

# Financial vulnerability and retirement planning

Evidence from representative sample surveys of working men and women in 16 countries

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# Acknowledgements

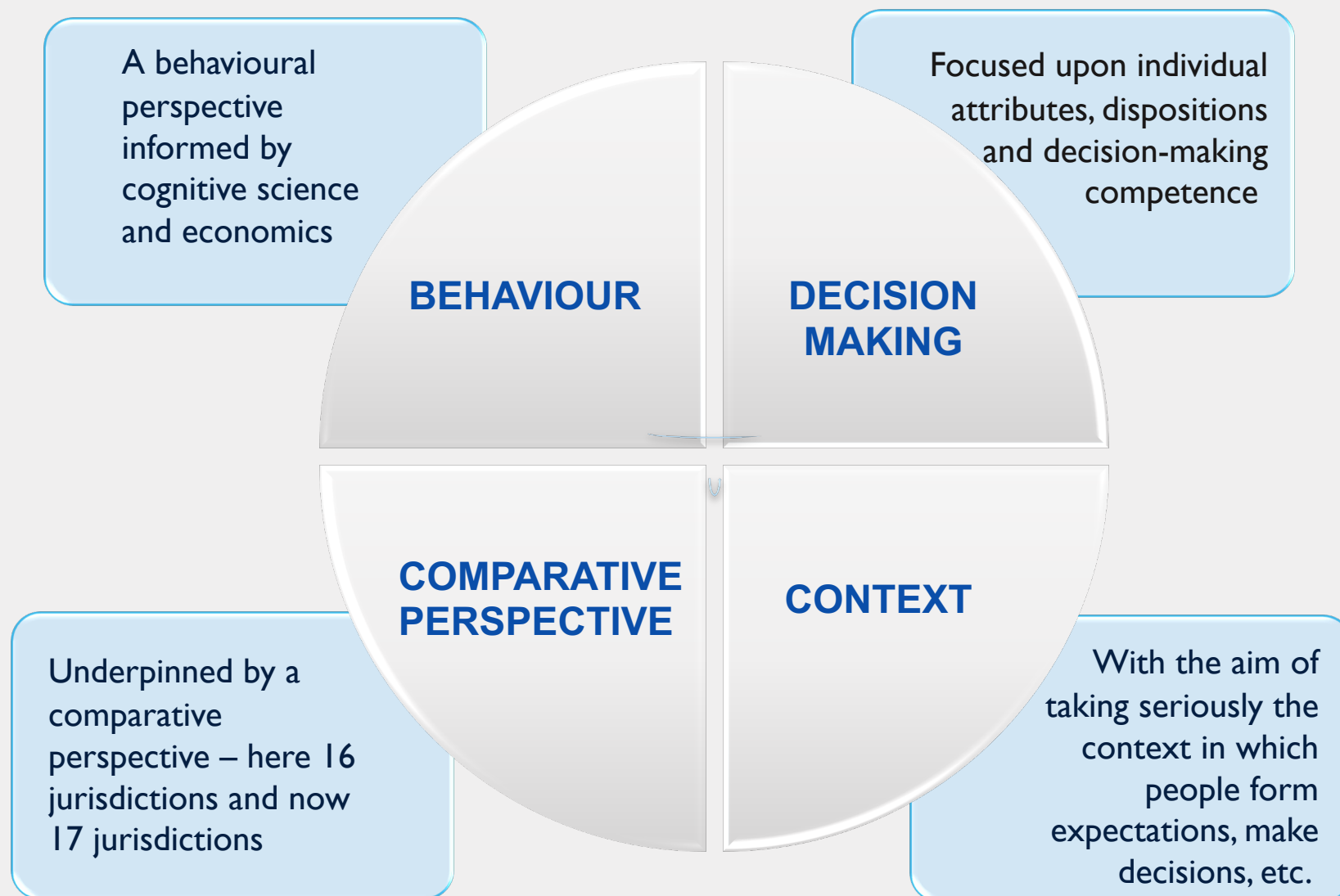
The research reported in this presentation and related paper was co-authored with Sarah McGill. It bears the imprint of on-going conversations with Nick Chater and the late John Marshall on cognition and decision-making under risk and uncertainty. Research assistance was provided by Marta Golin.

Zürich Insurance funded the larger project including the collection of the survey data through representative samples of employed individuals in 16 countries. The authors were entirely responsible for the design of the survey, the compilation and analysis of the data, and the conclusions drawn thereof. In all matters regarding the treatment of human subjects and the use of data, University protocols were followed.

# Part of a larger research agenda

- Focused upon the changing world of work
- New kinds of employment contracts, changing compensation and benefits & systems of management
- With emphasis on the impact on technological change in the workplace, related skills, and labour productivity
- Amplified, accentuated, and accelerated by COVID 19.

# Building blocks of the research program



- Provides resources for large, bespoke surveys of individual behaviour and corporate human resources policies (since 2016)
- Reinforced by jurisdiction-specific and company-specific insights and interviews with key decision-makers
- Involving a series of reports, webinars, and external collaborations with the EU/EC, WEF among others
- With applications for the design of public policy (e.g. skills-training programs), new models of deferred compensation (e.g. pensions), and health insurance (COVID 19).

# Themes of this paper & presentation

- The increasing vulnerability of working men and women to changing labour market conditions and ‘shocks’
- Their experience of short-term and long-term interruptions in earned incomes & health
- How short-term vulnerability can translate into the foreshortening of individuals’ long-term planning horizons
- Especially relevant to pension and retirement planning – the subject of this presentation.



# The paper



# Motivation and Research question



## Financial concerns

Most individuals in the OECD identify financial security in old age as one of their top three long-term financial concerns (OECD, 2019)

Nearly two-thirds of the US population report being worried about their future financial situation (Anderson et al., 2015)



## Financial hardship

Many households often live close to the financial edge and, in case of emergency, they resort to extreme measures to cope with unexpected shortfalls in income (Lusardi et al., 2011)

The onset of the COVID19 pandemic has greatly exacerbated these trends.



## Our research question

**What is the effect of past financial vulnerability on individuals' ability to plan for retirement?**

objective: understanding why some households prepare for retirement more effectively than others.



# Hypotheses and study sample

Hp 1

Deterioration in one's previous financial situation or health is expected to lower the propensity to plan for retirement

Hp 2

Age could have a positive effect on the likelihood of planning for retirement

Hp 3

Level of education is positively associated with likelihood of retirement planning

We rely on our novel survey dataset of employed men and women age 20-70 from 16 countries

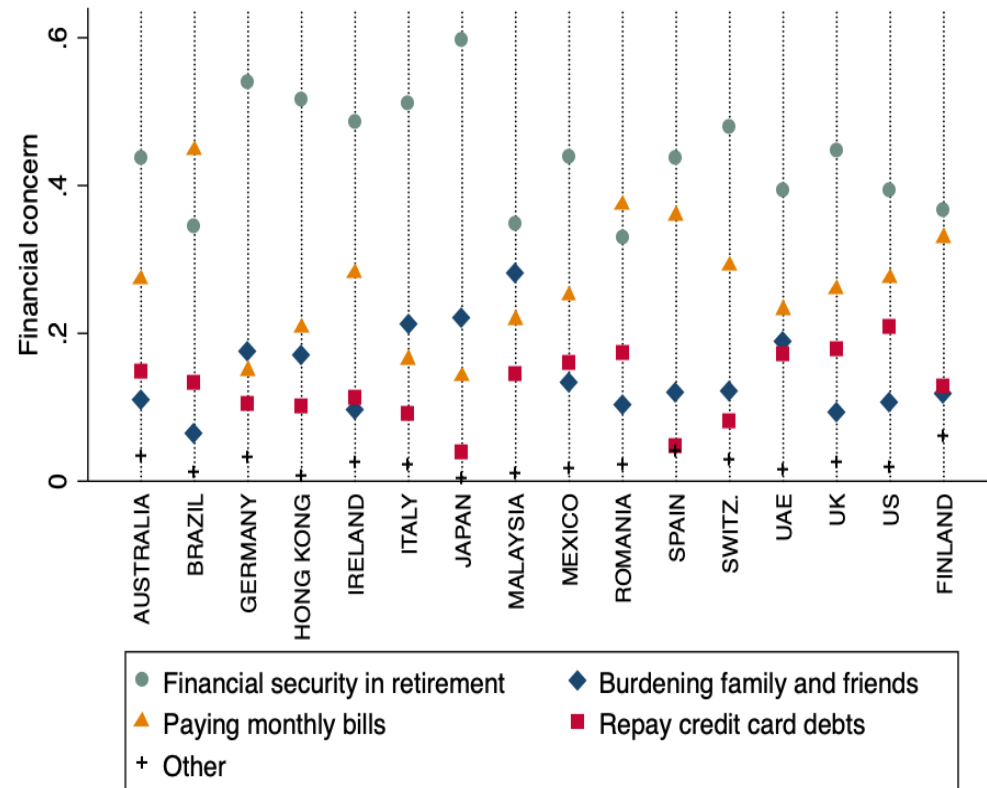
N = 13,278 working individuals



- Financial vulnerability is associated with a lower probability of planning for the future:
  - Past negative health episodes decrease the likelihood of thinking about future wellbeing in retirement by 10 and percent.
  - Past inability to save and income losses decreases the probability of planning for retirement by 41 and 29 percent respectively.
- Our results are robust controlling for risk aversion, present bias, cognitive abilities, and the adequacy of the country pension system.

Only those individuals who can afford to plan for their retirement plan for the future. The long-term cost of previous and current shortfalls in income or savings should not be neglected.

# Long term financial planning

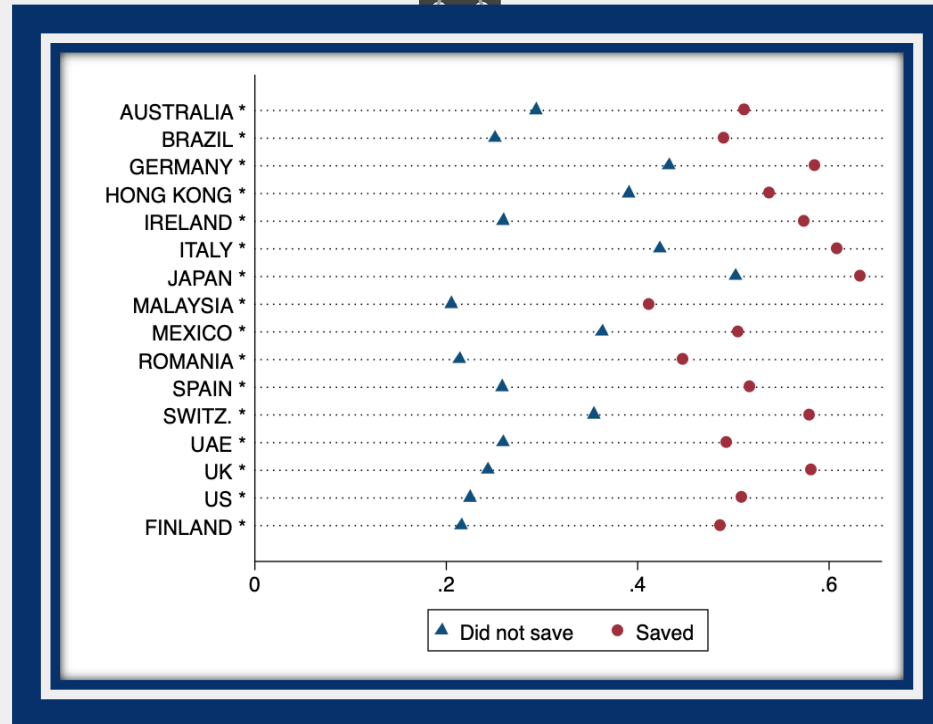
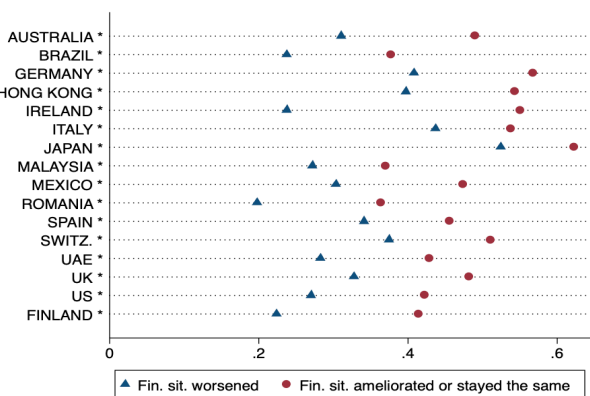
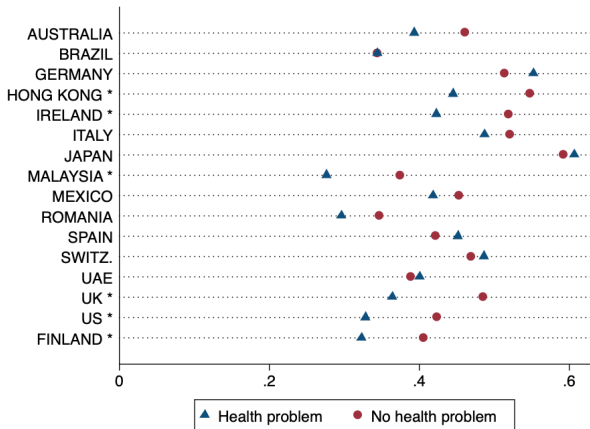


Fraction of respondents who are concerned about their financial security in retirement, being a burden to their family or friends, paying monthly bills, repaying credit card debts and other concerns for each country in our sample.

- Like Alessie et al. (2011) and Lusardi and Mitchell (2007) we label those who are *mostly* concerned about their retirement wellbeing as “planners”
- Overall, 44% of respondents in our sample are worried about their financial security in retirement
- Those who plan for retirement on average are
  - more educated
  - have higher monthly earnings
  - less likely to have *atypical* jobs
  - more likely to be male
  - 5 years older than those who don’t.



- We define financial vulnerability as a self-assessed situation in which individuals experience financial hardship caused by a **deterioration in their financial situation, personal health** and/or **their inability to save**
- Significant variability in financial vulnerability:
  - **women** are less likely to save, more likely to have experienced a worsening of their financial situation, and slightly more likely to have been ill in the past.
  - **having children or an atypical work arrangement** is associated with lower abilities to save and higher likelihood of having experienced a decline in one's finances last year.
  - past **educational attainment** appears to be negatively associated with past health hardship, the inability to save and deterioration in one's financial situation.
  - those respondents who could not save, have experienced negative health conditions or a shortfall in income in the past have, on average, a **lower monthly income**.

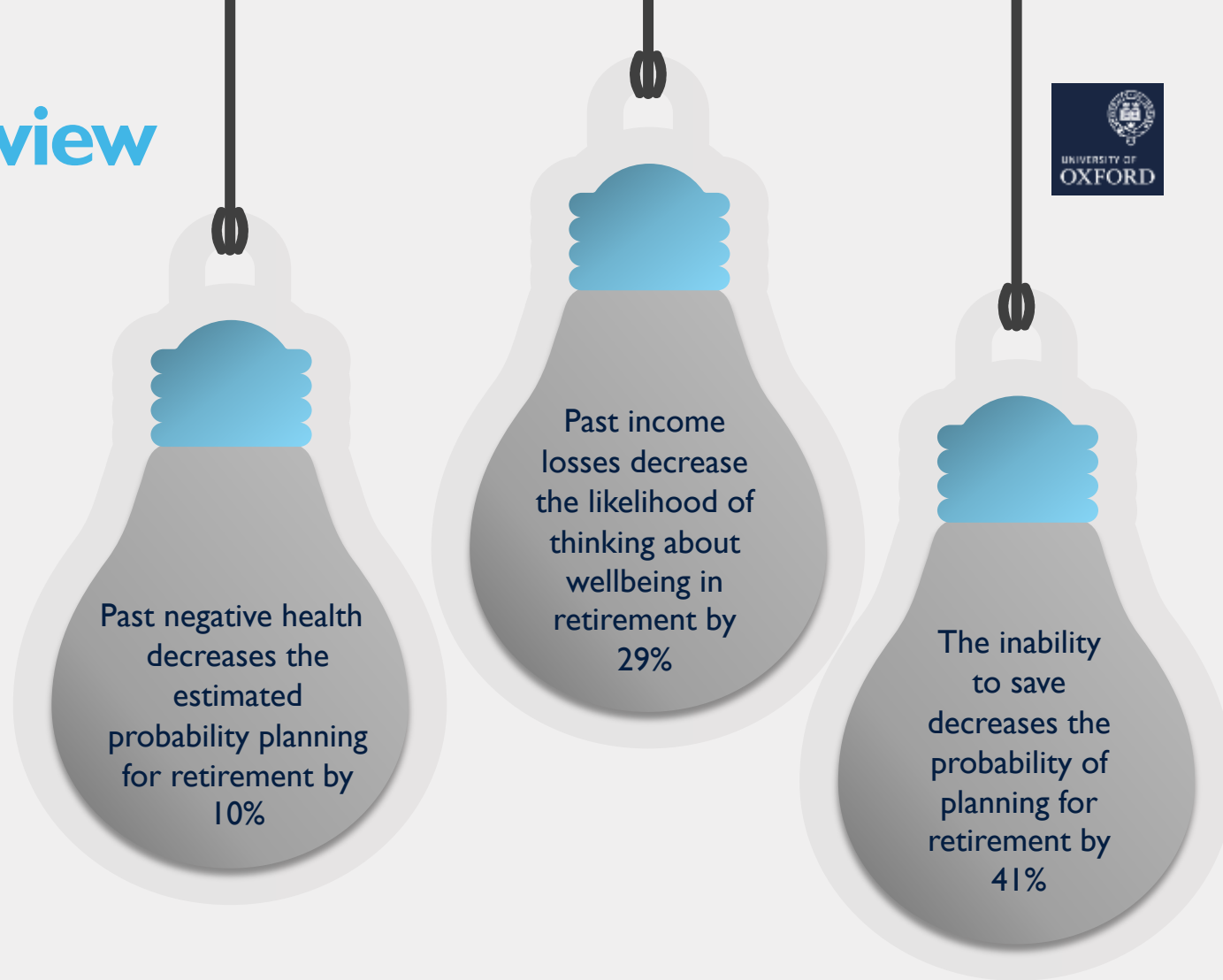


In countries marked with a \*, the difference between those who suffered from financial hardship and those who did not is statistically significant at  $p < 0.05$

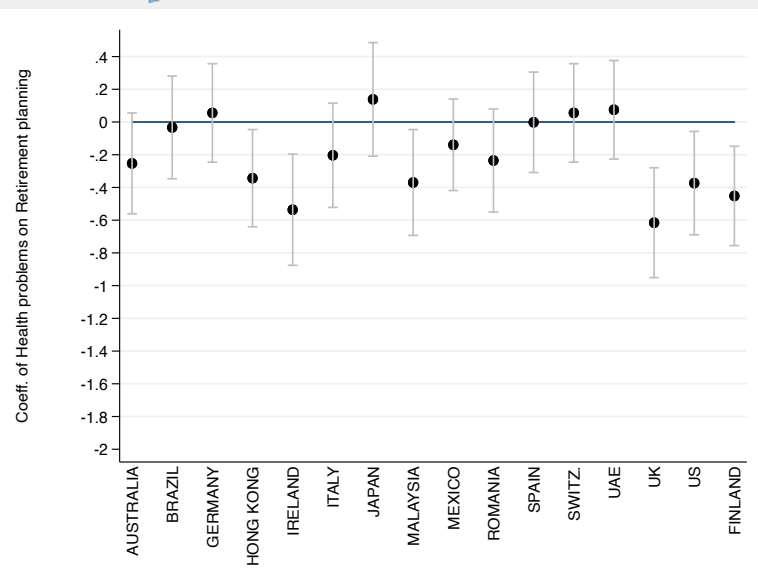
- The Figures show the fraction of respondents who are planning for their retirement by whether or not they suffered from negative health episodes, did not save, or experienced a worsening of their financial situation
- Individual propensities to plan for retirement appear strongly correlated with past episodes of financial vulnerability. This relationship is not driven by a small number of countries.

	Plan for retirement			
	(1)	(2)	(3)	(4)
Negative past health	-0.186*** (0.053)			-0.138*** (0.049)
No savings from last year		-0.915*** (0.070)		-0.838*** (0.070)
Fin. sit. worsened			-0.579*** (0.056)	-0.358*** (0.059)
Age	0.035*** (0.003)	0.038*** (0.003)	0.035*** (0.003)	0.038*** (0.003)
Male	-0.002 (0.054)	-0.035 (0.058)	-0.020 (0.055)	-0.047 (0.058)
Education (years)	0.012*** (0.004)	0.009** (0.004)	0.012*** (0.004)	0.009** (0.004)
Have children	-0.398*** (0.065)	-0.350*** (0.065)	-0.384*** (0.063)	-0.346*** (0.064)
Monthly income (log PPP)	0.476*** (0.055)	0.307*** (0.050)	0.424*** (0.054)	0.280*** (0.048)
Atypical work arrangement	-0.118** (0.050)	-0.090* (0.052)	-0.108** (0.052)	-0.084 (0.054)
Married or cohabiting	-0.045 (0.044)	-0.050 (0.042)	-0.034 (0.044)	-0.048 (0.043)
Constant	-5.529*** (0.507)	-3.967*** (0.424)	-5.016*** (0.491)	-3.641*** (0.409)
Country dummies	YES	YES	YES	YES
N	13278	13278	13278	13278
bic	17194	16714	17056	16661
Pseudo $R^2$	0.06	0.09	0.07	0.09

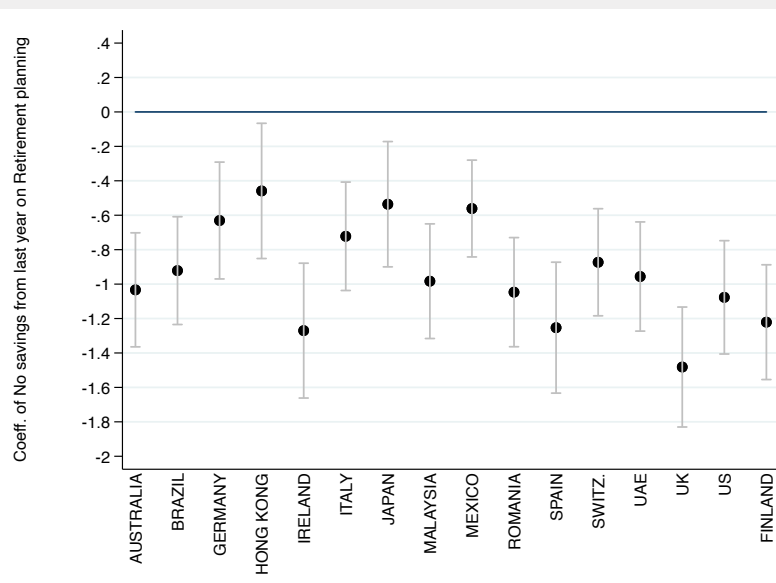
Notes: Coefficients of logit regressions expressed in log-odds metrics. Standard errors clustered at the country level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .



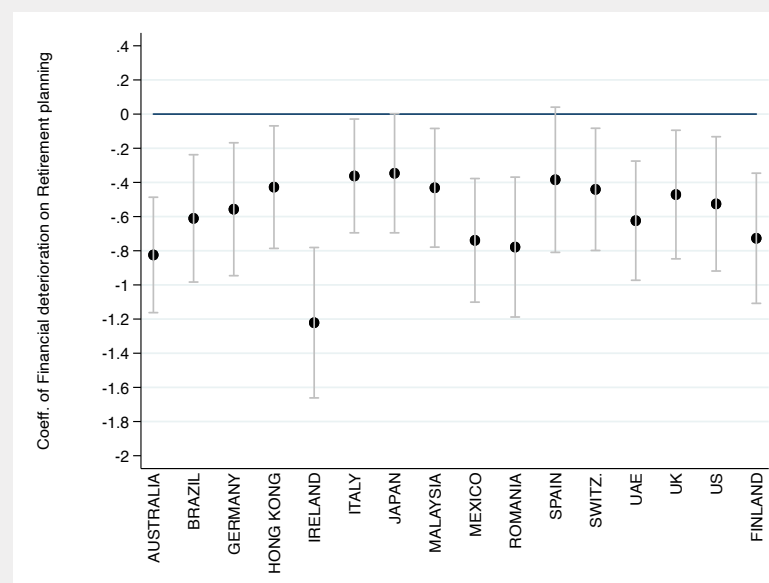




Past ill health



Inability to save



Financial deterioration

For each country, we regress retirement planning separately on our 3 measures of financial vulnerability and the full set of controls described above and plot the resulting coefficients in log-odds metrics as well as their 95 percent confidence intervals. Negative coefficients imply that financial vulnerability decreases the likelihood of planning for retirement.

**Take-away:** the effect of past financial vulnerability on long-term financial planning remains stable even after controlling for institutional differences in retirement income systems across jurisdictions as measured by the *Melbourne Mercer Global Pension Index*

# Robustness checks

- Financial vulnerability significantly decreases the likelihood of planning for retirement even controlling for risk aversion.
- Controlling for cognitive abilities **does not** curtail the effect that financial vulnerability exerts on retirement planning.
- Having preferences for the present is associated with a lower probability of planning for retirement but the effect of financial vulnerability remains the same.

## Behavioural factors

- For those in the 30-59 age group, their estimated probability to plan for retirement declines significantly if hit by a deterioration in their finances.
- Being unable to accumulate savings and/or suffering from ill health reduces the probability of planning for retirement no matter the age.

## Heterogeneity of effects

- The inability to save as well as experience of financial shortfalls are inversely correlated with the ownership of supplementary pension products.
- Negative health events are positively associated with a higher likelihood of holding supplementary pension products
- The magnitude of the effects is stable over ???????????

## Contributions to complementary pension fund

# Summary

We have shown that:

- The inability to save as well as shortfalls in earned income prompt people to be more aware of, and sensitive to, immediate circumstances
- Similarly, past negative health episodes reduce workers' planning horizon
- Emergencies appear to take precedence over issues related to lifelong financial well-being such as retirement planning – there is a 'finite pool of worries'
- Absent viable mechanisms that prompt people to think about their retirement, shortfalls in earned income due to the ongoing COVID pandemic are likely to have long-term consequences.







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# Research agenda

Four avenues for future research:

- Is the link between short-term vulnerability and long-term planning *causal*?
- How can individuals make optimal savings decisions in an environment where they face individual risks (short-term and long-term) and collective uncertainty (where it is difficult to know decades in advance their personal and family retirement circumstances)?
- How can the opportunities and incentives for young individuals to save more *and* more effectively for their retirement be expanded?
- What are the respective roles of the individual, their families, and society in ameliorating/managing the long-term effects of labour market and health-related vulnerability?



# Thank you

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