

# Pension Information and retirement planning in France: an evaluation of public policy

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# Introduction

- Increasing retirement related savings is one of the major issues in many OECD countries.
- Increasing longevity  Increasing pension risks
- Fully funded pension system : individuals have to manage the longevity risk.
- PAYG pension system : maintaining the standard of living after retirement is compromised.
- Improving retirement planning in this context is crucial, to manage:
  - The longevity risk
  - To maintain an adequate standard of living at old age.

# Introduction

- Financially educated individuals : plan their retirement (Lusardi and Mitchell, 2011c) , and invest more efficiently (Calvert, Campbell, and Sodini, 2005).
- Low financial literacy → accumulate less wealth and transact in a high-cost manner (Lusardi et Tufano, 2008),

# Introduction

- Improving financial literacy should be the first concern for policy makers (Gale and Levine 2011),
- Policy makers' role: improving the information quality to individuals, presenting it in a non complex manner.
- One way (among others) : **public pension information** (through pension statements/estimates).

# Introduction

- Why implementing pension information?
  - To increase the public understanding about the pension reform and to motivate pension savings for old age.
  - To have a better acceptance of reforms (Boeri and Tabellini, 2010).
- How implementing it?
  - Pension information right (2003 pension reform in France): pension statement from the age of 35 and **indicative global estimate from the age of 55.**

# Introduction

- Public interest group (*GIP Union Retraite*)
- Detailed information on the individuals' pension situation at the age of 35 and at 55 years old with an estimate of the pension (the “indicative global estimate” ).
- Implementation of the pension information right:
  - 2007 to 2010: transitory period
  - 2011: first year of full implementation

	2007	2008	2009	2010	2011	2012
1949	<b>58 years old</b>					
1950		<b>58</b>		<b>60</b>		
1951		<b>57</b>			<b>60</b>	
1952			<b>57</b>			<b>60</b>
1953			<b>56</b>			
1954				<b>56</b>		
1955				<b>55</b>		
1956					<b>55</b>	
1957						<b>55</b>

- Implementation in 2007.
- End 2010, 1949 to 1955 cohorts had received their pension statement.

# Introduction

- Discontinuity at the age of 56 in 2011: in this year, only cohorts from 1949 to 1955 had received the estimate of their pension:
- Regression discontinuity (RD) method combined with quantile regressions, to assess whether the changes in asset holdings are due to the pension information.
- First evaluation of the pension information system using the Survey on Health, Ageing and Retirement in Europe (SHARE Survey).

# Data and statistics

- Data from the 4<sup>th</sup> wave of the Survey of Health, Ageing and Retirement in Europe (collected in 2011).
  - We focus on French data.
- We evaluate the impact of the pension information on:
  - The per capita household savings for long-term investment
  - The per capita household gross financial assets

# Data and statistics

- Our sample:
  - Individuals born between 1949 and 1955 and still working the year receiving the pension estimate.
  - Individuals born between 1956 and 1960, they did not receive any pension estimate before 2011.

# Data and statistics

Average assets held by cohorts on both sides of the birth year (euros)

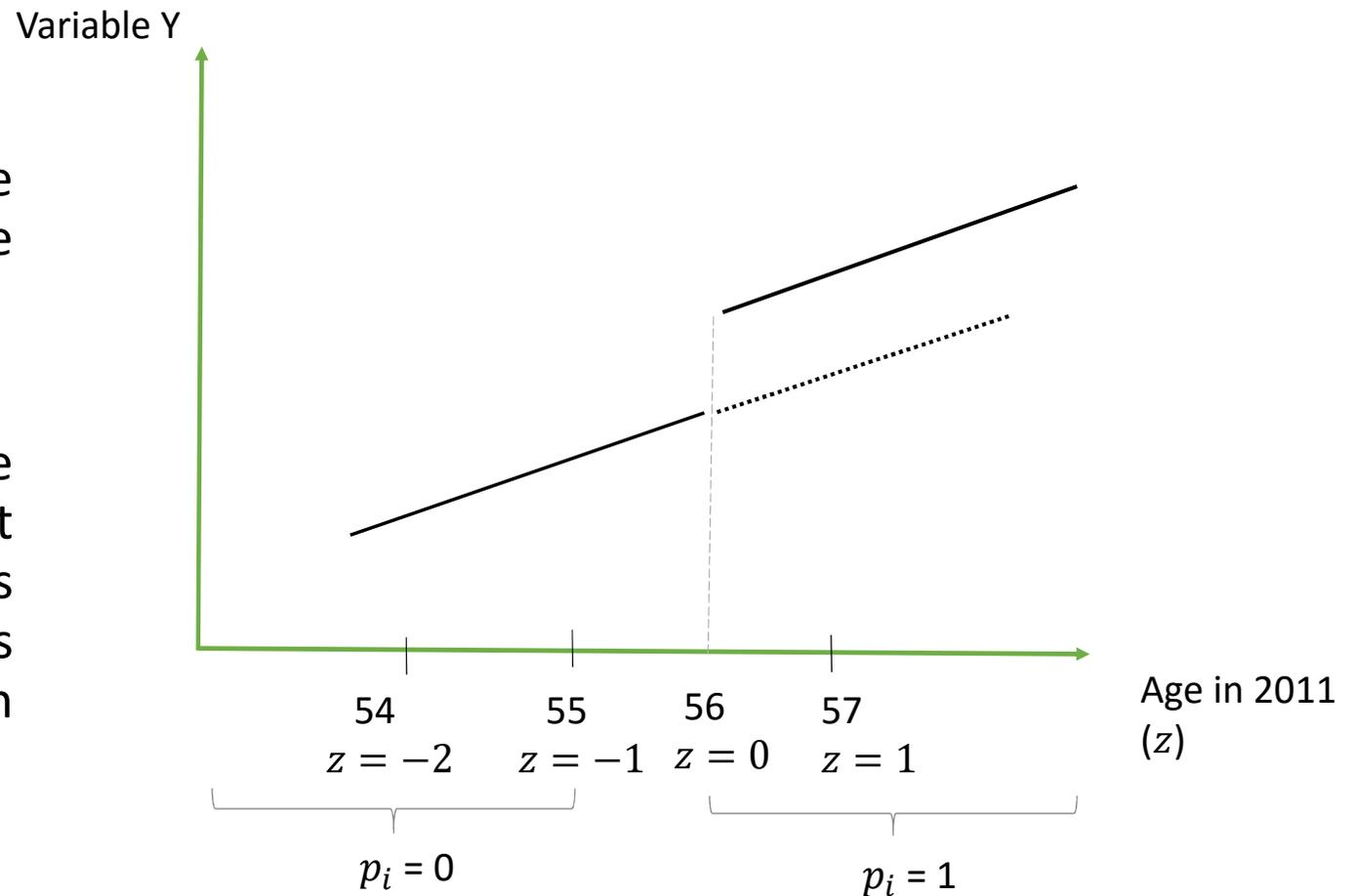
	<b>N</b>	<b>Per capita savings for long term investment</b>	<b>Per capita financial assets</b>
<b>Birth&lt;1956</b>	953	17975	31061
<b>Birth&gt;1955</b>	792	11276	20717

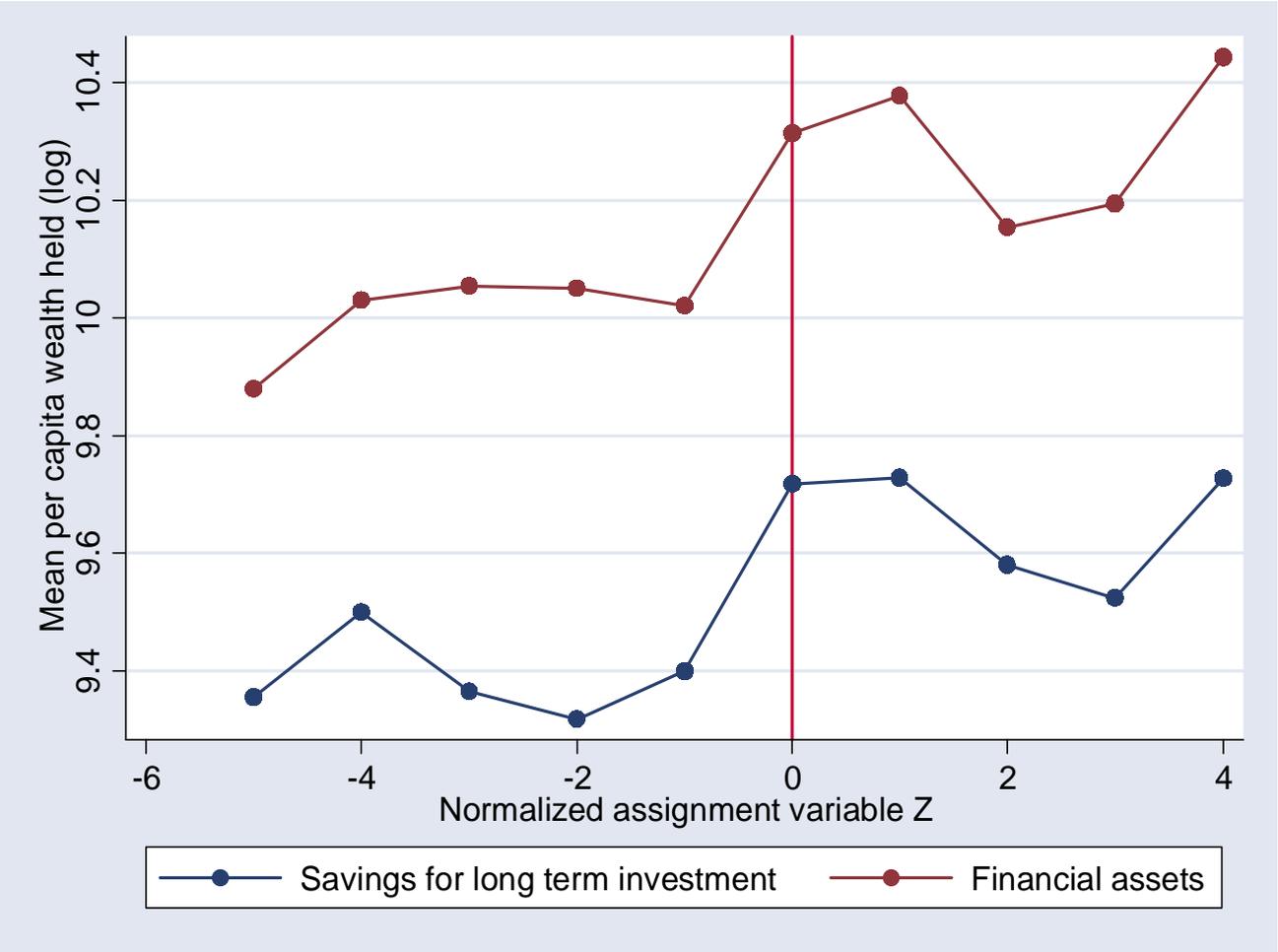
# Methodology

- Receiving the indicative global estimate is the « **treatment** »
- Discontinuity according to the year of birth:
  - Born before 1956 : in 2011, they have received their pension estimate, they are « ***treated*** »
  - Born after 1955 : in 2011, they did not have received it, they are not treated (control).
- Strict discontinuity in 1955: Regression discontinuity (RD) design (Hahn et al., 2011; Imbens et Lemieux, 2008; Lee et Lemieux, 2010).

# Methodology

- The objective is to estimate the average treatment effect at the threshold  $Z_0$ .
- The assignment variable  $z$ , the birth year, is normalized so that the discontinuity point is represented by  $z_0 = 0$ . As consequence,  $z_i = 1955$ -birth year.





# Methodology

$$Y_{ij} = \beta_0 p_j + h(z_j) + \delta X_i + \varepsilon_{ij}$$

- $Y_{ij}$  the wealth variable for the individual, born in year  $j$  (i.e. the value of the assignment variable  $Z$ ),  $\beta$ : treatment effect,  $h(z_j)$ : the assignment variable.
- $X_i$  Control variables

# Methodology

- $h(z_j)$  is supposed to be continuous and capture the cohort effect on savings:
  - Linear
  - Spline linear
  - Quadratic
- The hypothesis that  $h(\cdot)$  is smooth implies that, controlling other characteristics, the reception of the pension estimate (i.e. the treatment) is the only source of discontinuity in the wealth variable at age 56.

# Methodology

## Control variables:

- Educational attainment for the individual and his/her partner,
- Household composition (marital status and the number of children within the household),
- Household disposable income,
- Dummy variables indicate whether the respondent is self-employed, retired and homeowner,
- Dummy variable capturing health effects if the individual has declared being limited in his/her daily activities.

# Results

*The impact of the treatment on long term savings*

	OLS
	(1)
<b>h(.) linear</b>	0.337
	(0.45)
<b>h(.) spline linear</b>	0.459
	(0.58)
<b>h(.) quadratic</b>	0.421
	(0.56)

# Results

*The impact of the treatment on long term savings*

	OLS	q25	q50	q75
	(1)	(2)	(3)	(4)
<b>h(.) linear</b>	0.337	-	0.731	1.041***
	(0.45)	-	(1.21)	(3.21)
<b>h(.) spline linear</b>	0.459	-	0.739	1.077**
	(0.58)	-	(1.17)	(3.05)
<b>h(.) quadratic</b>	0.421	-	0.664	1.004**
	(0.56)	-	(1.08)	(2.98)

# Results

*The impact of the treatment on financial savings*

	OLS	25th	50th	75th
	(1)	(2)	(3)	(4)
<b>h(.) linear</b>	-0.008	-0.018	0.270	0.249
	(-0.03)	(-0.05)	(1.46)	(1.41)
<b>h(.) spline linear</b>	0.066	0.102	0.372**	0.358**
	(0.20)	(0.28)	(2.00)	(2.15)
<b>h(.) quadratic</b>	0.042	0.058	0.308*	0.248*
	(0.14)	(0.37)	(1.74)	(1.69)

# Results and conclusion

- Pension information has a significant positive impact on accumulation, but only on the highest part of the wealth distribution.
- With an elasticity for information between 1.004 and 1.04 for the 75th percentile, the impact is much stronger on long term savings than financial assets.

# Results and conclusion

- Pension estimate reinforces the savings of those who already hold the highest levels of wealth.
- The pension information does not seem to have an impact on those who hold the lowest levels of wealth:
  - They might not be able to save,
  - They have a high replacement rate,
  - They do not make an effective use of information because of a poor financial literacy.
- Pension information in this case tends to reinforce inequalities.