



Precautionary Liquidity and Choice Overload in French Employer-Sponsored Saving Plans

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Motivation

- **Policy debate: shall we authorize more “flexible” pension withdrawal, either at retirement or before retirement?**
 - Germany: no withdrawals
 - US: early withdrawals possible in IRAs accounts before age 59.5 with a 10% penalty
 - Australia and Canada: withdrawals possible for exceptional reasons
 - *Towards more flexibility? UK changes in 2015, proposal in Dutch regulatory reform, etc.*
- **What should be the liquidity feature of an optimal retirement savings system?**
 - With liquid savings, **present-biased individuals** might **not save adequately for retirement**
 - But participants might attach value to **liquidity**, this might **incentivize them to save**

Employer-Sponsored Saving Plans in France

- France's *Epargne Salariale* very close to the US 401(k)
 - Around **53% of French employees in private sector** have access to such saving schemes (DARES, 2020)
- French saving plans offer **two types of saving vehicles**
 - All firms offer a **MT option** (PEE): money can be withdrawn without penalty after 5Y
 - Some firms offer a **LT option** (PERCO-L): money can not be withdrawn until retirement
 - Both vehicles allow withdrawals without penalty for **exceptional reasons** (more restrictive for LT)
- We can compare how employees behave in **firms w/ and w/o a LT saving vehicle**

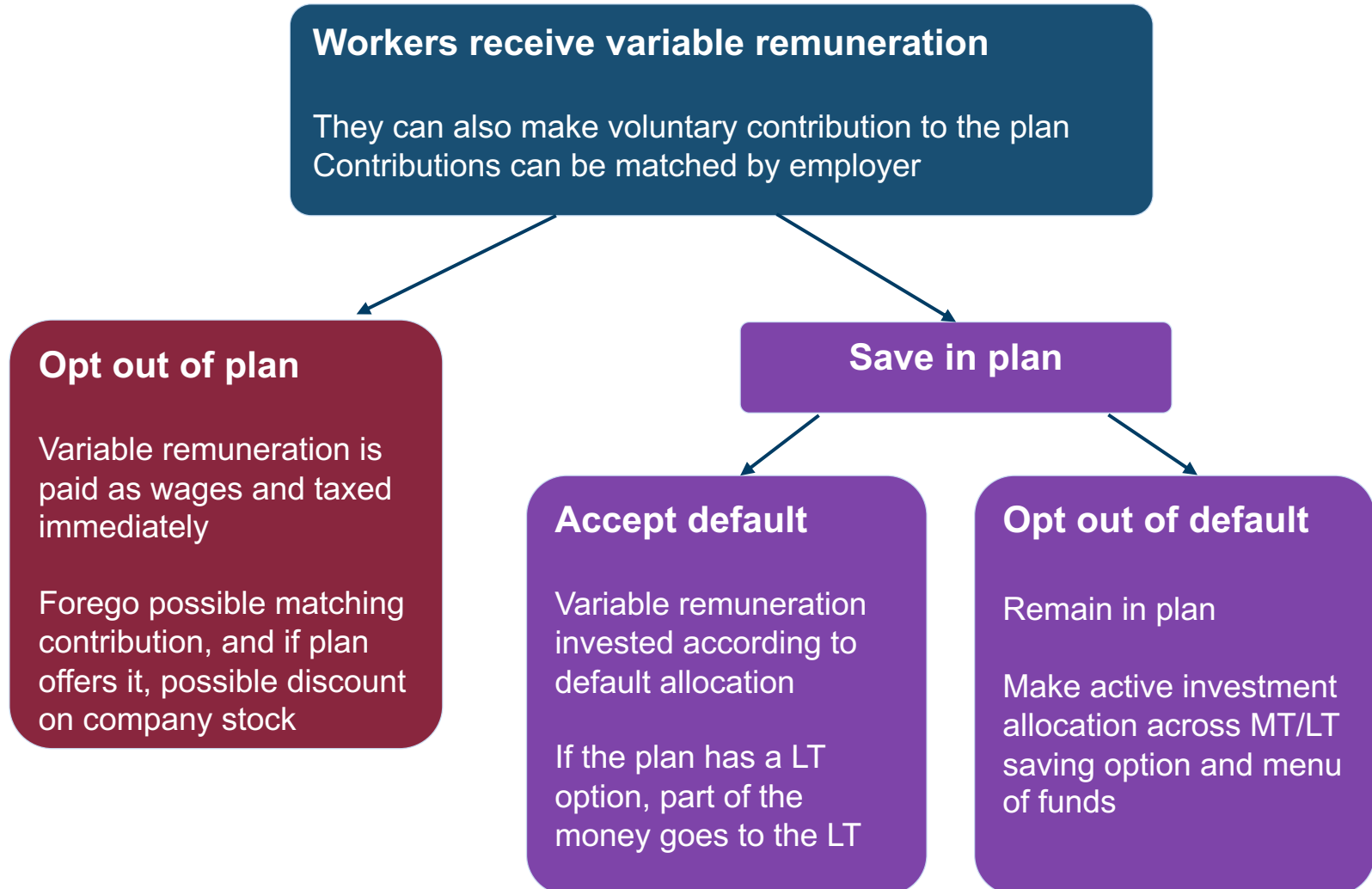
Research Question

- How does presence of both **a MT and a LT saving option** with limited access (hardship conditions only) until retirement affect participant behavior?
 - In an experimental setting on 750 RAND American life panel participants, Beshaers et al. (2020) show that **workers prefer accounts with a larger withdrawal penalty**, offering a better commitment to save
 - On US 401k administrative data, Choukhmane (2021) provides evidence that when **raising the default contribution rate**, some individuals **opt out of the plan**
- **Sophisticated present-biased workers prefer the LT option, while naive present-biased or neoclassical economic agents with a preference for liquidity favor the MT option.**

Our Paper

- Three sources of evidence of a **preference for liquid accounts**
 - Lower **take-up of the default** having a LT component
Combined with “**choice overload**”, this preference can turn some workers away from saving plans
 - Higher take-up of the LT option when the **LT- MT match spread** is larger
 - **Hardship withdrawals** are done in priority from the LT vehicle
- Based on a comparison between workers’ choices in firms w/ and wo/ LT plans (endogeneously chosen by firms)

The Choice Setting for Workers



Regulatory Constraints on Defaults

- If plan offers an LT option, the **default must include LT investments**
 - Presence of LT option expands the participant choice set and changes the default
- LT default option must be a balanced fund
- MT default must be low-risk

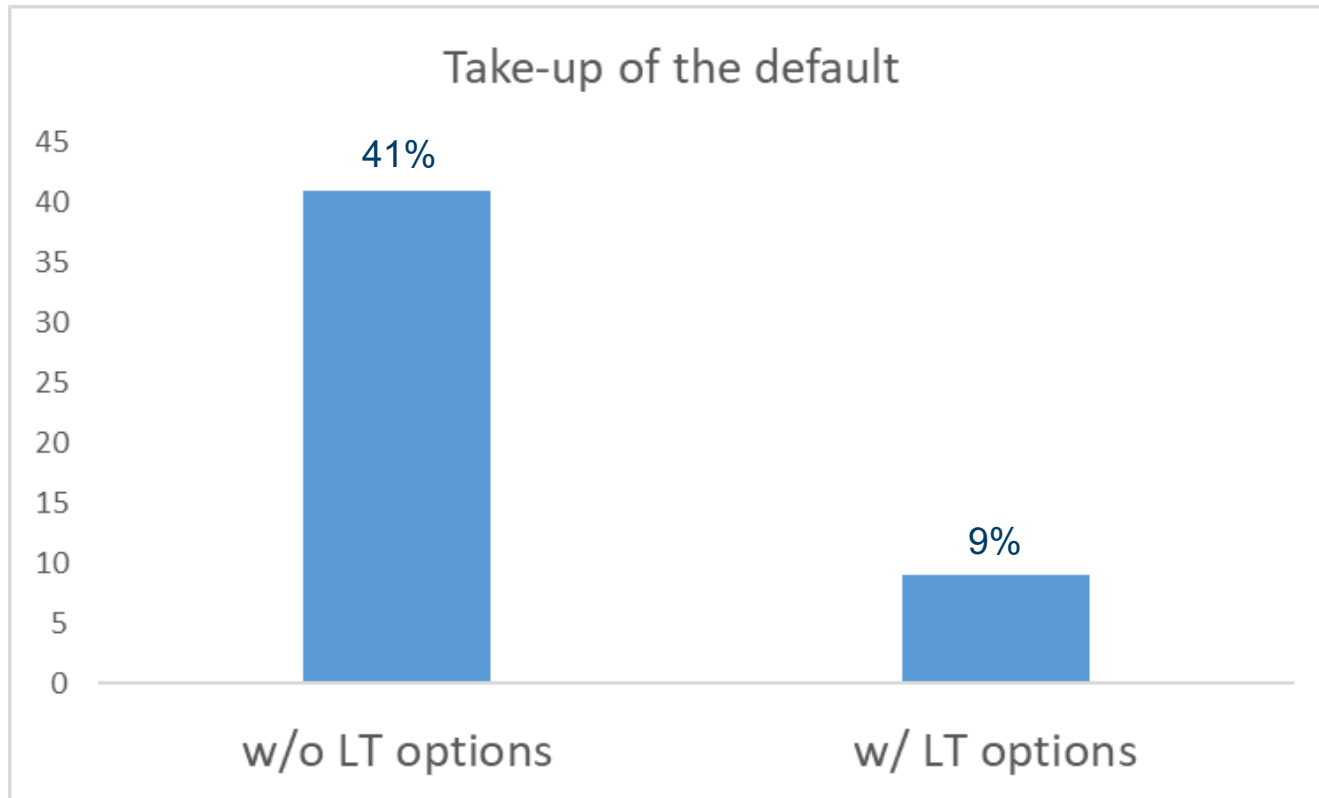
Data Sample

- Administrative data from Amundi, largest provider of French employer saving programs
- 650,000 employees at > 1,500 firms in 2017
- Restricted to firms with > 50 employees; all are required to pay variable remuneration and to offer a DC plan
- All plans feature auto-enrollment

Data Summary: Means and Medians

	Panel A Across firms (N = 1,583)		Panel B Across individuals (N = 645,966)	
Variable	Mean (S.D.)	Median	Mean (S.D.)	Median
Female	0.40 (0.22)	0.36	0.34 (0.47)	0
Age (median for firms)	45.60 (5.96)	46.0	44.6 (11.0)	45.0
Variable Remuneration (VR) (€) (median for firms)	1,761 (2,852)	859	2,115 (3,073)	1,004
Profit sharing (Y/N)	0.70 (0.46)	1.0	0.58 (0.49)	1.0
VR in Quartile 1 (€)	857 (1,193)	461	801 (1,216)	294
VR in Quartile 2	1,834 (2,669)	886	1,753 (2,204)	890
VR in Quartile 3	2,269 (2,376)	1,535	2,341 (2,695)	1,457
VR in Quartile 4	2,741 (3,851)	1,510	3,364 (4,342)	2,041
Plan balance (€000s)(median for firms)	9.271 (18.497)	4.133	24.692 (65.824)	5.954
Ln (plan balance) (median for firms)	8.33 (1.47)	8.47	8.4 (2.1)	8.7
Plan w/ LT savings	0.34 (0.48)	0	0.51 (0.50)	1.0
Plan w/ employer stock	0.23 (0.42)	0	0.65 (0.48)	1.0
Plan w/ match	0.42 (0.49)	0	0.68 (0.47)	1.0
# funds on MT menu	7.20 (5.00)	6.0	7.24 (4.34)	6.0
# asset classes in plan	2.91 (0.96)	3.0	3.08 (0.86)	3.0
Take-up of plan	0.88 (0.19)	0.98	0.87 (0.34)	1.0
Take-up of default option	0.27 (0.31)	0.13	0.25 (0.43)	0.0

1- Lower Take-up of the Default in Plans w/ LT options



Even if Plans w/ LT options are more attractive

	Plan wo/ LT option	Plan w/ LT option
	N = 316,783	N = 329,183
Individual characteristics		
Female	0.33	0.34***
Age	43.81	45.37***
ln (Plan balance) (€)	7.8	9.08***
Variable remuneration (€)	1,344	2,857***
Profit sharing (Y/N)	0.47	0.68***
Plan Attributes		
Plan w/ employer stock	0.6	0.69***
Plan w/ match	0.45	0.90***
Nb. Funds on MT menu	6.12	8.32***
Nb. Asset classes	2.74	3.40***
Take-ups		
Take-up of plan	0.9	0.84***
Take-up of default option	0.41	0.09***

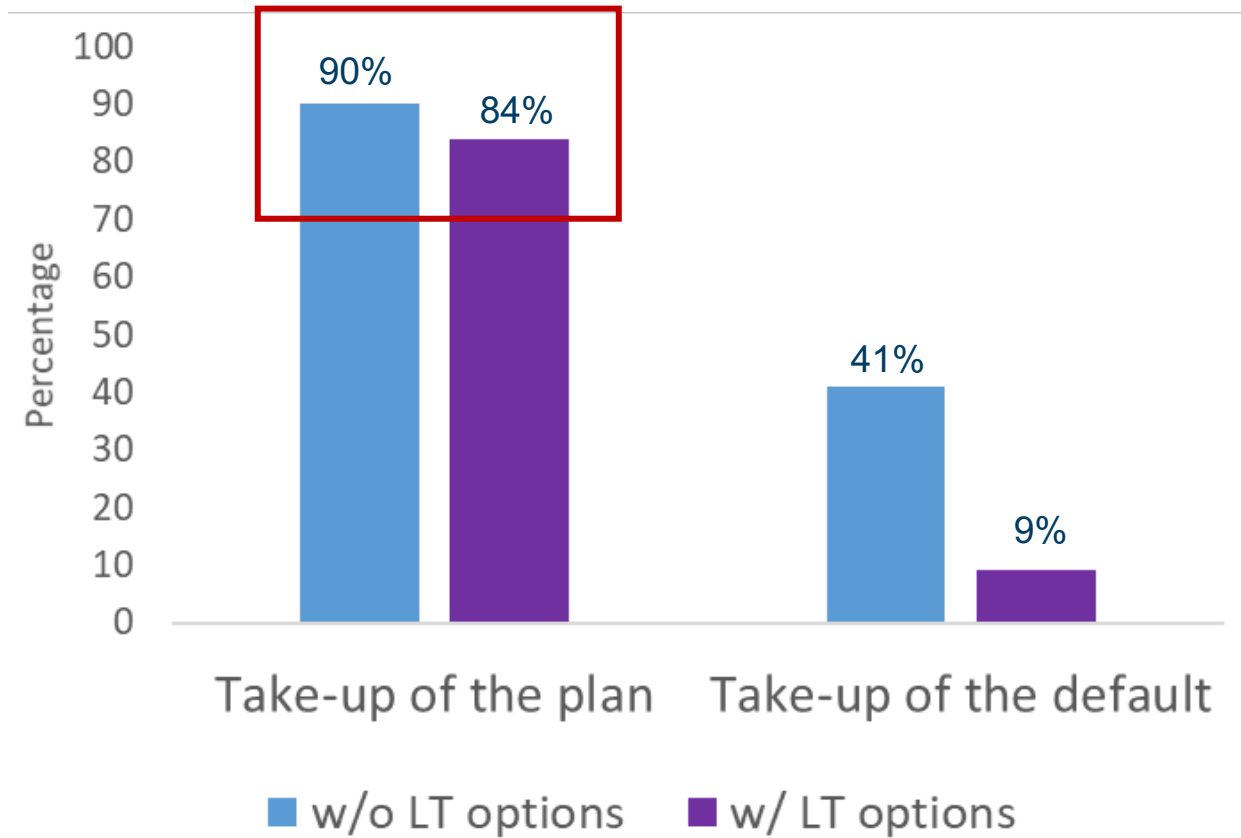
Regressions Results

	(1) r1 Take-up of the default option	(2) r2 Take-up of the default option	(3) r3 Take-up of the default option	(4) r4 Take-up of the default option	(5) r5 Take-up of the default option	(6) r6 Take-up of the default option
VARIABLES						
Firm w/ LT savings plan		-0.32*** (0.069)			-0.32*** (0.11)	-0.26*** (0.085)
Firm w/ employer stock			-0.086 (0.076)		-0.049 (0.059)	-0.051 (0.057)
Firm w/ match				-0.18** (0.086)	0.016 (0.11)	-0.013 (0.092)
Age >= 62	-0.015 (0.035)	0.0037 (0.013)	-0.0090 (0.033)	-0.011 (0.031)	0.0041 (0.011)	0.013 (0.0083)
Female						
Variable remuneration in Q1						
Variable remuneration in Q2						
Variable remuneration in Q3						
# Funds in MT plan						
# Asset classes						
Constant	0.20*** (0.065)	0.36*** (0.11)	0.29*** (0.091)	0.36*** (0.099)	0.38*** (0.063)	0.60*** (0.13)
Observations	645,966	645,966	645,966	645,966	645,966	645,966
R-squared	0.003	0.138	0.015	0.043	0.141	0.162

• When the plan (and thus default option) has a LT saving component, individuals are **26% less likely** to take the default

→ Some workers dislike the illiquid nature of LT savings, opt out of the default to avoid it

Lower Take-up of Plans w/ LT options



Regressions Results

VARIABLES	(1) Take-up of the plan	(2) Take-up of the plan	(3) Take-up of the plan	(4) Take-up of the plan	(5) Take-up of the plan	(6) Take-up of the plan
Firm w/ LT savings plan		-0.095** (0.048)			-0.16*** (0.046)	-0.13*** (0.041)
Firm w/ employer stock			0.12*** (0.034)		0.10*** (0.026)	0.100*** (0.025)
Firm w/ match				0.066* (0.039)	0.11*** (0.038)	0.098*** (0.035)
Age < 57	-0.032	-0.030	-0.028	-0.028	-0.031	-0.032
Age >= 62						
Female						
Variable remuneration i						
Variable remuneration i						
Variable remuneration i						
# Funds in MT plan						
# Asset classes						
Constant						
Observations						
R-squared						

• When the plan has a LT saving component, individuals are **13% less likely** to take the plan

• Some workers may dislike the LT option, but it can be avoided by making an active choice

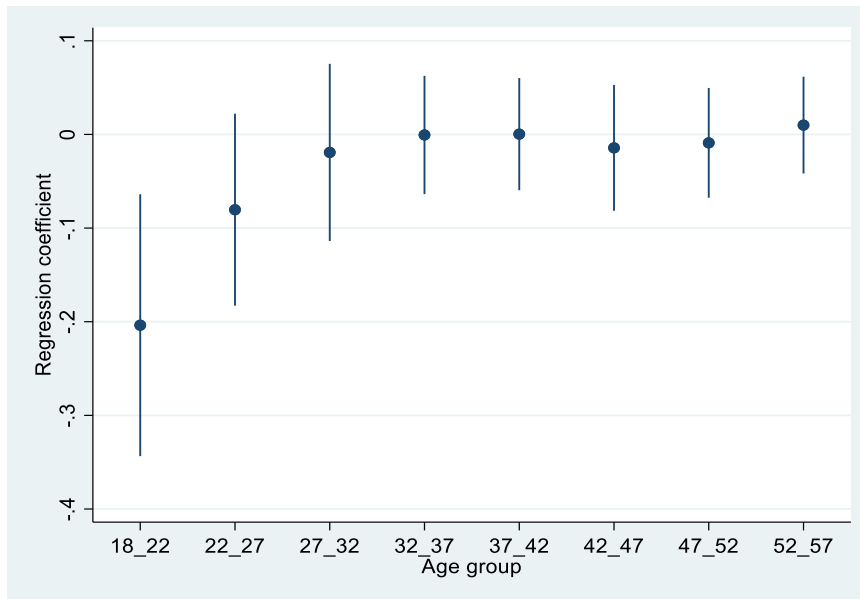
→ **Choice overload can explain why some workers opt out of plan rather than making active choices**

→ **Cost of decision-making seems to outweigh benefits of participation for some workers**

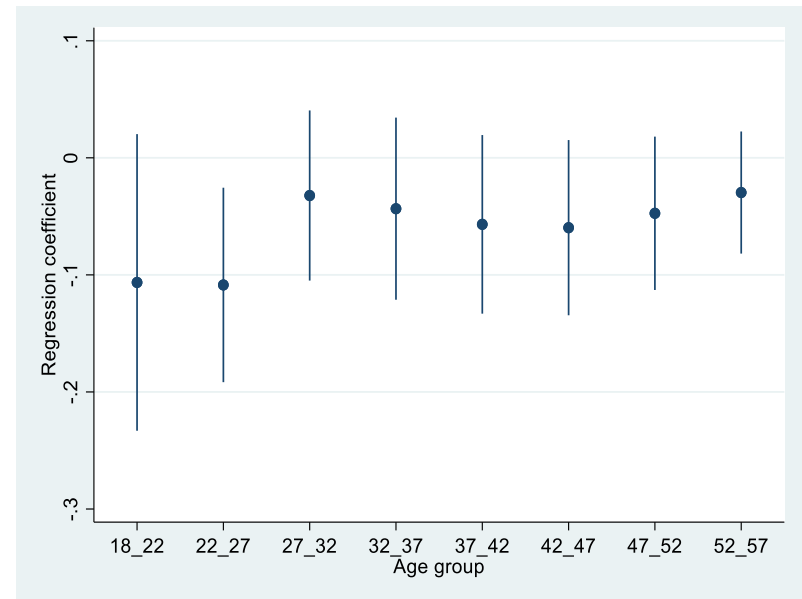
Heterogeneous Effects

- **Young individuals** seem to be particularly sensitive to illiquidity

Take-up of the Default

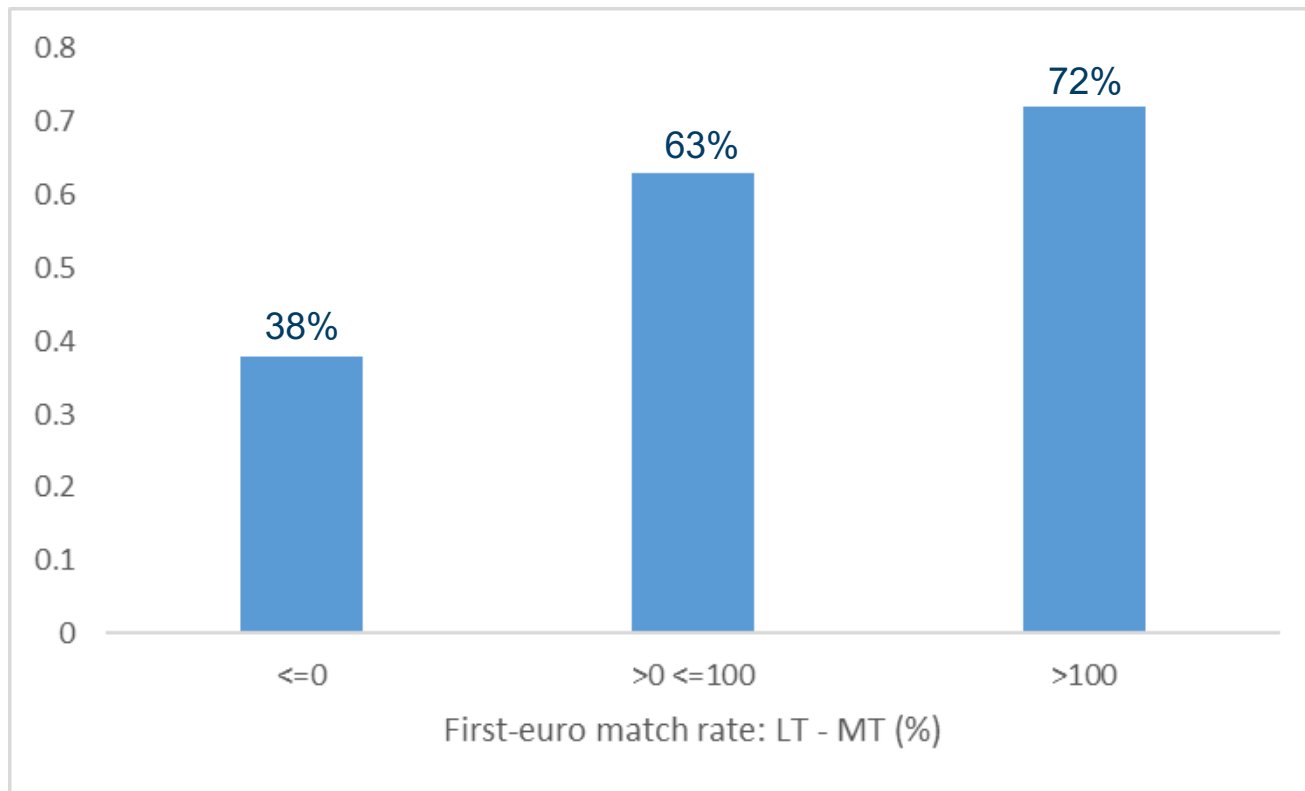


Take-up of the Plan



2- Higher Take-Up of the LT option with LT-MT Match Rate

- Average take-up of the LT option



Regressions Results

	(1)	(2)	(3)	(4)	(5)
	r1	r2	r3	r4	r5
VARIABLES	Individual invests in LT	Individual invests in LT	Individual invests in LT	Individual invests in LT	Individual invests in LT
First-euro match rate LT-MT (%)		0.0013*** (0.00023)		0.0012*** (0.00021)	0.0012*** (0.00024)
Firm w/ employer stock			0.13*** (0.044)	0.10** (0.044)	0.073 (0.045)
First-euro match rate MT (%)		0.00013 (0.00045)	-0.00057** (0.00029)	0.00022 (0.00040)	0.00011 (0.00038)
Age >= 62	0.042*** (0.014)	0.046*** (0.014)	0.037*** (0.013)	0.043*** (0.013)	0.037*** (0.012)
Female	-0.046* (0.024)	-0.013 (0.020)	-0.016 (0.019)	0.00042 (0.017)	-0.0040 (0.016)
Variable remuneration in Q1	-0.012	-0.024	-0.030	-0.031	-0.031
Variable remuneration in Q2					
Variable remuneration in Q3					
# Funds in MT plan					
# Asset classes					
Constant					
Observations	149,950	149,950	149,950	149,950	149,950
R-squared	0.149	0.183	0.174	0.192	0.199

• A 100% increase in the match rate increases participation in the LT saving vehicle by 12%

→ Workers need to be compensated for the liquidity loss that comes with the LT saving vehicle

3- Larger Withdrawals from the LT saving vehicle

- Withdrawals

- 71% of individuals do not withdraw unlocked money
- 69% of individuals making a hardship withdrawal do not use unlocked money

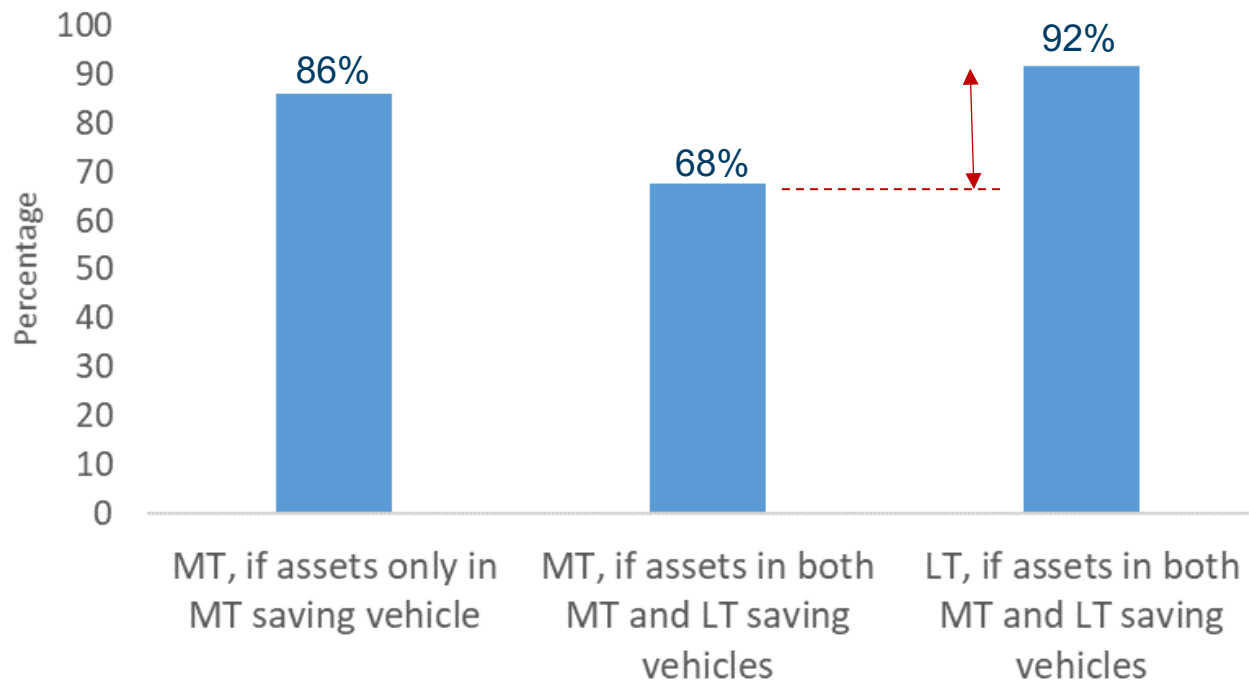
	N ind	%
Do not withdraw	130,126	71.0%
Unlocked money withdrawal	47,414	25.9%
Hardship withdrawal	8,031	4.4%
Hardship withdrawal with no unlocked money withdrawal	5,567	3.0%
Total (individuals with unlocked money in 2016)	183,173	100%

↕ 69%

3- Larger Withdrawals from the LT saving vehicle

- **% of total assets withdrawn**

- 86% of total assets for individuals having only a MT saving vehicle
- 92% on the LT, 68% on the MT for individuals having MT and LT vehicles
- People can partially offset the effect of the nudge into LT savings with hardship withdrawals



Conclusion

- Plan attributes affect participation, even when unattractive features can be avoided by active choices
- **Saving plan illiquidity** reduces participation and use of default, especially among the young
- Some participants appear to opt-out rather than make active choices to avoid default (“**choice overload**”)
- Workers need to be **compensated for the liquidity loss** that comes with the LT saving vehicle
- Some workers make use of **hardship withdrawals** to offset the nudge into LT savings

Conclusion

- Evidence of “**Precautionary liquidity**” motives
 - Preference for *holding more liquid assets*, not because of current needs, but because of *possible future needs*
 - Evidence in banking: lending and deposit (Kashyap et al., 2002) ; consumer finance: credit card or house loan delinquency (Cohen-Cole and Morse, 2010) ; early withdrawals during Covid (Bateman et al., 2022)
- Work in progress...
 - Impact of introducing a LT saving vehicle in the plan
 - Saving behavior after hardship withdrawals

— DISCLAIMER

The data used to carry out this study come from the processing of record keeping and account keeping of AMUNDI ESR employee and pension savings accounts. These data have been analyzed anonymously for scientific, statistical or historical research purposes.

— MENTIONS LÉGALES

Amundi Asset Management

Société Anonyme au capital social de 1 086 262 605 euros

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