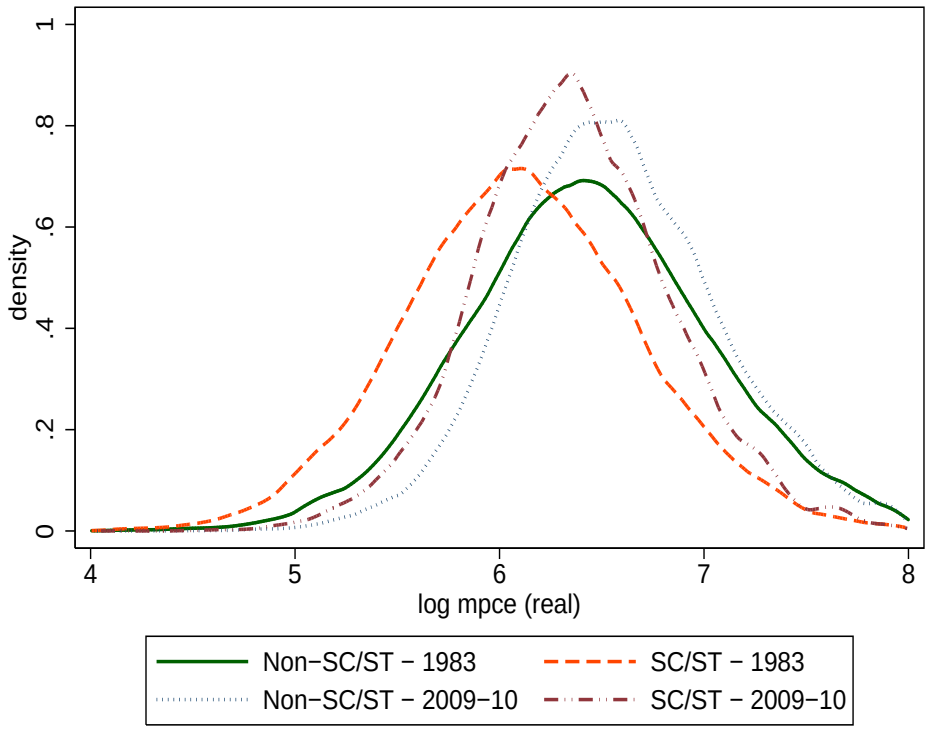


(b) gaps



Household consumption distributions

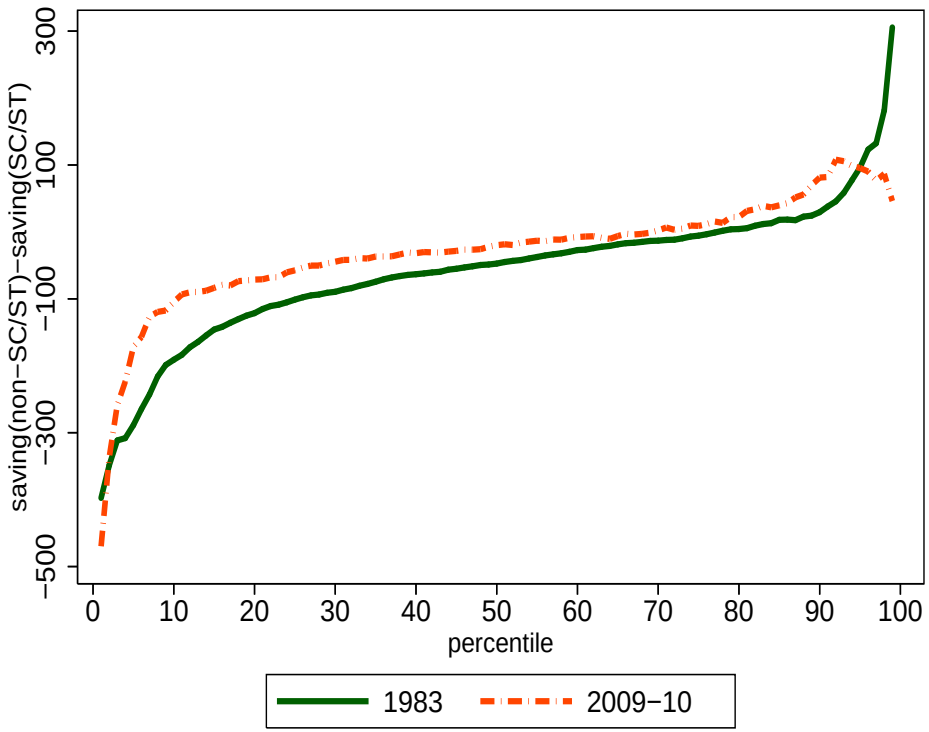
(a) densities



(b) gaps

Household saving distributions

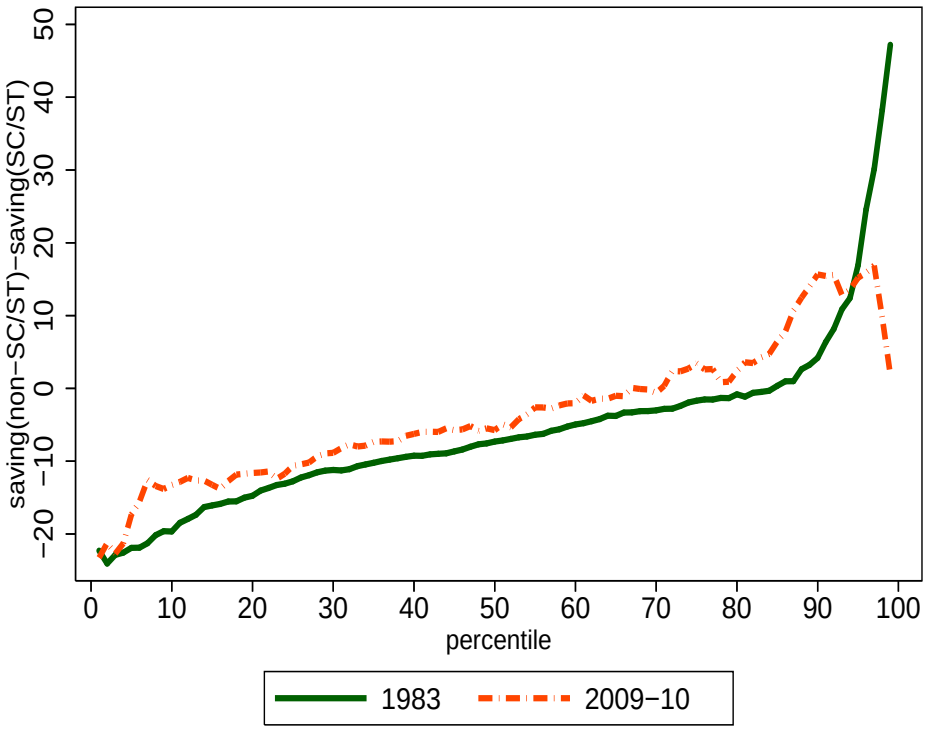
(a) saving gaps



(b) saving rate gaps

Per capita saving distributions

(a) per capita saving gaps



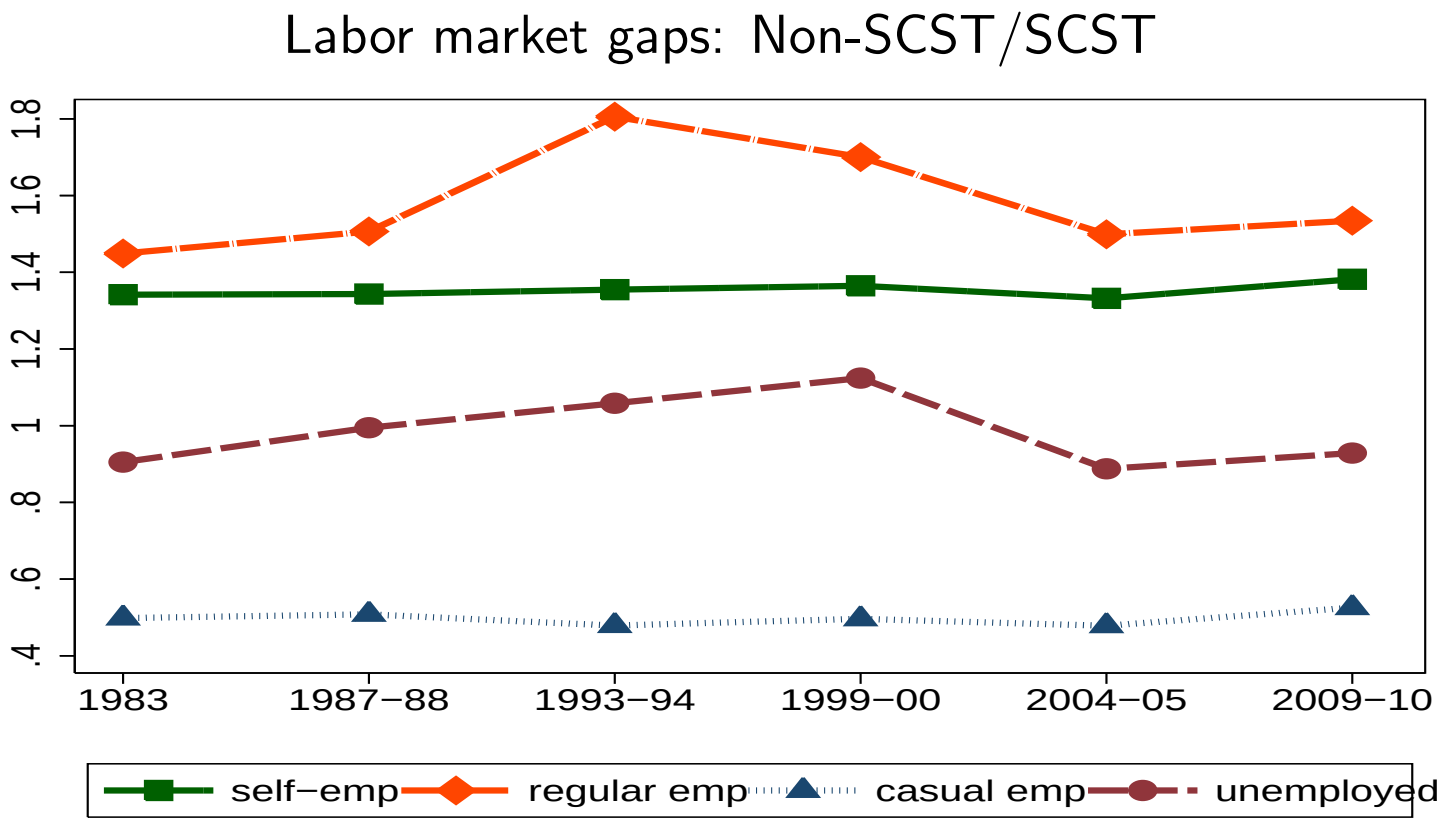
(b) per capita saving rate gaps

Accounting for self-employment

- Preceding ignores the self-employed
- Problematic if SC/STs and non-SC/STs differ systematically in probability of self-employment
- More problematic if these differentials change during the sample period

Self-employment patterns

No big change in proportions of self-employed of the groups



Accounting for self-employed income

- There may be scale economies in household consumption
- An additional worker may add proportionately less to household consumption
- Important to account for all household workers
- NSS does not report self-employed income: need to proxy it

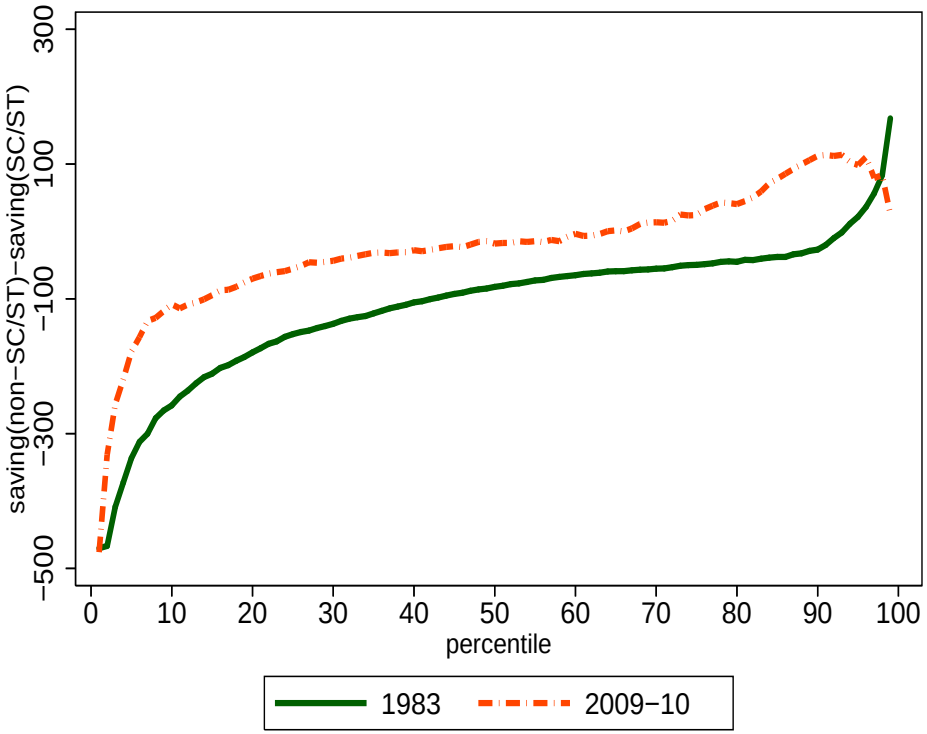
Proxying self-employed income

- Use wage sample to estimate wage regression using worker characteristics on:
  - demographics and location
  - education and occupation
  - caste
- Use regression to predict the wages of self-employed
- Use estimated wages to obtain total household income

Saving distributions with imputed incomes

Patterns robust to including self-employed income

(a) per capita saving gaps



(b) per capita saving rate gaps

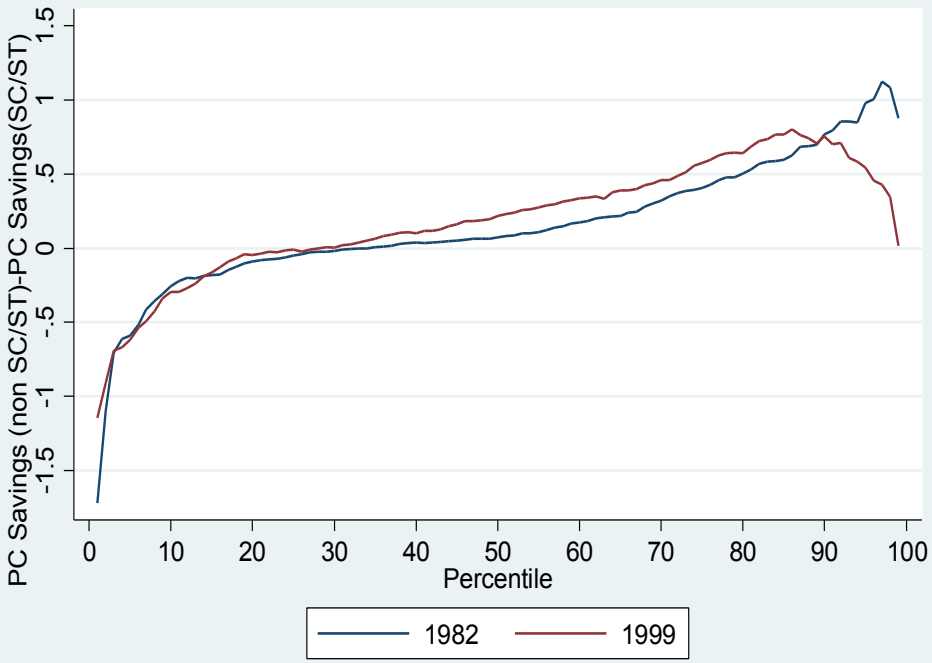
Saving in REDS data

- REDS data has household income and consumption data
- Can compute savings exactly for all households
- Drawbacks
  - smaller data set
  - only rural households
  - we only have access till 1999 round
- Provides robustness check on our measures using imputed self-employed income

Saving distributions in REDS data

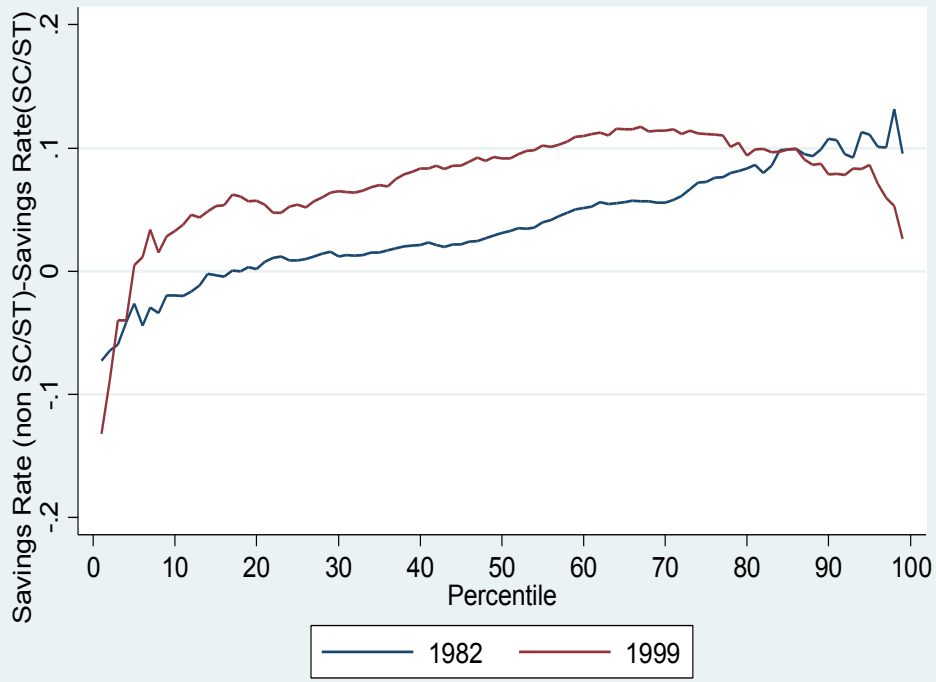
Similar patterns similar in REDS

(a) per capita saving gaps (REDS)



Diff in Percentiles of PC Real Savings (Excl Expenditure on Personal Transport, Jewelry and Education) between non-SC/STs and SC/STs plotted against the percentile (REDS)

(b) per capita saving rate gaps (REDS)



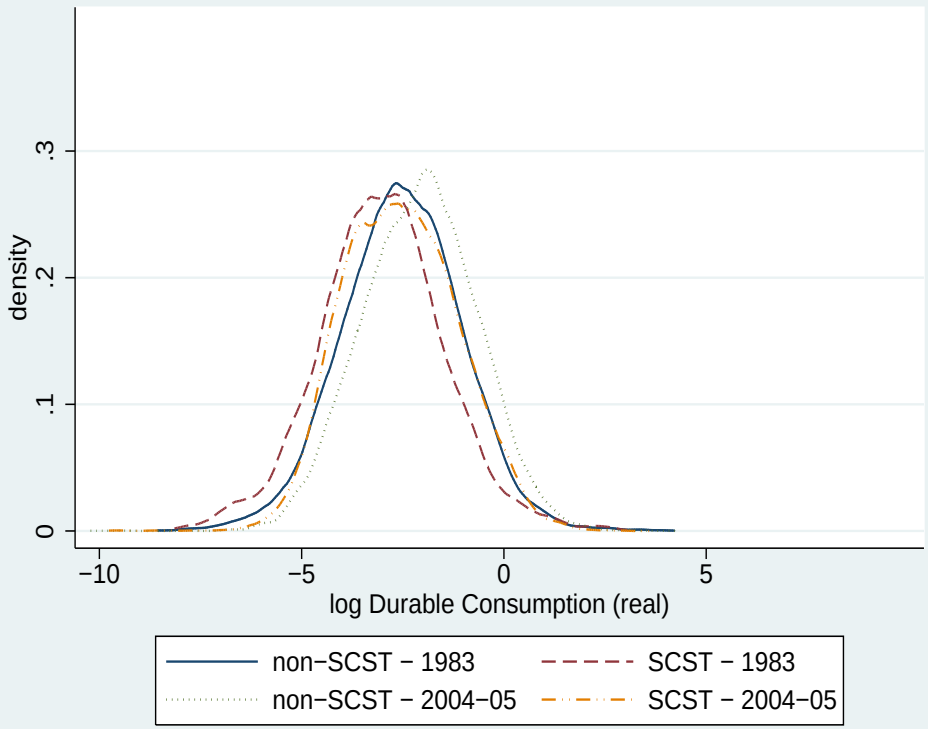
Diff in Percentiles of Savings Rate (Excl Expenditure on Personal Transport, Jewelry and Education) between non-SC/STs and SC/STs plotted against the percentile (REDS)

Saving in durable goods

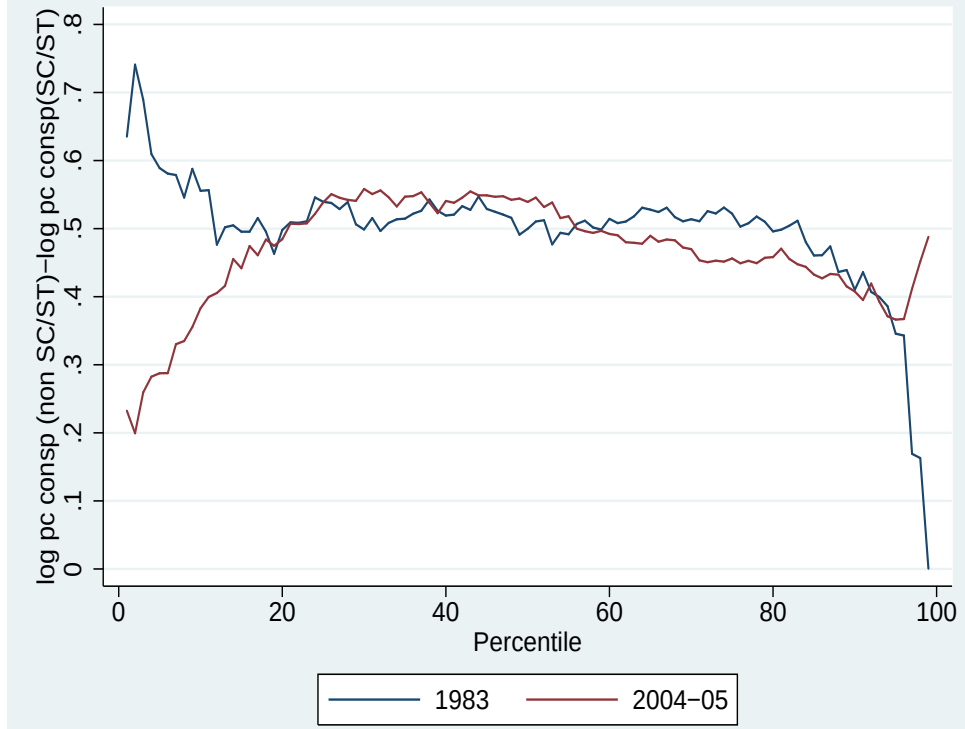
- Alternative method of saving is buying durable goods
- Some categories such as education have a large investment aspect
- Limited financial deepening increase importance of alternative saving instruments
- We create a durable expenditure category from the NSS consumption survey:
  - jewelry, personal transport, and education

Durable expenditures

(a) densities of log mpce (durable



(b) percentile gaps in log mpce (durables)



Collecting facts

- SC/STs tend to save more than non-SC/STs
- Degree of "excess" saving of SC/STs has declined over time
- SC/STs spend less on durables
- Gap in durable spending has declined, particularly amongst the poorer households
  - sharpest decrease in durable spending gap is in education expenditures

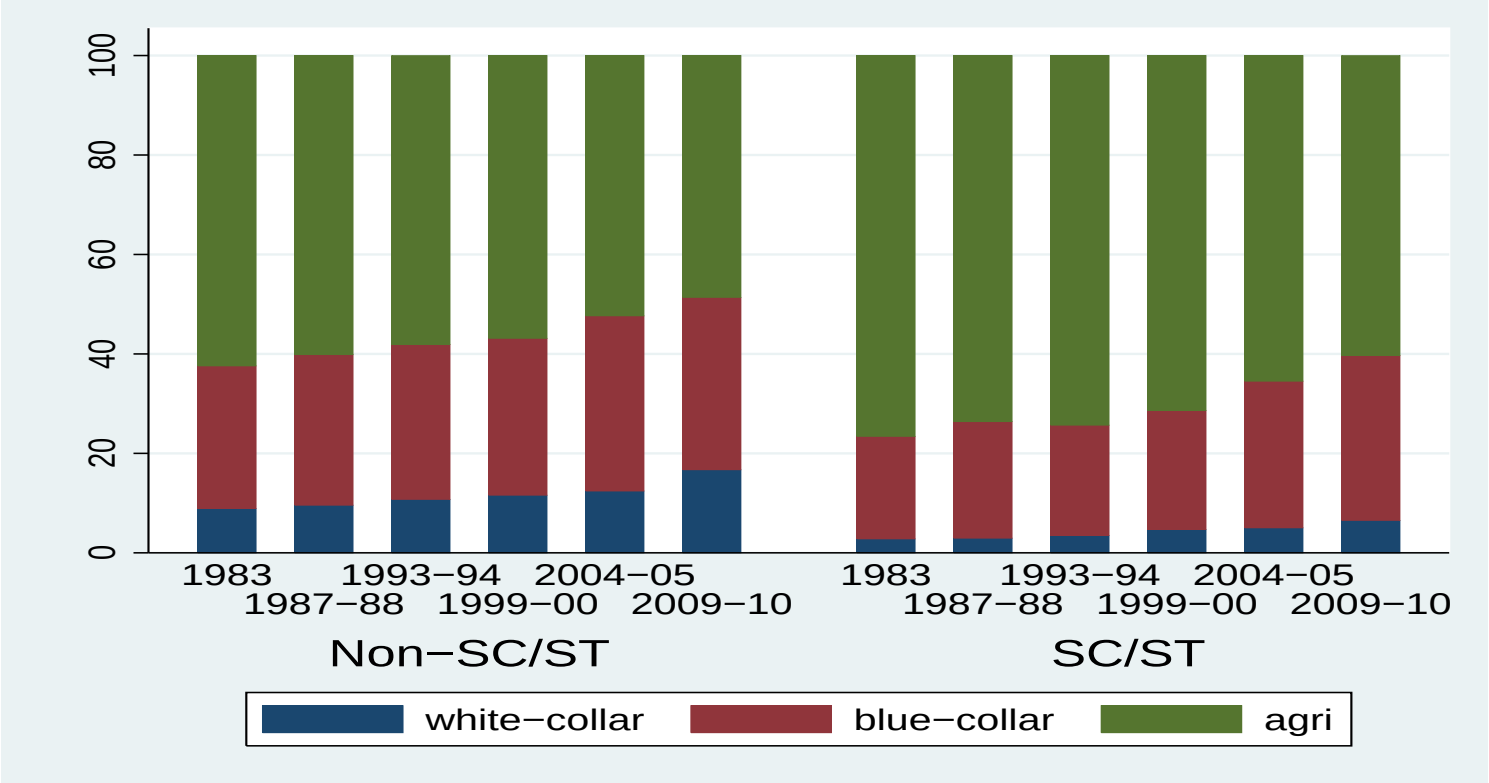
Explanation?

- The saving facts are interesting but potentially puzzling
  - why do poorer SC/STs tend to save more?
  - why has this excess saving declined?
- One explanation for excess savings: precautionary savings
  - arises with uncertainty under fairly standard preference specifications
  - higher uncertainty induces greater saving
- Is there such evidence in the data?

Employment related uncertainty

- We examine two sources of uncertainty, both related to employment status
- Some types of jobs have lower job security than others
  - agrarian, part-time and casual work versus white-collar, full-time and regular work
- Some occupations have greater income uncertainty
- Higher uncertainty induces greater saving
- Contrast SC/STS and non-SC/STs along these dimensions

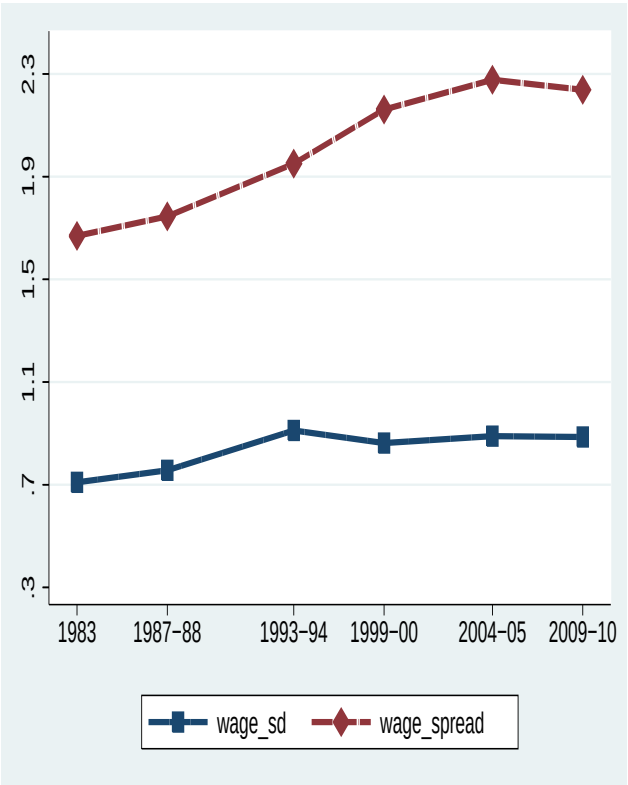
Occupation distribution by caste



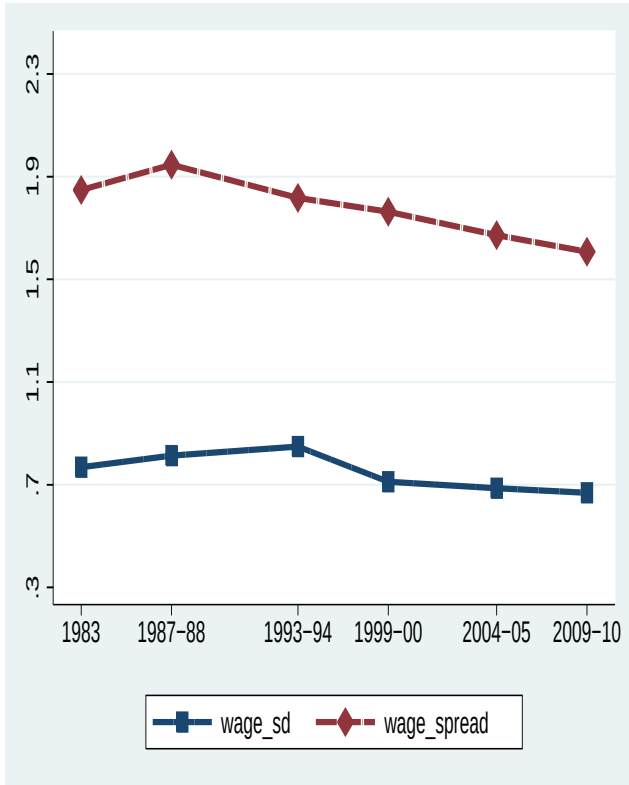
Wage dispersion by occupation

Higher and widening wage dispersion amongst white-collar workers

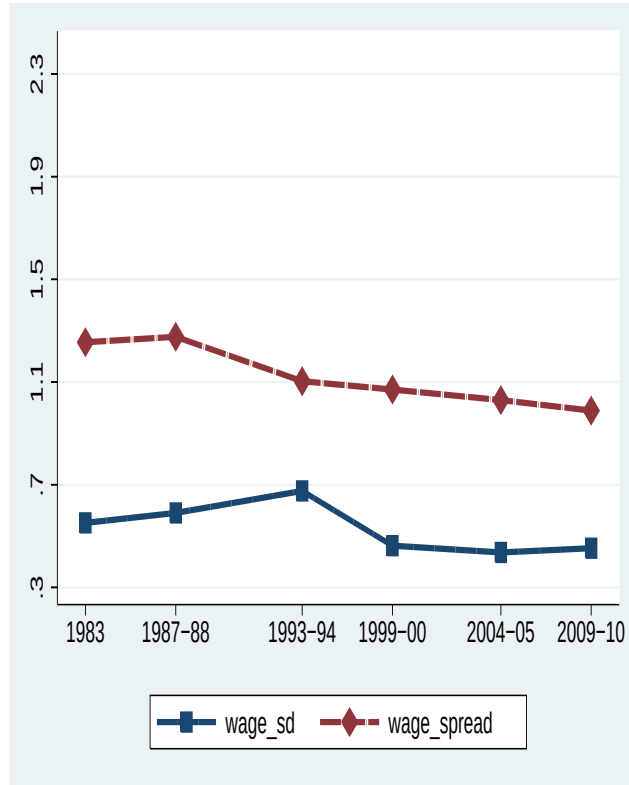
(a) wage dispersion – white-collar



(b) wage dispersion – blue-collar



(b) wage dispersion – agrarian



Job security

- We show that unemployment rates are highest for agrarian and lowest for white collar workers
  - Job uncertainty highest amongst agrarian workers
  - SC/STs over-represented in agrarian occupations
  - SC/STs face greater job insecurity
- SC/STs switching out of agrarian work faster
- Job security possibly improved for SC/STs over time

Implications

- Wage uncertainty lower for SC/STs but job security is lower too
  - ambiguous effect on precautionary saving motive
- Job security may have increased over time for SC/STs
- Wage uncertainty may have risen for non-SC/Ts
  - precautionary saving motive may have risen for non-SC/STs and decreased for SC/STs
- Could explain reduction in excess savings of SC/STs

Conclusion

- Paper examined differences in the saving patterns between castes
- SC/STs often tended to save more than non-SC/STs
- The savings gap has declined over time
- Changes in the precautionary motive could account for the time series behavior