How to explain & remedy the *continuous* drop of French stock ownership since the 2008 crisis?

Luc Arrondel & André Masson  
CNRS-PSE

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Direct individual stockholding in France: continuous decline at least until March 2016

Source: Tns-Sofia (13.8% in December 2008)
Household (direct or indirect) stockholding, 2007-2014
Pater survey (panel dimension)

Source: Tns-Pater (see end of slide 6)
### 3.4a. Taux de détention des valeurs mobilières et des assurances vie par niveau de richesse financière

#### 2010

<table>
<thead>
<tr>
<th>Percentiles</th>
<th>Actions en direct</th>
<th>FCP-Actions</th>
<th>Obligation ou FCP-Obligation</th>
<th>Autres valeurs mobilières</th>
<th>Ass. Vie multi-support</th>
<th>Ass. Vie en euros</th>
<th>Bons de Capitalisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-25</td>
<td>0.004</td>
<td>0.002</td>
<td>0.000</td>
<td>0.001</td>
<td>0.010</td>
<td>0.054</td>
<td>0.000</td>
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<td>25-50</td>
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<td>0.010</td>
<td>0.001</td>
<td>0.003</td>
<td>0.047</td>
<td>0.165</td>
<td>0.001</td>
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<td>50-70</td>
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<td>0.011</td>
<td>0.024</td>
<td>0.096</td>
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<td>70-90</td>
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<td>0.215</td>
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<tr>
<td><strong>Ensemble</strong></td>
<td><strong>0.135</strong></td>
<td><strong>0.046</strong></td>
<td><strong>0.021</strong></td>
<td><strong>0.020</strong></td>
<td><strong>0.121</strong></td>
<td><strong>0.239</strong></td>
<td><strong>0.004</strong></td>
</tr>
</tbody>
</table>

**Stocks ↓ (3.5% direct)**

*but see top 1%*

**Life insurance: unit → euros ↑ 2.3%**

### 3.4. Taux de détention des valeurs mobilières et des assurances vie par niveau de richesse financière

#### 2014

<table>
<thead>
<tr>
<th>Percentiles</th>
<th>Actions en direct</th>
<th>FCP-Actions</th>
<th>Obligation ou FCP-Obligation</th>
<th>Autres valeurs mobilières</th>
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<th>Ass. Vie en euros</th>
<th>Bons de Capitalisation</th>
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</thead>
<tbody>
<tr>
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<td>0.002</td>
<td>0.000</td>
<td>0.002</td>
<td>0.013</td>
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<td>0.002</td>
<td>0.005</td>
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<td>50-70</td>
<td>0.069</td>
<td>0.027</td>
<td>0.007</td>
<td>0.006</td>
<td>0.099</td>
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<td>70-90</td>
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<td><strong>Ensemble</strong></td>
<td><strong>0.099</strong></td>
<td><strong>0.030</strong></td>
<td><strong>0.014</strong></td>
<td><strong>0.010</strong></td>
<td><strong>0.120</strong></td>
<td><strong>0.262</strong></td>
<td><strong>0.003</strong></td>
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**Source: Insee, enquêtes « Patrimoine »**
### Risky financial asset ownership in the zone € per level of net wealth (2010)

<table>
<thead>
<tr>
<th>Quintiles de patrimoine net</th>
<th>1er</th>
<th>2nd</th>
<th>3ème</th>
<th>4ème</th>
<th>5ème</th>
<th>Top 5%</th>
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<td><strong>EU zone</strong></td>
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<td></td>
</tr>
<tr>
<td>Austria (AT)</td>
<td>2,4</td>
<td>4,4</td>
<td>13,8</td>
<td>18,5</td>
<td>33,8</td>
<td>38,9</td>
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<tr>
<td>Belgium (BE)</td>
<td>4,8</td>
<td>18,6</td>
<td>25,7</td>
<td>38,8</td>
<td>65,7</td>
<td>72,8</td>
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<td>Cyprus (CY)</td>
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<td>24,3</td>
<td>35,3</td>
<td>41,7</td>
<td>62,4</td>
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<tr>
<td>Germany (DE)</td>
<td>3,5</td>
<td>9,0</td>
<td>27,1</td>
<td>28,0</td>
<td>47,5</td>
<td>55,7</td>
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<tr>
<td>Spain (ES)</td>
<td>1,8</td>
<td>5,1</td>
<td>9,3</td>
<td>17,8</td>
<td>36,2</td>
<td>48,6</td>
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<tr>
<td>Finland (FI)</td>
<td>14,6</td>
<td>29,7</td>
<td>36,1</td>
<td>45,7</td>
<td>67,4</td>
<td>81,7</td>
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<td>France (FR)</td>
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<td>10,9</td>
<td>19,1</td>
<td>27,9</td>
<td>47,5</td>
<td>63,8</td>
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<td>Greece (GR)</td>
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<td>1,1</td>
<td>1,6</td>
<td>3,9</td>
<td>12,8</td>
<td>22,8</td>
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<td>28,6</td>
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<td>Luxembourg (LU)</td>
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<td>30,4</td>
<td>48,6</td>
<td>60,7</td>
<td>61,8</td>
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<td>Netherlands (NL)</td>
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<td>23,9</td>
<td>29,7</td>
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<td>Portugal (PT)</td>
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<td>4,0</td>
<td>6,5</td>
<td>19,9</td>
<td>37,6</td>
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<td>Slovenia (SI)</td>
<td>9,8</td>
<td>11,6</td>
<td>15,3</td>
<td>27,4</td>
<td>37,9</td>
<td>55,0</td>
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<tr>
<td>Slovakia (SK)</td>
<td>1,6</td>
<td>2,2</td>
<td>3,9</td>
<td>5,2</td>
<td>7,6</td>
<td>11,8</td>
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<td><strong>Actifs financiers risqués</strong></td>
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<td>EU Zone</td>
<td>20,2</td>
<td>14,6</td>
<td>30,7</td>
<td>36,3</td>
<td>23,0</td>
<td>14,0</td>
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<tr>
<td>France</td>
<td>21,7</td>
<td>4,0</td>
<td>19,8</td>
<td>25,8</td>
<td>33,7</td>
<td>23,9</td>
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<tr>
<td>Non-EU Zone</td>
<td>4,1</td>
<td>18,3</td>
<td>21,5</td>
<td>27,9</td>
<td>34,7</td>
<td>41,8</td>
</tr>
</tbody>
</table>

**Issue:** rise overall stockholding or only stock investment in wealthy portfolios?

France in an average position in the Eurozone concerning wealth.

**Source:** Household finance & consumption survey (HCFS) 2010
DEMAND: behaviors, preferences & expectations

\[ \Delta \text{behaviors} = g[\Delta \text{preferences}, \Delta \text{present resources}, \Delta \text{expectations}] \]

- **Preferences** towards risk, but also time & (family) transmission

- **Present available resources**: “Cash in hand” (income & wealth) and…
  - Liquidity constraints, unemployment, exposition to background risk
  - Capitals: health, education, financial literacy & cognitive capacity…

- **Expectations & beliefs** about the future
  - Economic expectations: future labor income, prob. of unemployment; risk & return on stock market, real estate…; future liquidity constraints
  - ‘Self’ expectations (future tastes, health, survival probabilities) & ‘social’ expectations (future (of) retirement benefits & Welfare State)

- **Data available in Pater survey (but for ✖)**
  - Representative in each wave with a strong panel dimension
Cac40 and Pater survey

May 2007
June 2009
Nov. 2011
Dec. 2014
Individual (risk) preferences: globally stable since 2007; individual changes do not explain decline in stockholding

Arrondel & Masson (2014 & 2016)

- Usual measures: lottery choices, self-reported Likert scales
  - ‘Risk tolerance’ ↓ from 2007 to 2011, ↑ a little in 2014: post crisis “fear” (emotion) cannot last for ever. Such measures have a lot of defects =>

- Risk score: ordinal & aggregate, from 60 diverse questions
  - Data ‘decide’ one score in each wave: score = mix of aversions to risk, losses & ambiguity
  - Questions coded: −1, 0, +1. Score = Σ answers to ‘relevant’ questions
    - Much better properties: robustness, time correlations, determinants, wealth effects…
  - Risk score: statistically stable over the period 2007-2014 => see graphs
    - But for an age effect: risk tolerance decreases with age (as expected)

- 2007-2014, regressions, individual differences in panel
  - Δ risk score has no significant effect on Δ stockholding

✓ Similar results for the score of time preference

Pater 2007-2009 (Panel) & 2009-2011 (Panel)

2007 / 2009
More risk averse/prudent

2009 / 2011
More risk averse/prudent

Source: Panel PATER 2007-2009 (N=2,234)

2007: mean=6.5 median=7
2009: mean=6.7 median=7
2011: mean=6.8 median=7

Source: Panel PATER 2009-2011 (N=1,970)

2 economic shocks:
no time effects on preferences

Pater 2011-2014 (Panel) & 2007-2014 (Panel)

2011: mean=6.3 median=6
2014: mean=6.8 median=7

Source: Panel PATER 2011-2014 (N=2204)

Age effects 2007-2014:
People become more risk-averse

2007: mean=6.2 median=6
2014: mean=7.0 median=7

Source: Panel PATER 2007-2014 (N=807)
Effects of available resources & expected future labor income on stockholding

Arrondel & Masson (2014 & 2016)

- Available resources
  - Limited (downward) variations since 2007 among potential stockholders
  - + or – touched by the crisis: explains Δ stockholding, but limited effect

- Expectations of future labor income & probability of unemployment over the next five years
  - But → between 2011 & 2014

- Δ expectations: no significant effect on Δ stockholding
In your opinion, if you expect the stock market to increase within the next 5 years, which is the highest possible increase (as a percentage)?

In your opinion, if you expect the stock market to decrease within the next 5 years, which is the lowest possible decrease (as a percentage)?
The key role of (variations of) stock market expectations

- Expectations are rather pessimistic (not ‘rational’)
  - They ↓ between 2007 & 2009, ↓ even more between 2009 & 2011
  - But expectations ↑ a little between 2011 & 2014

- Expectations decline explains stockholding decline:
  - Expected average return: strong effect on ownership (& investment)
  - Expected volatility: no effect on ownership (negative on investment)
    - Lag effects: rise in expectations at the end of 2014 => rise in stockholding later?
    - Selection effects due to nonresponses

- Degree of ambiguity of expectations => tentative assumption
  - Nonresponses, inconsistencies, ‘imprecisions’ = measure of ambiguity
    - Negative effect on stockholding in Pater (Tracol, 2016)
  - Ambiguity rises from 2007 to 2009, but no more from 2009 to 2011 & decreases from 2011 to 2014
    - Negative effect on stockholding in 2009 (& 2011?) but positive effect after
SUPPLY: $\Delta$ factors of limited stock ownership

- Capital market imperfections: fixed costs (holding, transaction & information, indivisibility & threshold effects…)
  - Little change after 2008 or 2009

- Liquidity & credit constraints, rigidity of labor supply…
  - Little change after 2012 (& no significant effect on $\Delta$ stockholding)

- High volatility & limited performance of the stock market
  - But compare the changes in stockholding & those of the CAC 40

  All explain little of the stockholding decline (at least after 2012)?

- Rise in (relative) taxation of stocks in 2008-2012: the answer?
  - Potential important effect but less on ownership: difficult to measure
  - Stops at the end of 2012: what about stockholding drop after?

- Other assets: housing, unit-linked contracts, “livret A”, etc.
  - Unit-linked: see Insee 2010-2014. Livret A (saving deposit) after 2012 =>
Safe portfolio in France: Total amount invested in Livret A

- September 2008
- End of 2012
Explaining the drop in stockholding after 2013-2014

Factors that may explain the drop in stock ownership until 2012:
- demand: more pessimistic & ambiguous stock price expectations; \( \Delta \) current resources; (but not more risk aversion)
- supply: heavier (relative) taxation of stocks, ‘livret A’ opening, etc.

cease to act after 2012 or even play in the opposite direction…

- For a rise in stock ownership after 2012 or 2013
  - Intentions of investment strategies in 2014: back to 2009 \( \Rightarrow \) see graph
  - We need another wave of Pater survey for a better understanding!

- The puzzle: as much supply than demand / financial education?
  - French savers ready but supply & professional advice do not follow??
  - Fewer issues of shares: privatizations drop in 2007-2012 but rise in 2013 (& the weight of foreign shareholders in listed companies is high: 42%)
  - Advice offers little (less & less?) oriented to direct stockholding?
    - Some evidence of that?
« As regards financial investments, do you think that... »

Pater 2007, 2009 2011 & 2014 (panel) : in % (N = 807)

The bulk of one’s savings should be invested in risky assets from the moment that there is a chance for very high potential gains

A large share of one’s savings may be invested in risky assets if the potential gains make it worthwhile

A small part of one’s savings may be invested in riskier assets

One should not take risks; all of one’s savings should be invested in safe assets

2014: return to 2009
A variety of explanations to solve the puzzle?

- French people are rather satisfied with their advisor (70%), but
  - Environment: pessimism / future & anxiety / geopolitical context
  - Issues concerning customer relationship
    - Confidence. Product understanding. Grasp of the return / risk couple. Financial education relative to diversification, liquidity, investment horizon & charges

- Financial advice between 2012 & 2015 (AMF mystery shopping)
  - ‘Degradation’: personal projects, investment horizon, charges & fiscal sit.
  - Still insufficient in risk tolerance, income & financial knowledge
  - Very cautious offers for the active young people
  - Proposals oriented to unit-linked contracts (90% of the cases)!

- Recommendations (supply = AMF)
  - Supply: AMF certification, annual assessment of knowledge/competence (guidelines of ESMA); high priority given to customer’s interests
  - Demand: Financial education: produce a ‘new saver’– but only on the long run?
Which possible remedies to the decline in stockholding?

- Introducing **DC funded pensions** as in Germany (or developing risky savings programs with quasi automatic affiliation)
  - OECD or EU projected returns to pension funds may be overestimated?
  - “All shareholders better than all home owners or precautionary savers”: a motto not in line with today French culture?

- A lower (relative) **taxation on stocks & entrepreneurship**
  - For more long-term & productive savings
  - Tax reform must be both credible & durable…

- A (confidence) **shock on stock-price & other expectations**
  - Rise confidence given to financial markets, leading to more ‘rational’ price expectations
  - Also rise confidence in our ‘social model’ & its sustainability, promote stabilization (budget) policies, in order to prevent…
  - … Over-accumulation of unproductive capital and alleged safe savings, especially in the hands of the elderly
Perspectives for long-term productive saving

- The conference has highlighted the crucial (negative) role of 3 factors & their interactions
  - Population ageing & the rise of life expectancy
  - Lack of growth (& stable jobs in a number of countries)
  - Low (nominal & real) interest rates

- Another factor seems also important: over-accumulation of unproductive capital in the hands of the elderly
  - Implying a growing weight of inheritance, but received in full property much later than before, at an average rate of 60 today
  - Making young people more and more liquidity constrained in their wealth projects
    - A wealth situation common to most countries in the Euro Zone, that is…
    - … bad for both productive saving & growth, equality of life opportunities & intergenerational balance or equity