Hedging by Giving: Spiritual Insurance and Religious Donations

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A brief summary

- What
  - Individuals with higher income uncertainties donate more in next quarter
  - Effect driven by religious donation and negative income uncertainties/shocks

- Why
  - Individuals view donation as spiritual insurance; donate wishing to get blessed/reward in the future

A brief summary

- How
  - Economic Model: a strong-enough spiritual insurance motive may lead to a positive relationship between income uncertainty and donation
  - Field data: bank activities for all adult employees receiving wage payment from this bank's account; investigate the predictability of current-quarter income uncertainty on next-quarter donation amount at the individual level
  - Field experiment: randomly add a phrase "do good deeds and receive blessings" to some of the potential donors in an online charitable crowdfunding platform; investigate whether those treated donors are more likely to donate with the treatment

- Who, When, and Where
  - Field data: 74,023 adult employees receiving wage payment from this bank's account; July 2013-June 2015; a high-income economy in East Asia
  - Field experiment: 4.2 million random users of the crowdfunding platform; 28th July to 15th August, 2022; the same high-income economy in East Asia (?)

Main Findings

- Significant positive relation between current-quarter income uncertainty and next-quarter donation amount

  - Individual-level income uncertainty: SD of all residualized monthly payroll income from previous 4 quarters

  ❖ 1 unit ↑ in last quarter income uncertainty → 0.52 USD ↑ in current quarter donation amount

  - IV: firm-level average income uncertainty

  ❖ 1 unit ↑ in last quarter instrumented income uncertainty → 2.02 USD ↑ in current quarter donation amount

Main Findings

- Donation as spiritual insurance
  - Income uncertainty positively predicts both religious donation and secular donation, with a larger effect on religious donation
  - The positive relation is most/only prominent for negative income uncertainty and religious donation
  - Higher medical cost in current quarter predicts higher (religious) donation amount next quarter
- Substitution between donation and insurance purchase
  - Individuals buy less insurance in the quarter they donate
  - Last-quarter income uncertainty positively predicts current-quarter insurance purchase, but current-quarter donation diminishes this effect

Main Findings

- Field experiment:
  - A modest significant higher likelihood of donation among the treated potential donors; no change in the donation amount
  - Larger treatment effect in cities with higher superstitious beliefs
- Unlikely to be driven by mutual insurance, income seasonality, or tax considerations
- The spiritual insurance doesn't work: donation cannot reduce income uncertainty in the next year

Comments

- Detailed and powerful field data + economic model + field experiment
  - Evidence from various sources to support a complete logic line
  - Individual-level variation from the field data + randomized field experiment facilitates causal interpretation
- Interesting findings
  - A new motive for donation
  - Another type of superstitious behavior

Comments

- 1. Donation or religion as spiritual insurance?
  - Most analyses are based on total donation (amount or likelihood), and the main effect also exist among secular donations
  - The crowdfunding platform is not religious; "do good deeds and receive blessings" does not necessarily point to religion, could be superstition, morality, or reciprocity
  - ➢ Donation as a spiritual insurance, and religious donation serves as a better spiritual insurance (i.e., a heterogeneity effect)

  - Logic development for spiritual insurance only highlights the function of religion
  - Medical shocks only predict religious donation
  - ➢ The religion serves as spiritual insurance. In this case, other types of donation shall serve as falsification

Comments

- **2. Identification concerns**
  - Wages and donations are both endogeneous variables within an individual
  - Firm-level average income uncertainty as IV
    - Excluded the individual him/herself?
    - Donation as a firm-level behavior? Eg., peer effect; firms organize/promote donation for tax purpose when the business is bad
    - ❖ Timings of donations among same-firm employees are not clustered
  - Substitution between donation and insurance purchase
    - Donation result in less money to do other things, not necessarily work through spiritual insurance
    - ❖ Check if other types of consumption are also reduced with/after donation

Comments

- 3. Alternative explanation: familiarity effect
  - People tend to donate to the institutions that they are more familiar with
  - People who have riskier jobs (hence more volatile wage payrolls) tend to have religious beliefs → more familiar with religious institutions → donate to religious institutions
  - ❖ Less concerned if the authors propose all donations as spiritual insurance instead of religious donations only
  - ❖ Show the effect exist among individuals with different types of jobs or income uncertainty

Comments

- ## 4. Further implications
  - ### Individual level
    - The spiritual insurance doesn't work (income uncertainty does not reduce after donation), but one reduces the purchase of real insurance that does work → individuals who donate will be worse off in the future?
    - Learning effect?
      - On average, do people learn from the past experience and stop donation/donate less after several rounds of donation?
      - Do individuals who happen to get good outcomes after donation attribute the luck to donation, and donate more in the future?
    - ❖ Can try to check it at a higher frequency (monthly or quarterly), but may not be able to document the learning effect due to relatively short time window
  - ### Social level
    - Spiritual insurance crowd out real insurance→ uninsured (negative) income uncertainties → a bad thing?

Comments

- ## 5. Others
  - Is the predictability of income uncertainty on donation mainly manifests at the intensive or extensive margin?
  - Interpretation of the main effect
    - 1 unit instead of 1 SD ↑ in income uncertainty; or 1 unit ↑ in SD of past income→ 0.52 USD increase in donation
  - Semi-deviation
    - Denominator should be number of months with positive or negative deviations from mean, not the total # of months in the past period
  - Summary statistics
    - All results interpretations are based on unconditional mean values, while Table 1 reports conditional values for some variables and unconditional values for the other variables → better to be consistent
    - Also show the summary statistics for the main independent variable: income uncertainty

Summary

- Very nice paper with important implications based on cool empirical settings

- Lucky to discuss and enjoyed reading it

- Looking forward to future versions/publication

Thank You

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