# The impact of financial crisis on savings decisions: evidence from Italian pension funds

M. Maré, L. Di Gialleonardo, A. Motroni, F. Porcelli

Discussion by Simone Tedeschi,
Department of Economics, University of Roma Tre

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# Presentation Outline

# Aims of the paper



The paper deals with an important life cycle issue:

- Empirical evaluation of the attitude towards pension funds
- Impact of the financial crisis on households saving decisions in private pension schemes

Using a novel dataset which surveys pension-related issues so far little investigated for Italy.

# Presentation Outline

# Why pension funds (PFs)

Since sustainability of public pension expenditure has been put under control, authors rightly emphasize

- Importance of worrying about future adequacy of pension benefits
- Point out the importance of a stronger development of the second pillar which, in Italy, despite the adoption in 2008 of a mechanism of automatic enrollment, still lags behind

# Bottom line of the paper

- Financial turmoil did not affect PFs membership
- PFs are perceived as a safe way to save for retirement

# Presentation Outline

# Remarks



- Appreciations: The analysis provides important piece of information on the distribution of PFs membership conditional on observable characteristics
- Criticisms: $\Rightarrow$

# On adequacy

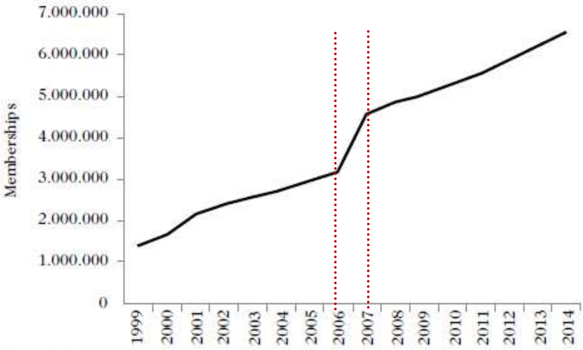


Adequacy is about
intra-cohort future incomes distribution
as well as inter-cohort

# On membership dynamics

Dynamics appears to be sustained, especially in the biennium 2006-2007. $\Rightarrow$ following slowdown
a clue of a possible negative impact of the great crisis?

Figure 1. Membership of pension funds (1999-2014)



# Presentation Outline

# The model



- Probit regression on a 2 wave pool of cross-sections:

$$I_t = \beta_o + \beta_1 Y_{2012} + \beta'_2 W_t + \beta'_3 D_t + \beta'_4 C_t + \varepsilon_t$$

where:

$t$ = survey wave index

$I_t$ = dummy=1 if interviewee is a pension fund member

$Y$ = survey wave dummy (2008 omitted)

$W_t$ = matrix of occupational, wealth and income variables

$D_t$ = matrix of ideology and demographic variables

$C_t$ = matrix of variable related to confidence in pension funds

# On the covariates



Authors should show descriptive statistics, in particular on:

- Income (does it match other sources like the SHIW?)
- Questions related to individuals' trust in PFs (how are they distributed in 2008 and 2012?). Could provide a first empirical evidence for the claim that funds are perceived as a safe way to save for retirement.

# Main determinants of the likelihood to be enrolled in a PF



- Working in sectors where big companies prevail (intuitive)
- Union membership (correlation or causality?)
- Other financial asset holding (worrying for adequacy)

# Timing (1)



## is there a proper "pre" in the data?

- "The active phase of the crisis, which manifested as a liquidity crisis, can be dated from August 9, 2007, when BNP Paribas terminated withdrawals from three hedge funds citing a complete evaporation of liquidity"
- "Between June 2007 and November 2008, Americans lost an estimated average of more than a quarter of their collective net worth [...] During the same period [...] pension assets lost 1.3 trillion."
(Wikipedia)

# Timing (2)



## is there a proper "pre" in the data?

- The figure shows that **the bulk of decrease in net returns of Italian PFs shows up in 2008...**

| Anni | Fondi pensione negoziali | Fondi pensione aperti | PIP "nuovi" ramo I | PIP "nuovi" ramo III | TFR |
|---|---|---|---|---|---|
| 1999 | - | 24,0 | - | - | 3,1 |
| 2000 | 3,5 | 2,9 | - | - | 3,5 |
| 2001 | -0,5 | -5,6 | - | - | 2,9 |
| 2002 | -3,4 | -13,1 | - | - | 3,1 |
| 2003 | 5,0 | 5,7 | - | - | 2,8 |
| 2004 | 4,6 | 4,3 | - | - | 2,5 |
| 2005 | 7,5 | 11,5 | - | - | 2,6 |
| 2006 | 3,8 | 2,4 | - | - | 2,4 |
| 2007 | 2,1 | -0,4 | - | - | 3,1 |
| 2008 | -6,3 | -14,0 | 3,1 | -21,9 | 2,7 |
| 2009 | 8,5 | 11,3 | 3,1 | 14,5 | 2,0 |
| 2010 | 3,0 | 4,2 | 3,2 | 4,7 | 2,6 |
| 2011 | 0,1 | -2,4 | 3,2 | -5,2 | 3,5 |
| 2012 | 8,2 | 9,1 | 3,3 | 7,9 | 2,9 |
| 2013 | 5,4 | 8,1 | 3,2 | 10,9 | 1,7 |
| 2014 | 7,3 | 7,5 | 2,9 | 6,8 | 1,3 |
| 2015 | 2,7 | 3,0 | 2,5 | 3,2 | 1,2 |

(1) I rendimenti sono al netto dei costi di gestione e dell'imposta sostitutiva per tutte le forme pensionistiche incluse nella tavola; anche per il TFR la rivalutazione è al netto dell'imposta sostitutiva. Per la metodologia di calcolo, *cfr.* anche Glossario, voce "Indice

# Identification (1)



impact of financial crisis:

w.r.t which counterfactual?

# Identification (2)



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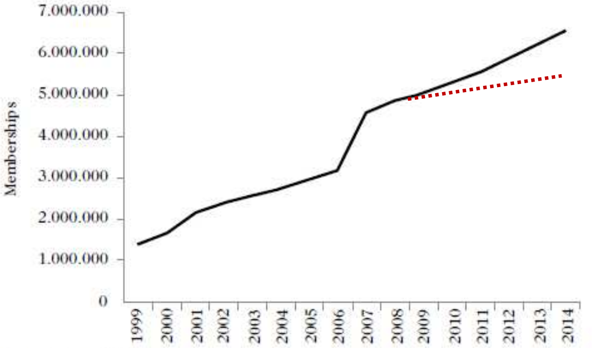


*Source: Covip (2014)*

# Identification (3)



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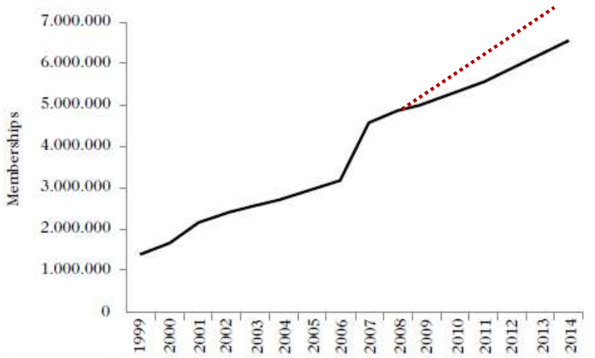


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# Identification (4)

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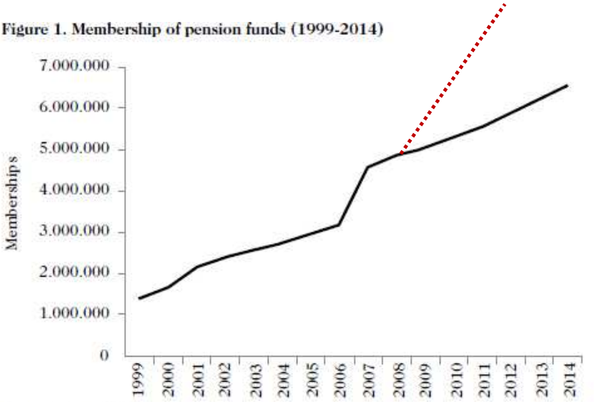


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# Identification (5)



I am not sure $\beta_1$ itself capable to pick up the impact of financial crisis on the dependent variable of the model...

- Time dummy can control for indistinct aggregate effects on the intercept (i.e. common to all individual);
- Tells how much the average membership probability in 2012 is different from the average in 2008
- Even in the sample restricted to those individuals not affected by Monti-Fornero reform. Why direct involvement in the reform be the only confounding factor?
- Why instead trust in PFs is conceived as a confounding factor rather than a possible outcome for the effect of financial crisis?

# Identification (6)



- Authors conclude that financial turmoil did not affect PFs membership
  $\Rightarrow$ Neither the adoption of the of the auto-enrolment rule nor the global crisis affected the individuals' attitude towards pension funds.

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- Can we rule out the opposite statement:
  both the adoption of the of the auto-enrolment and the global crisis affect the individuals' attitude towards pension funds, though in opposite directions

# Possible Solutions (1)



- improvement but not resolution: work with changes rather than levels (transitions)
- If a proper control group existed you could base your identification strategy on a proper diff-in-diffs (or diff-in-discontinuity) approach
  ...but the global financial crisis is a GE matter (no SUTVA).

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  ...but the global financial crisis is a GE matter (no SUTVA).
- The financial year 2008-09 was associated with falls in asset prices.
- Large shock to individuals' wealth holdings, particularly affecting those close to retirement
- Real effects: the increase in the probability to be unemployed or under-employed

# Possible Solutions (2)



Several margins on which an individual can react

- expectations of the likely inadequacy of pension resources
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Several margins on which an individual can react

- expectations of the likely inadequacy of pension resources
- expectations of leaving a bequest
- planned retirement age
- current level of consumption
- rebalance portfolios in favor of safer assets

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- Could tackle your identification problem by sketching some behavioral hypothesis on which indexes the different assets are exposed to
- regress the membership status and/or the share of savings directed to that investment against:
- the changes of the individual-specific price changes experienced by the individual
- taking into account the persistency of the membership status

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- Supplementary pension still a **superior good** in Italy $\Rightarrow$ not consistent with ensuring future adequacy of pensions.

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- Supplementary pension still a **superior good** in Italy $\Rightarrow$ not consistent with ensuring future adequacy of pensions.
- Mandatory TFR transfer to PFs effective tool for adequacy?
- Rather, much work should be done to make PF a **normal good**.

# Pension funds for all? (2)



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Moreover, much more important seems to be

- Expected returns
- Pension asset volatility
- Liquidity
- Portability for temporary contracts and discontinuous careers