The Final destination of Household financial wealth*

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Banca d'Italia, November 30th – December 1st , 2017

How financial systems work: evidence from FA

*does not necessarily express the views of the Banque de France

Introduction

- Several motivations:
  - Impact of the recent financial crises on household wealth;
  - Use the more detailed available breakdowns in financial accounts (whom-to-whom data) in a cross-country comparison perspective;
  - Current discussions in France on the orientation of financial investments

- Update Boutillier *et al.* (2007) findings on final destination of household financial wealth:
  - The previous study covers DE, ES, FR, IT, NL, UK, US and JP in 1990s and early 2000s;
  - The present study covers DE, ES, FR, IT over 1999Q1-2017Q1

Outlines of the presentation

1 – Methodology and Database

2 – The weight of FI before and after recent crises

3 – Look-through results

4 – Conclusion and way forward

1.1 Financial intermediaries are made transparent

- Consist in a re-allocation of all the intermediated assets initially hold by HH to claims on the non-financial sectors

- A numerical illustration:

Initial counterpart composition of HH Financial Assets:		Look-through: 1st Iteration	Look-through: 2nd Iteration	… Final composition: Last Iteration
Non-Financial Corporations (NFC)	163	317	355	368
Households (HH)	20	174	212	225
General Government (GG)	25	178	217	229
Rest of The World (RoW)	24	139	168	178
Financial Corporation (S12)	769	192	48	0
Total	1000	1000	1000	1000

Structure of S12 assets:

NFC	20	GG	20	S12	25
HH	20	RoW	15	Total	100

1.2 The structure of database

- HH sector includes Non-profit institutions serving households (NPISH)
- The S12 sector is split into MFIs and non-MFIs
- RoW sector is not made transparent
  - $\Rightarrow$It is considered as a final non-financial sector although it includes financial intermediaries
- All the type of financial assets are covered but derivatives and other receivables are aggregated
- Full-fledged counterpart (ctp.) information by type of assets is required….

1.3 treatment of missing w-t-w breakdown

- W-t-w partially missing for DE and IT
  - In Bouthillier *et al.* 2007, when ctp. sector is not available, liability structure side is used:

  ⇒ e.g. if GG issues 20% of debt securities, 20% of HH assets in debt securities are assumed to be vis-à-vis GG

  - This assumption is appropriate for life insurance and pension entitlements but more questionable for unquoted shares and other participations:

	France		Spain	
	Share in the Household assets	Share in the whole economy liability	Share in the Household assets	Share in the whole economy liability
NFC	72	68	91	68
MFIs	14	5	3	4
NMFIs	13	5	5	8
RoW	0	23	0	20

⇒ ES and FR average asset structure is used for DE and IT

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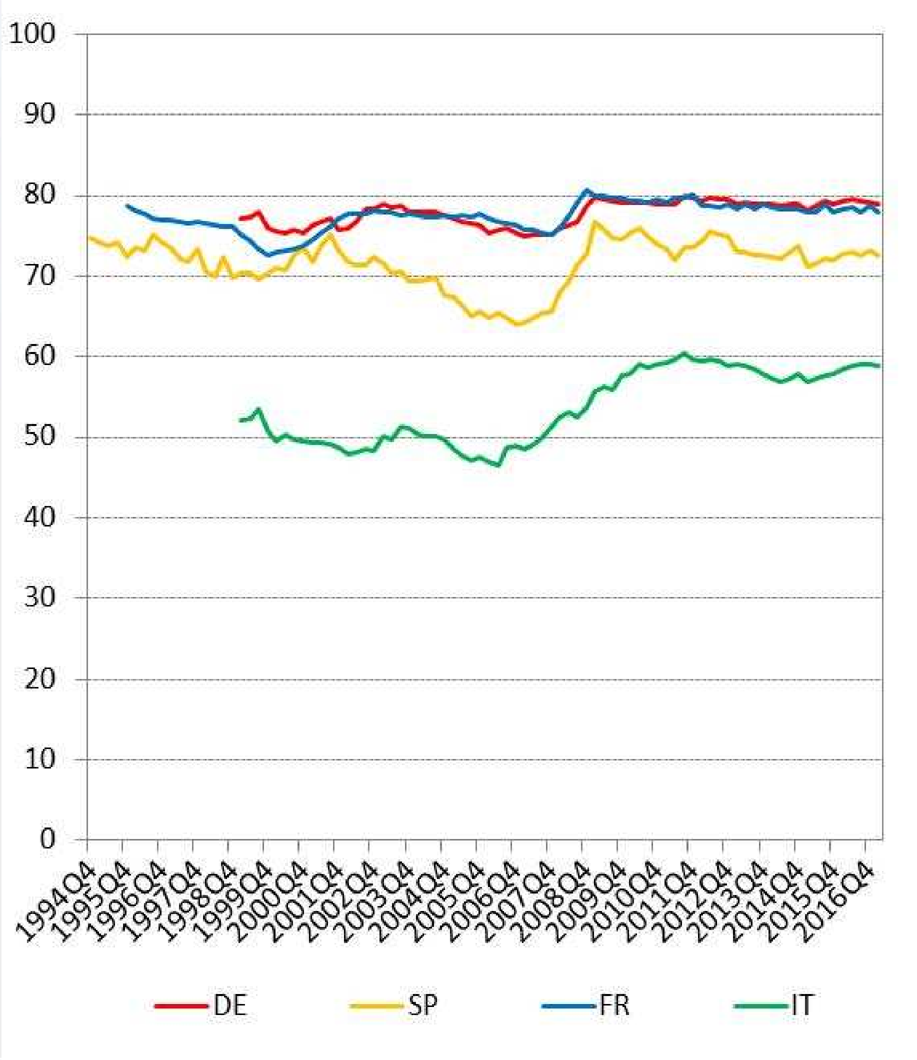
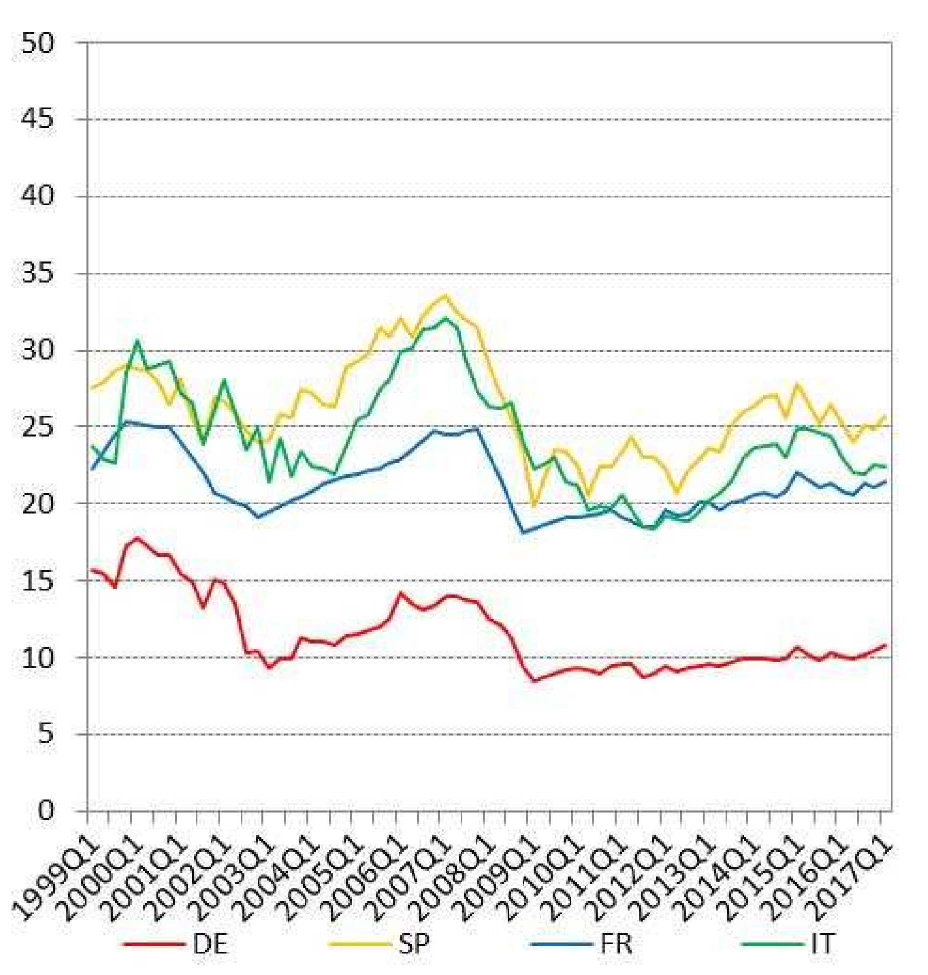
2.1 Intermediation rates at high levels

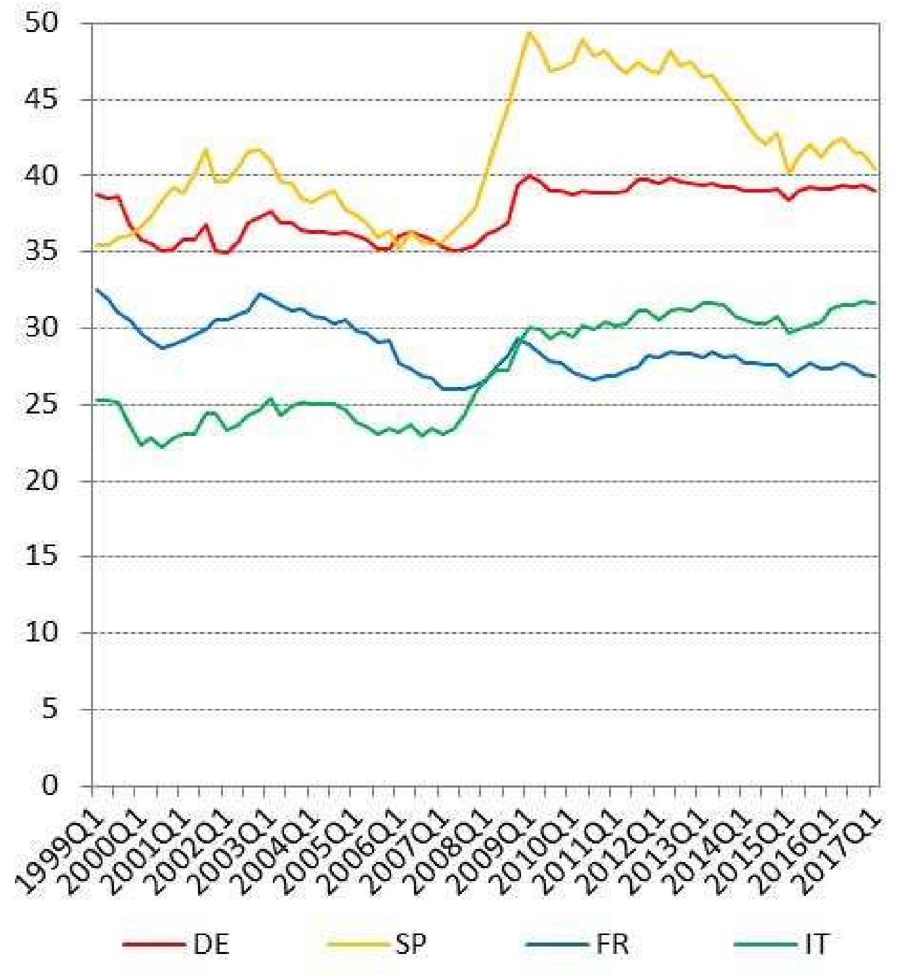
- IR defined as the share of total HH assets hold vis-à-vis S12
  - ⇒ i.e. HH bank bonds or the participations in the mutual bank capital are included in this IR
- IR around 75% in DE-ES-FR, a lower level in IT (below 60%)
- IR picked up in the early stages of the crisis and stabilized afterwards at a higher level:
  - Negative valuation on securities directly hold by HH;
  - Relatively strong flows of on deposits



Equity directly hold by Households
(% of total financial assets)



Households Deposit
(% of total financial assets)

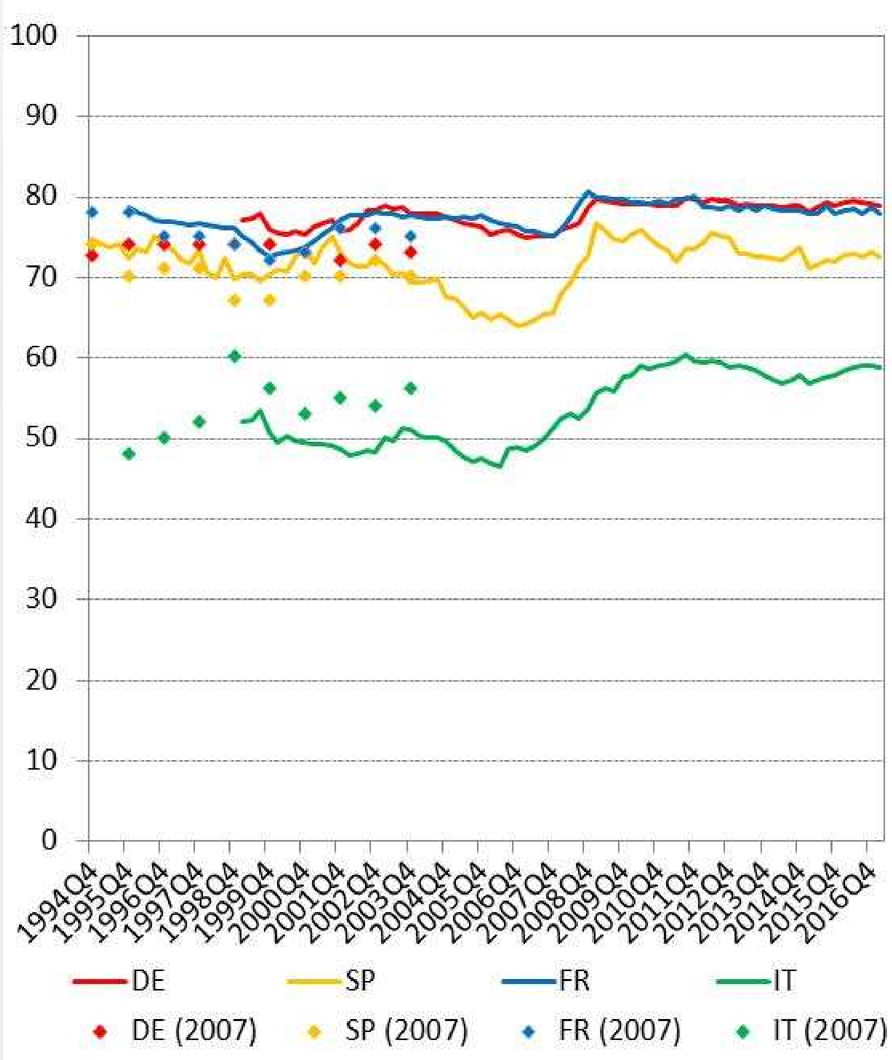


2.2 IR is stable in the LT perspective

- Comparison with Bouthillier *et al.* (2007) shows relatively high consistency

- Bouthillier *et al.* (2007) findings can be extended to the 2000s:

IR are rather stable in spite of massive transformations within intermediation industry



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$\Rightarrow$ 2 complementary representations:

– Final allocation in terms of instruments

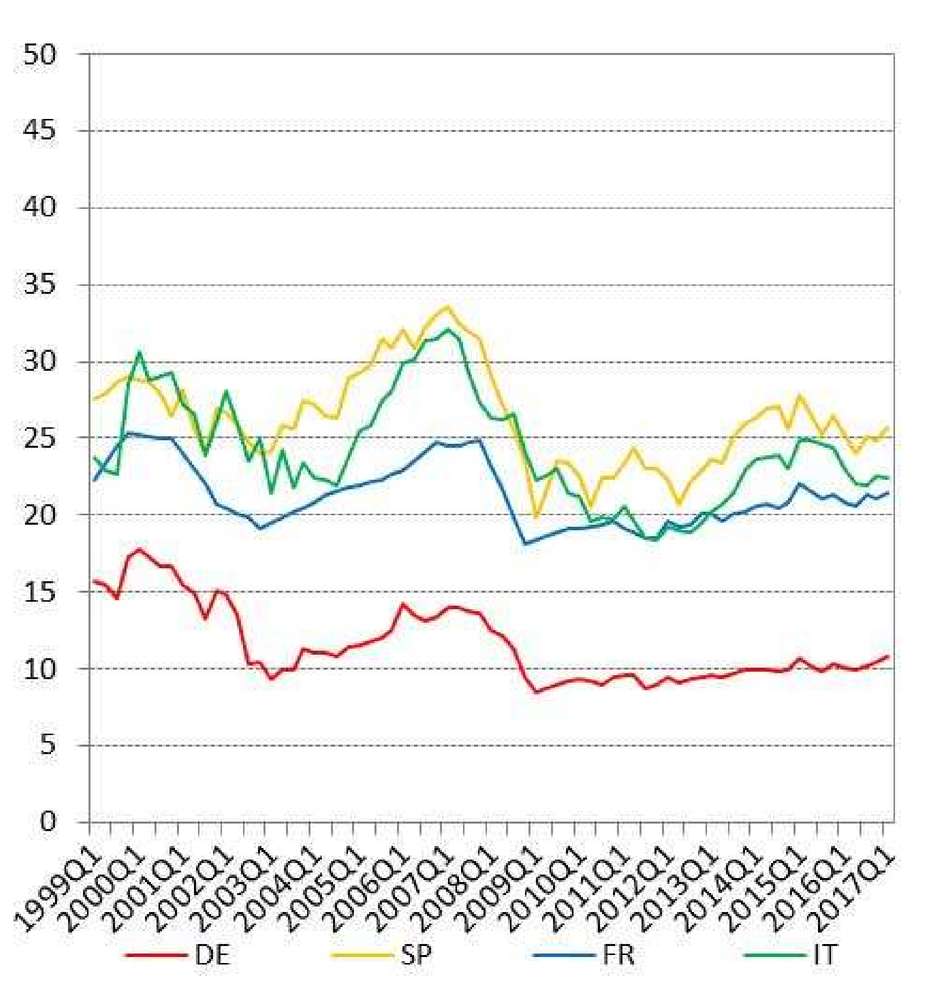
– Final allocation in terms of ctp. sectors

4 – Conclusion and way forward

3.1 Final composition in terms of instruments

- After look-through, greater concentration on 3 instruments: debt securities, equity and loans
  - ⇒Still cross-country heterogeneity is not massively reduced with look-through and the ranking can be affected

Equity directly hold by Households
(% of total financial assets)

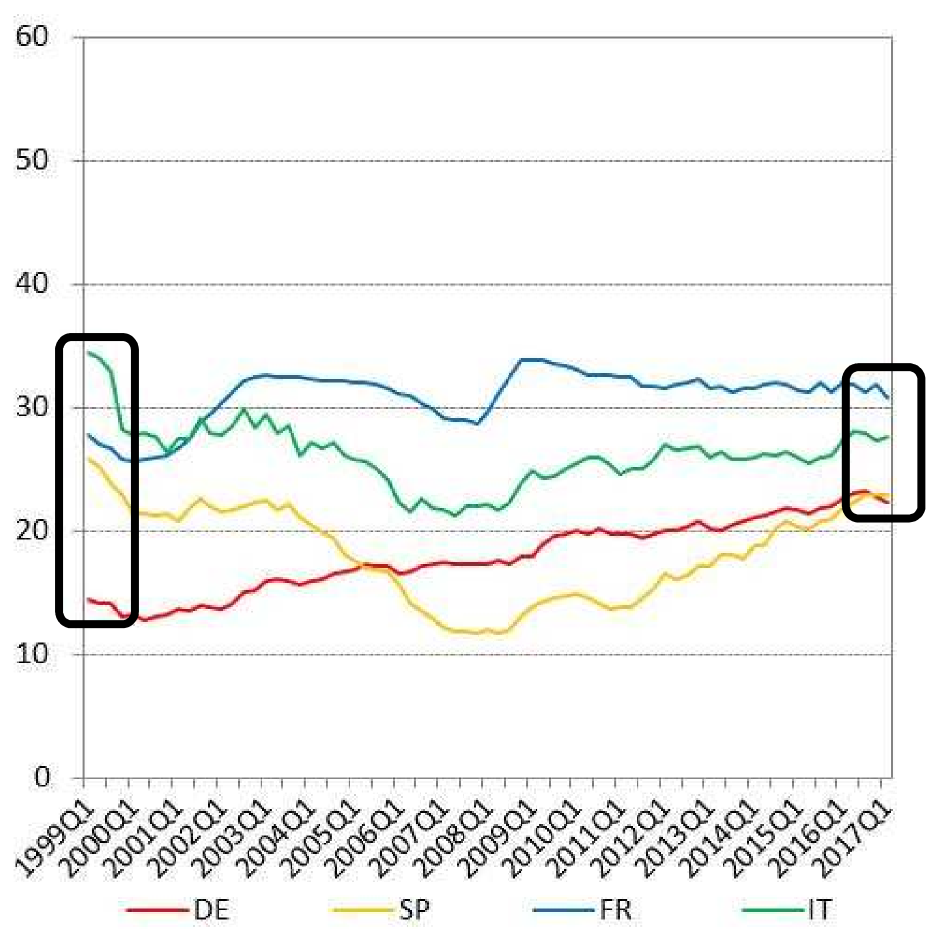


Equity directly and indirectly hold by HH
(% of total financial assets)

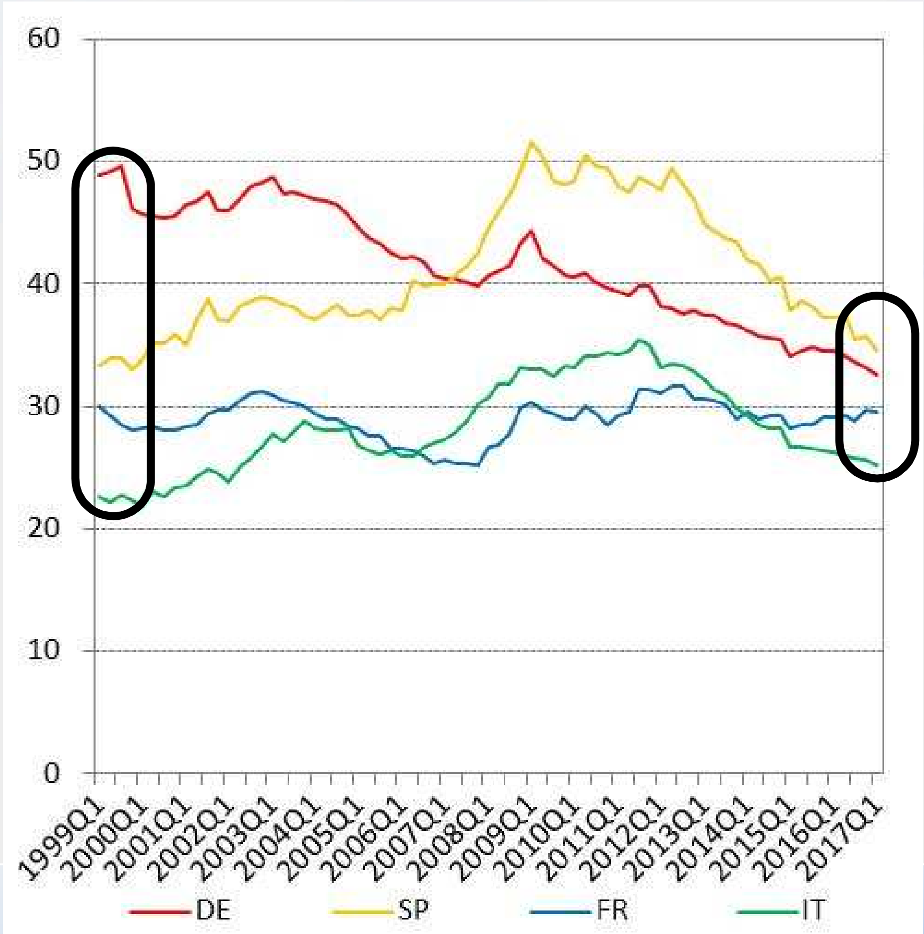
3.1 Final composition in terms of instruments

- Regarding debt securities and loans, cross-country dispersion is smaller today than in the early 2000s

Debt securities directly and indirectly hold by HH
(% of total financial assets)



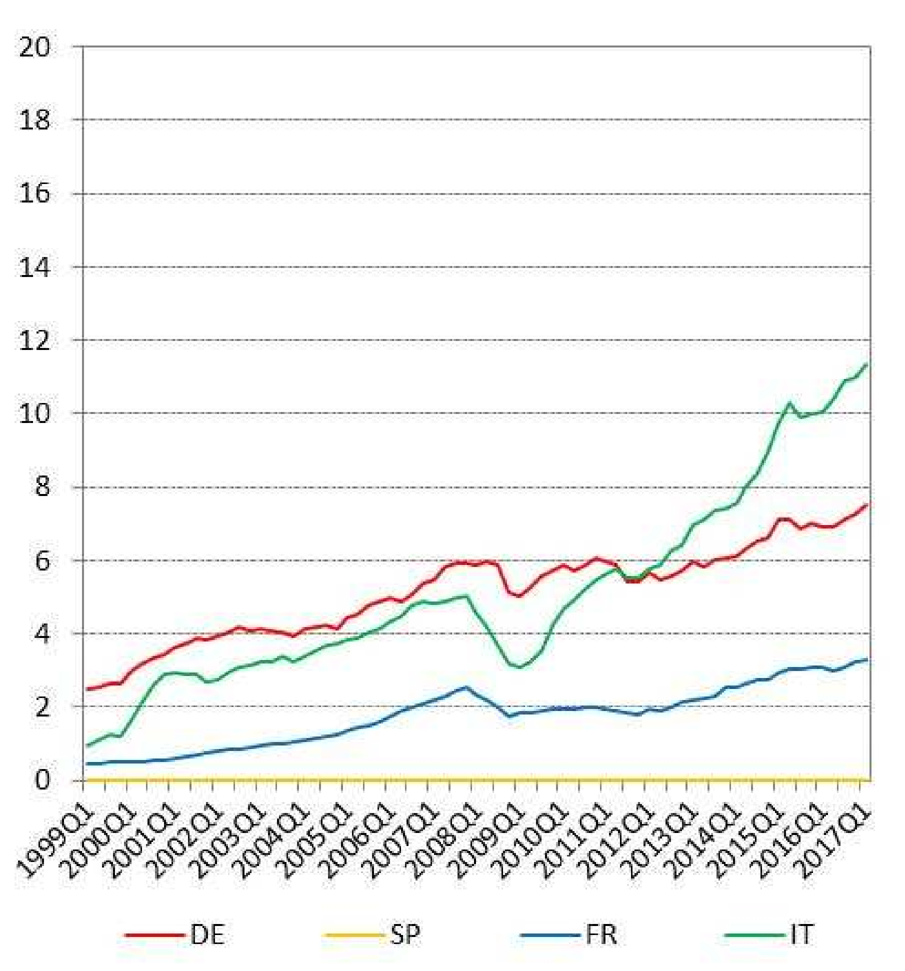
Loans and other receivable directly and indirectly hold by HH
(% of total financial assets)



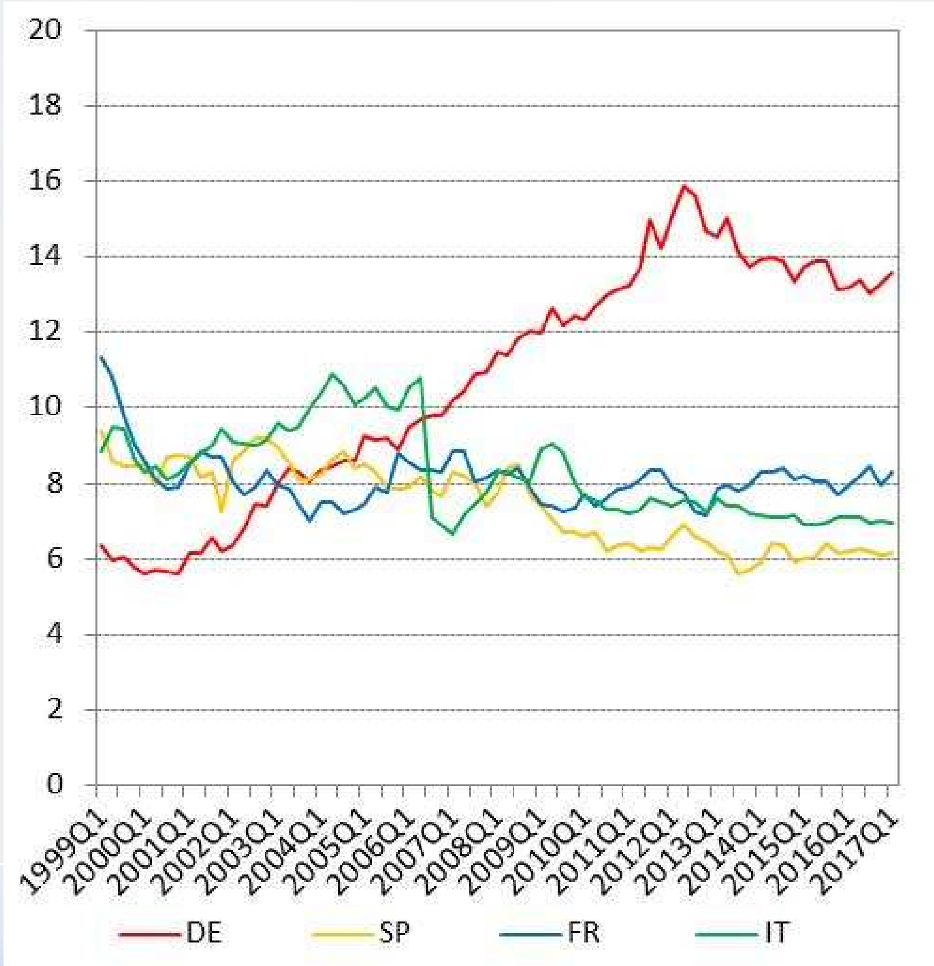
3.1 Final composition in terms of instruments

- For DE et IT: larger residual shares of investment fund shares and deposit (indirectly owned vis-à-vis the RoW)

Investment fund shares directly and indirectly hold by HH
(% of total financial assets)



Deposits directly and indirectly hold by HH
(% of total financial assets)



3.2 Final composition in terms of ctp. sectors

- Bouthillier *et al*. 2007 did not comment on it

  ⇒As this study relies on almost comprehensive w-t-w data, results in terms of ctp. sectors are sufficiently reliable

- Look-through ≠ a simple intermediation scheme where economic agents in surplus (mostly HH) are financing, *via* financial intermediaries, agents in deficit (e.g. GG, NFC)

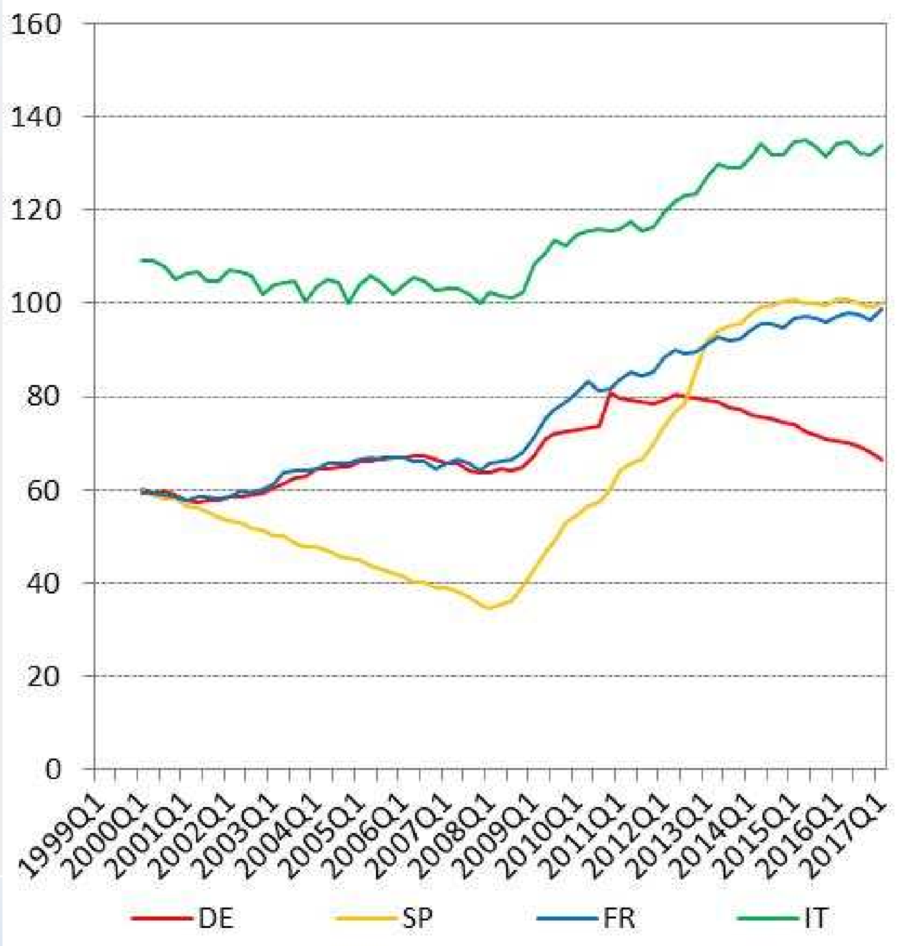
  ⇒This would be the case in a analysis performed on a net basis and not like here on a gross basis

- The final destination actually depends on investment strategies of the financial intermediaries which can be either resident or non-resident

3.2.1 10 to 25% of HH wealth are claims on GG

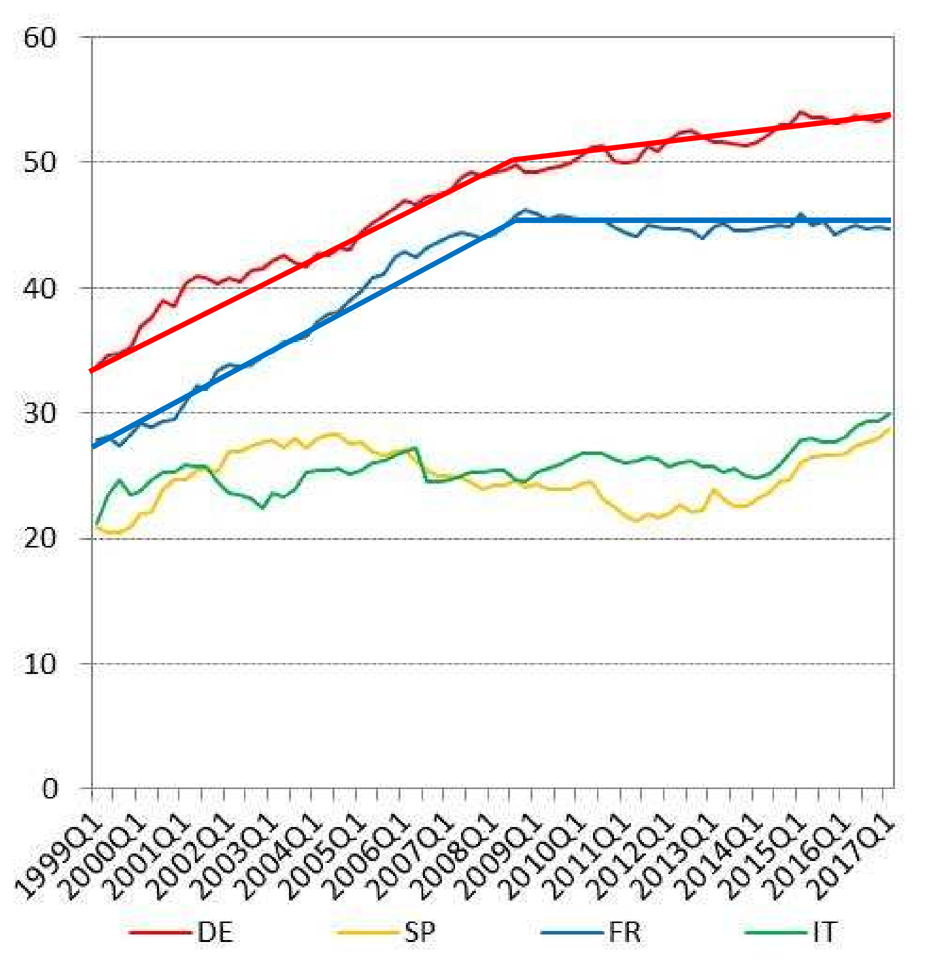
HH direct and indirect claims on GG
(% of total financial assets)

Public debt ratio
(% of GDP)

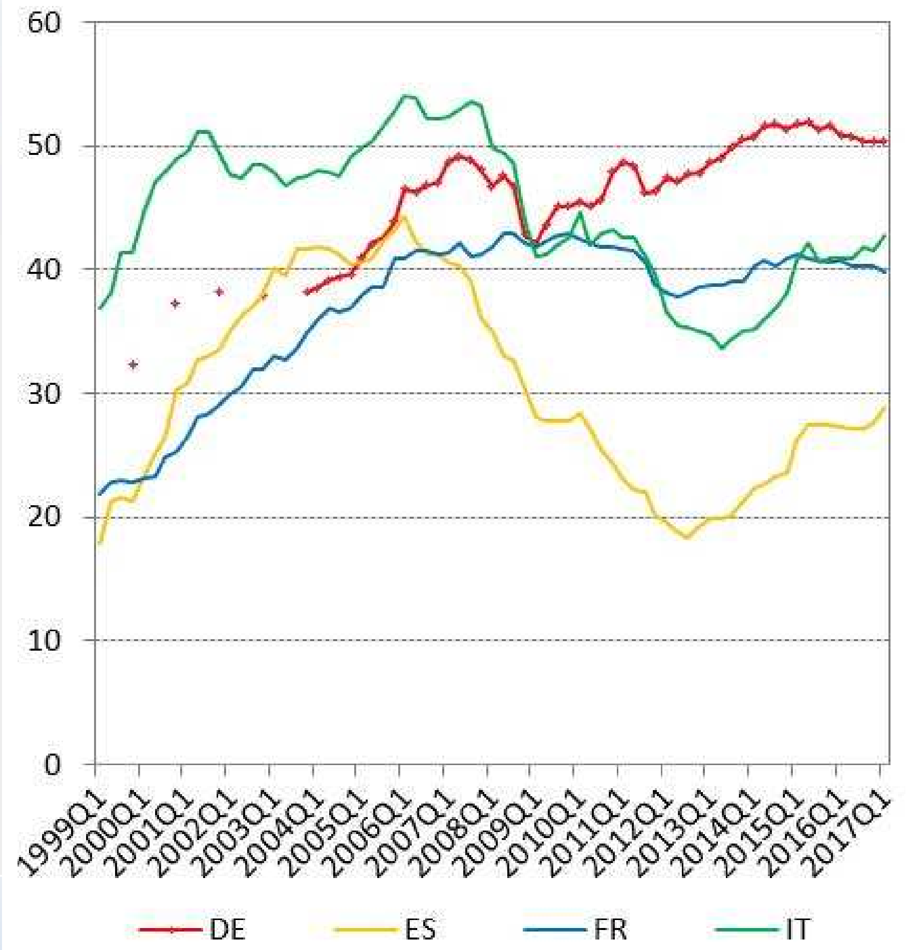


3.2.2 Diverse trends in RoW financing

HH direct and indirect claims on RoW
(% of total financial assets)



Portfolio Investment assets / Financial corporation debt securities+Equity and investment fund shares or units (%)

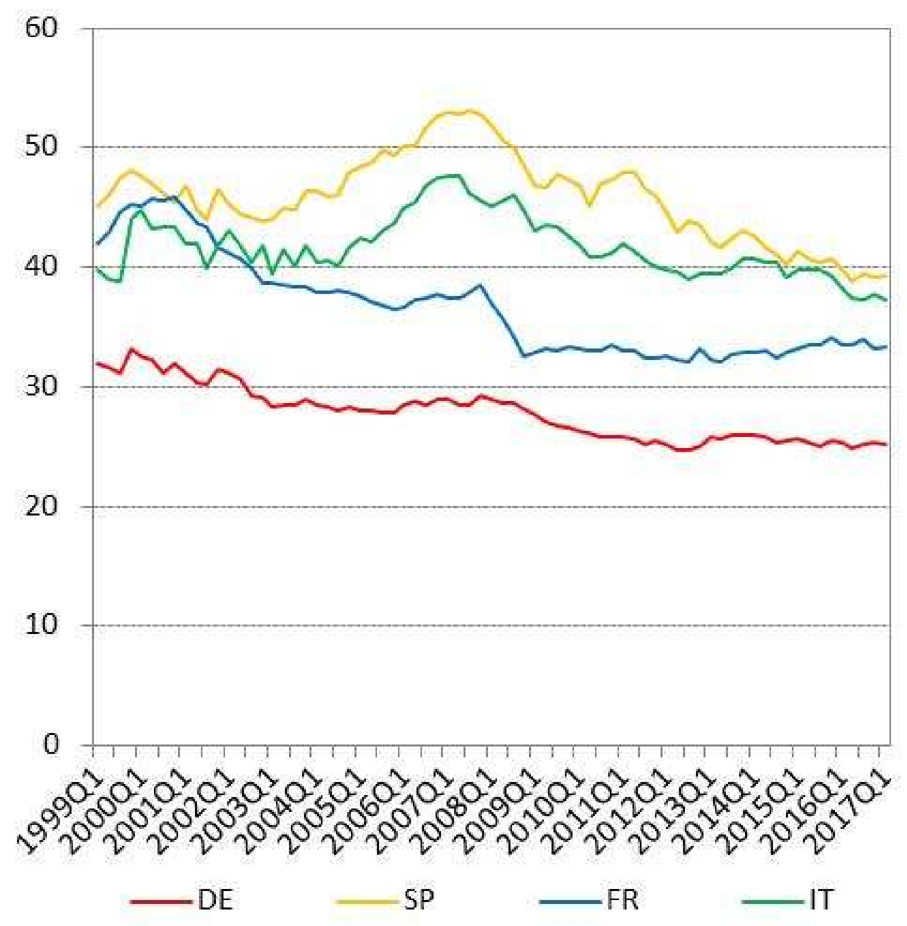


3.2.3 but a common declining trend in NFC financing

- Before the financial crisis, NFC indirect financing has significantly picked-up in ES and IT

- Since the crisis a common downward trend in all countries, but more pronounced in ES and IT

HH direct and indirect claims on NFC
(% of total financial assets)



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4.1 Conclusion and limitations

- To our knowledge this is first time since Bouthillier *et al.* (2007) this look-through approach is implemented on other countries than France
- But there are several studies relying on look-through circumscribed to indirect investments (*e.g.* life insurance, investment funds, MFI deposits being excluded)

  $\Rightarrow$ e.g. recent works in *Banca d'Italia*
- Tentative comparisons show our results are consistent … with stronger caveats here in terms of risk transfer analysis

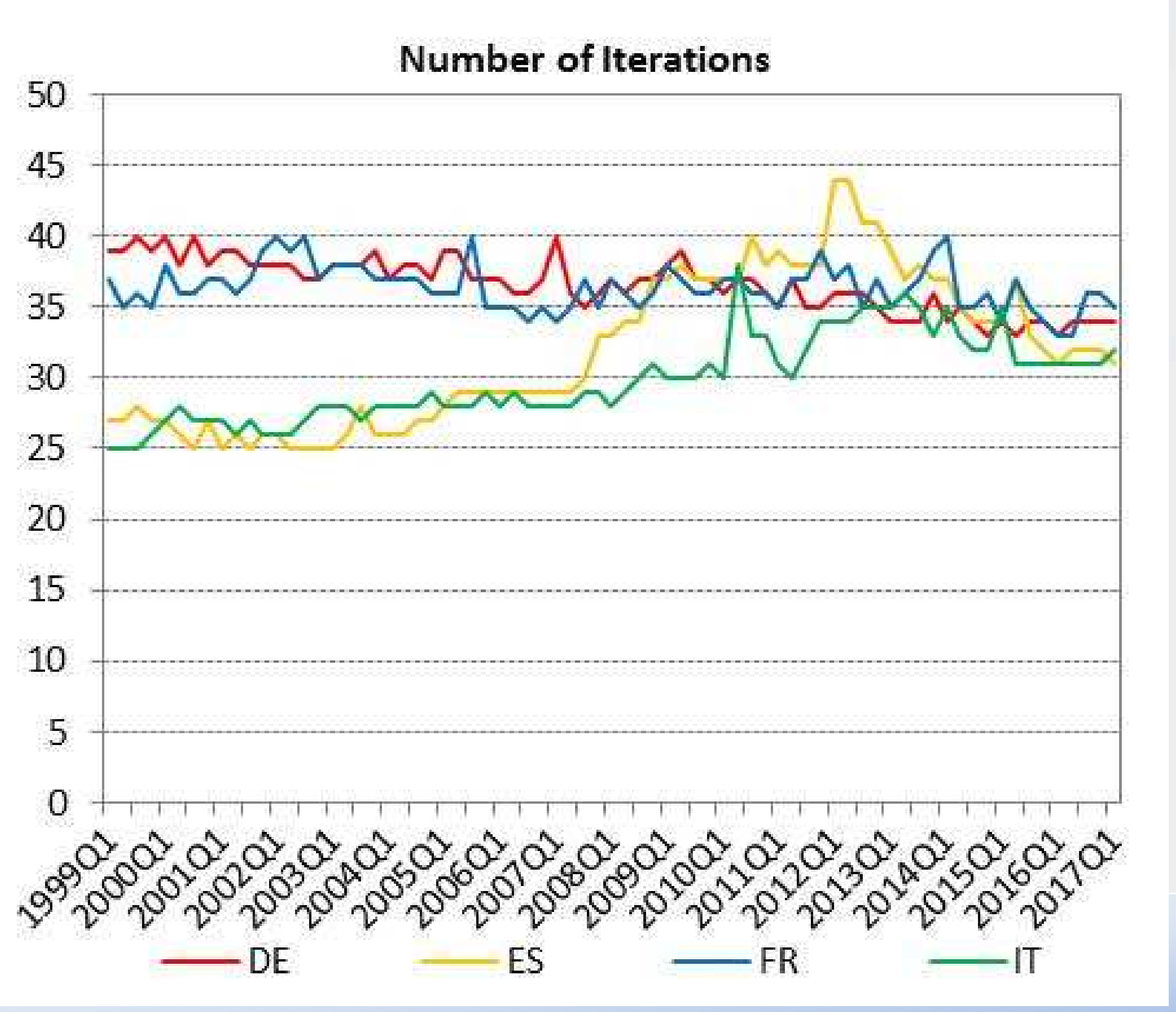
4.2 Way forward

- This study is still preliminary. The robustness of some finding will have to be cross-checked
  - ⇒For DE and IT part of the ctp. sector breakdown is imputed from *ad-hoc* assumptions and a sensitivity analysis on the should be performed
  - ⇒As in the original study of Bouthillier *et al.* (2007), a larger panel of countries would also improve robustness

- This look-through exercise (as former ones) is performed on the market value of HH financial assets which can be massively affected by valuation effect, especially during crisis times
  - ⇒Yet it would be interesting to split transactions and market effects

Thanks for your attention!

ANNEXES



Number of Iterations
50
45
40
35
30
25
20
15
10
5
0
1999Q1
2000Q1
2001Q1
2002Q1
2003Q1
2004Q1
2005Q1
2006Q1
2007Q1
2008Q1
2009Q1
2010Q1
2011Q1
2012Q1
2013Q1
2014Q1
2015Q1
2016Q1
2017Q1
DE
ES
FR
IT

Production of backward data when missing

- For Germany whom-to-whom data for debt securities, quoted shares and Investment fund shares is only available for the 2013Q1-2017Q1

- RAS method is used to impute 1999Q1-2012Q4 data: available information on 2013 is used to derive backwards the detailed counterpart structure while being consistent with available information on total sector assets and total liabilities.

The composition Household financial assets before and after the look-through approach (% end-2014)

C 2017 : Coletta 2017 and P 2017: Pavot 2017

	DE			ES			FR			IT		
	Before	*After C 2017*	*After P 2017*	*Before*	*After C 2017*	*After P 2017*	*Before*	*After C 2017*	*After P 2017*	*Before*	*After C 2017*	*After P 2017*
Total Financial Assets	100	100	100	100	100	100	100	100	100	100	100	100
Currency and deposits	39	45	13	43	46	6	29	30	8	31	31	7
Debt securities	4	11	22	1	14	21	2	26	32	13	27	26
Shares and other equity	10	13	18	26	27	32	20	25	28	23	24	25
Mutual fund shares	10	13	7	11	7	0	6	9	3	10	9	9
Insurance, pension schemes	37	12	5	17	2	0	37	4	0	21	7	4
Other assets	1	5	35	2	3	41	6	7	29	3	3	28