# Comments on "Credit Misallocation During the Financial Crisis" written by Schivardi, Sette, and Tabellini

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# This paper

- This paper studies bank-firm relationship in Italy using unique data
- Banks with low capital are reluctant to cut credit to inefficient firms (during and after the crisis).
- This misallocation of credit increases survival rate of inefficient firms (Zombie firms)
- Excellent paper!

#### Data and Estimations

- Italian Firm-bank relationship data (unique data)
  - Combined Three data: Firm Register, Credit Register, Supervisory Report
- Main estimations
  - Who lends to Zombie firms

$$\Delta b_{ijt} = \beta_0 + \beta_1 (Z_{it} * LowCap_{jt} * crisis_t) + \beta_2 \mathbf{X_{ijt}} + Dummies + \eta_{ijt}$$

Impact on firm growth of Zombie firms

$$\Delta y_{ipt} = \beta_0 + \beta_1 ShZ_{pt} + \beta_2 (1 - Z_{ipt}) * ShZ_{pt} + \beta_3 Z_{ipt} + Dummies_{ipt} + \eta_{ipt}$$

### My Comments

- 1. sample issue
- 2. TFP
- 3. Some more crucial dimensions and controls.

# Comment 1(Sample)

- Sample issue
- Dropped sample of mutual banks-firm relations (dropped 600,000 bank-firm-year observations)
  - (from 5113468 to 4522722 observations)
- However, mutual banks might be also important in terms of misallocation
  - Mutual/regional banks tend to lend inefficient firms and make Zombie firms
    - Limited information
    - Irrationality (Tight human connection in regions)
    - Efficient firms borrow from mega banks
      - Difficult to find good firms

## Comment 2(TFP)

- TFP dispersion by misallocation of credit
- Issue 1:
  - measured by TFP dispersion
  - Does TFP (productivity, physical side) reflect Zombie firms (credit)?
- Issue 2:
  - Standard deviation is not perfectly correct to measure TFP dispersion in this case
  - Skewness is more important

#### Comment 3(some more dimensions)

- Sectoral heterogeneity also important
  - The paper studies firm heterogeneity
  - Sectoral heterogeneity exists. Some sectors are credit dependent and some are not.
  - Shocks (level, magnitude, response to shock) are heterogeneous across sectors.
  - Dummy control might be not enough
- Core-periphery structure might be influential
  - Firms in urban regions are different from rural areas in bankrelationship during crisis.
  - Agglomeration economies might be easy to recover from shock.
  - Dummies might be not enough
- Exporters and FDI (foreign ownership) might mitigate misallocation

### Some possible applications

- Similar data in Japan (TSR data)
  - Bank-firm relationship
  - Main banks
  - Manufacturing firms, services, constructions, etc
- Same things might happen in Japan
  - Might be more serious (more misallocation)
  - Misallocation to construction sectors in rural areas
- More and better exogenous shocks—many natural disasters (earthquakes)
  - Exogenous shocks