

Household finance: Who benefits, who pays, and what can change?

Skandia Research Award on Long-Term Savings

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- Households can remain inactive, even in the face of strong financial incentives to act.
 - A smaller, related problem: costly excessive activity (see literature on retail investor trading).
- Financial firms understand differences across households in responsiveness, and design products around them.
- Inaction and inappropriate responses are often concentrated among poorer, less well educated and less financially sophisticated households. (Campbell and Ramadorai, 2026)
- How can regulation and technology help households respond appropriately to financial incentives?

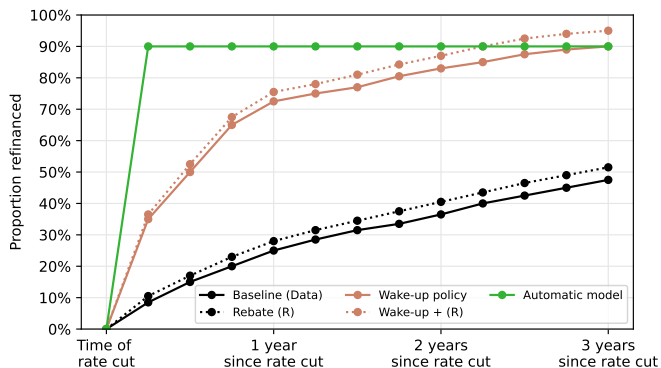
Where we are going

1. Inaction and who bears its costs
2. Why households remain inactive
3. Can regulation help?
4. Can technology help?
5. Making the pieces work together

- A lower mortgage rate can produce substantial savings, conditional on surmounting the real options threshold.
- In Denmark, households can refinance regardless of home equity or credit standing.
- Even four years after reaching a positive refinancing incentive, **over half of mortgages have not refinanced.**
- Differences in financial incentives alone cannot explain the pattern. (Andersen, Campbell, Nielsen and Ramadorai, AER 2020)

How does refinancing respond to a rate cut?

Consider a rate cut large enough to make refinancing worthwhile for 90% of borrowers.



Andersen et al. (AER, 2020), Figure 10 (top): model simulation of refinancing after a rate cut.

How product design turns inaction into cross-subsidies

- We move from Danish fixed-rate mortgages to UK teaser/reset mortgages: a low initial fixed rate is followed by a higher variable reset rate.
 - Such teaser-rate contracts are common across household markets, including mortgages, mobile phone plans, and electricity (Armstrong and Vickers, JEL 2012).
- Households who search or switch can keep obtaining the lower price. Others pay the higher reset price.
- Competition for active customers can pass some revenues from inactive customers back to active customers, thus creating a cross-subsidy.
- In UK mortgages, we compare the current teaser/reset structure with a single-rate market to ask who pays and who benefits. (Fisher, Gavazza, Liu, Ramadorai and Tripathy, JFE 2024)

Your good deal is someone else's bad deal

Change in average mortgage rate: single-rate minus teaser/reset structure.

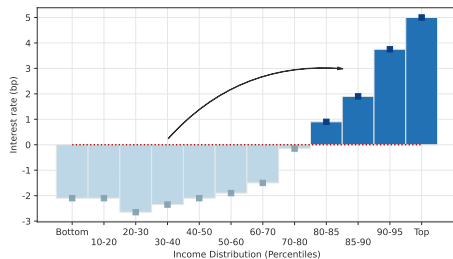


Figure 4(a): rates by income group

- Higher-income groups and prosperous regions pay more in the single-rate counterfactual, thus revealing the regressive cross-subsidy that exists in the current system. (Fisher, Gavazza, Liu, Ramadorai and Tripathy, JFE 2024)

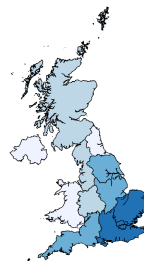
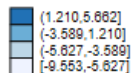


Figure 5(a): regional rates (bp)



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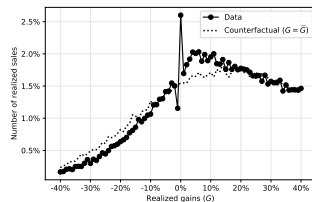
Waiting to sell a home

- Housing is central to household finances. There is another form of inaction here: households may delay selling houses, even when moving offers financial gains.
- An owner may hold out for at least the price originally paid, even when current conditions have changed.
- Evidence from the UK, Denmark and the US links potential nominal losses to slower sales. (Badarinza et al., 2026a; Andersen et al., AER 2022; Genesove and Mayer, QJE 2001)
- To understand the delay and inform policy, distinguish beliefs about value, preferences over realizing a loss, and possible downsizing aversion. (Badarinza et al., 2026a,b)

Historical prices influence current decisions

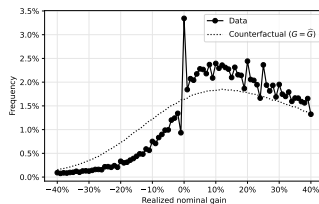
Realized gain: transaction price divided by the original purchase price, minus one.

Denmark



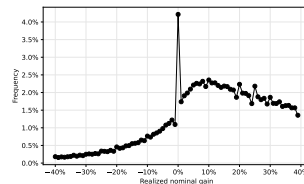
Andersen et al. (AER, 2022)

UK



Badarinza et al. (2026a)

USA



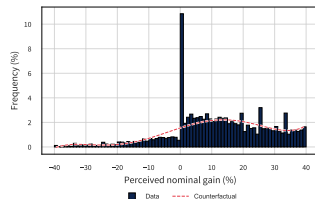
Badarinza, Goldsmith-Pinkham and
Ramadorai (2026)

What causes this reluctance to sell? We attempt to distinguish the underlying sources.

The purchase price also anchors beliefs

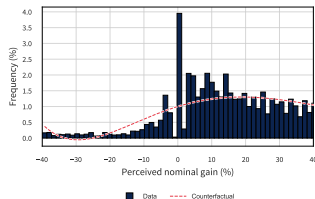
SCF (USA)

26,660 observations



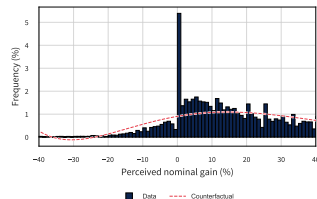
SFS (Canada)

25,121 observations



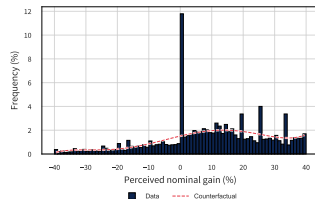
HLS (UK)

26,226 observations



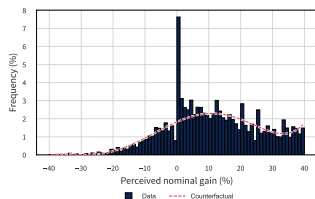
HFCS (Euro area)

99,493 observations



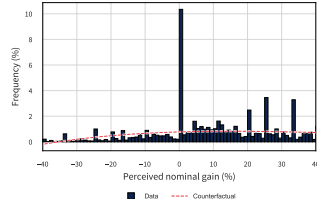
DHS (Netherlands)

3,689 observations



CES (Euro area)

12,748 observations

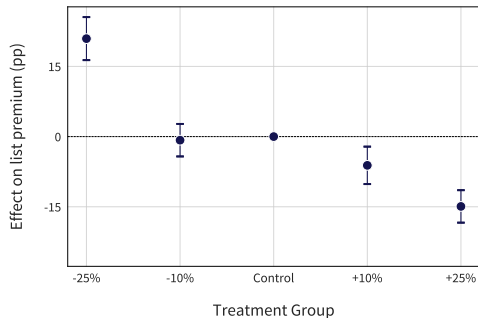


Badarinza, Georgarakos, Kenny, Polisetty and Ramadorai (2026b).

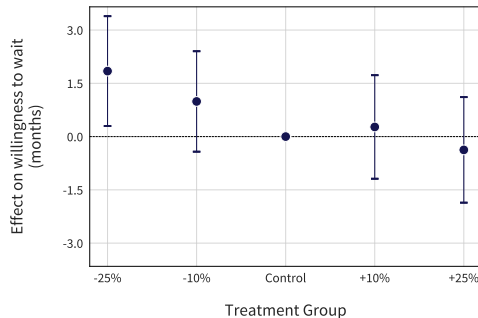
Losses affect listing premia and willingness to wait

Randomized information about how housing prices evolve over the next 12 months.

Listing premium



Willingness to wait



Badarinza et al. (2026b), Figure 4(a,d). Stated scenario responses for pre-treatment gains in $[-5\%, +5\%]$. Premium: percentage points over post-shock perceived value; wait: months.

Together, the two papers help distinguish sources of inaction in this setting: beliefs about value, preferences over realizing losses and downsizing aversion.

Different reasons for the same inaction

- **Simple time-dependent inaction:** reminders may increase attention to incentives. (Byrne, Devine, King, McCarthy and Palmer, JF forthcoming)
- **Beliefs:** information and advice may change how the choice is understood. (Armona, Fuster and Zafar, REStud 2019)
- **Ease of comparison and lower transaction costs:** simpler processes and products may make switching and taking action easier. (Campbell and Ramadorai, 2025, PUP)
- **Preferences:** households may understand the incentives yet choose to remain inactive. Policy should respect those choices.
- **Regulation and technology must address the correct underlying cause.**

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Can regulation protect inactive customers?

Coen, Gavazza, Gottlieb and Ramadorai (2026), “Regulating Inaction”

- **Price walking:** attract a new customer with a low price, then increase the price at renewal.
- In January 2022, the UK restricted this practice in general insurance.
- A renewal quote could be no higher than the equivalent new-business quote for the product.
- We study how insurers and customers responded in the motor insurance market.

Price-walking regulation around the world

Year	Jurisdiction	Competent Authority	Scope
2013	Netherlands	Netherlands Authority for the Financial Markets (AFM)	Lending
2014	South Korea	Korea Communications Commission	Telecom
2014	United States	State insurance departments	Insurance
2019	Australia	Australian Energy Regulator (AER)	Energy
2020	New Zealand	Electricity Authority (EA)	Energy
2021	Australia	Australian Securities & Investments Commission (ASIC)	Ins. add-ons
2022	United Kingdom	Financial Conduct Authority (FCA)	Insurance
2022	Ireland	Central Bank of Ireland (CBI)	Insurance
2025	Colombia	Comisión de Regulación de Comunicaciones (CRC)	Telecom
2026	Canada–Ontario	Financial Services Regulatory Authority of Ontario (FSRA)	Insurance

Firms respond to the new constraint

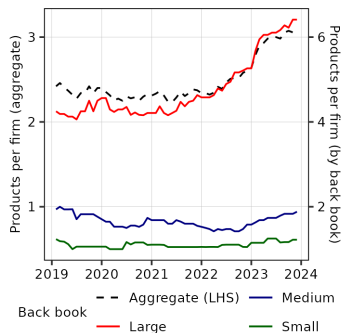
- Before the policy, a low introductory price could attract customers who would later pay higher renewal prices.
- After the policy, raising a product's renewal price also makes the product less competitive for new customers.

Three consequences:

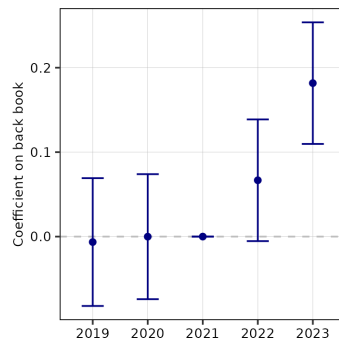
1. Firms **reduce introductory discounts** to customers predicted to be inactive.
2. Firms **proliferate products**: a new product can compete for new customers while retaining an expensive back book.
3. Firms cycle between building a bigger back book and exploiting it next period: **regulation faces a shifting target**.

The product menu expands

Firms with the largest back books increase their product offerings by about 50%.



(a) Trends by Back Book

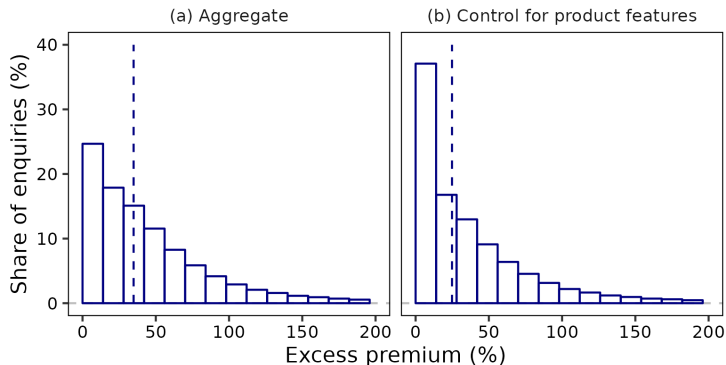


(b) Difference-in-Difference

Coen et al. (2026), Figure 5(a,b): products per firm and difference-in-difference. Top third by past product sales.

Substantial gains from switching remain

Post-policy, the incumbent product remains expensive relative to the cheapest quote.



Coen et al. (2026), Figure 6: median excess price about 40%; over 20% after adjusting for the initial premium paid.

Why this is hard

- The policy constrains one pricing margin. Firms can respond through other prices and product design.
- Consumers still need to search and compare a changing menu, making search, if anything, even more important.
- The findings do not establish that everyone is worse off. But inaction remains costly: the gains from switching are still substantial.
- Financial education matters, but is insufficient alone: firms can respond by adding complexity, and knowledge can become obsolete. (Campbell and Ramadorai, 2025, PUP)
- Effective regulation must anticipate firms' responses. But can technology also help to reduce the burden on households?

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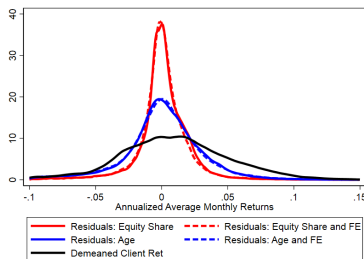
Will people trust technological solutions enough to wholly adopt them?

Greig, Ramadorai, Rossi, Utkus and Walther (2026), “Human Financial Advice in the Age of Automation”

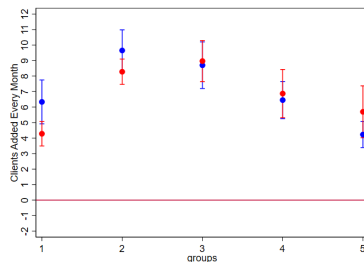
- Technology offers useful aid, but adoption may be uneven and uncomfortable. Older, less educated and poorer households may face greater barriers.
- To study these questions, we turn to portfolio management, where automation can implement a portfolio and keep it aligned with the financial plan.
- Households must still understand the plan and decide whether to remain with it.
- The setting is a hybrid service: **automated portfolio management, with human advice and support.**
- What difference does the assigned human advisor make?

Identifying the role of human advisors

- Previously self-directed US investors entering a hybrid service, 2014–2018.
- Clients receive dedicated advisors through mechanical workload-balancing rules.
- We measure advisor type using the retention of other clients.
- Advisor type predicts retention, while portfolio choices and realized returns show little variation attributable to the advisor.



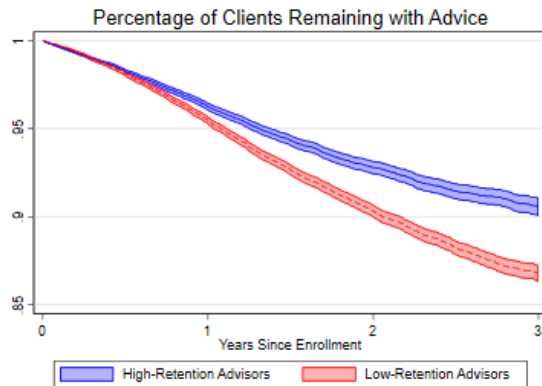
Return residuals: solid lines omit advisor fixed effects; dashed lines include them.



New-client additions by workload quintile. Blue: high-retention; red: low-retention advisors.

Greig et al. (2026), Figure 1(d) and Online Appendix client-assignment figure, panel (c).

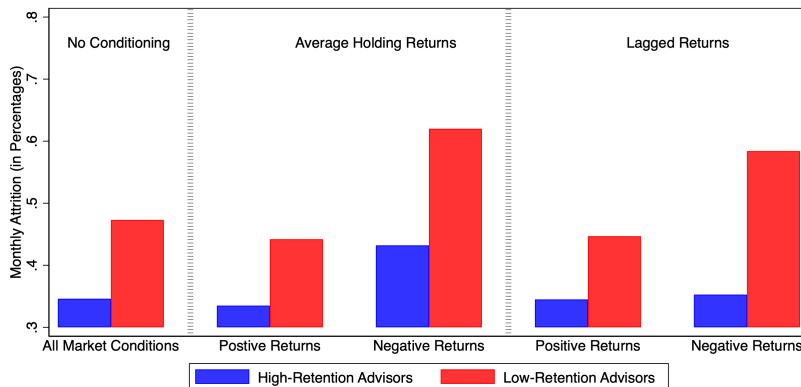
Human advisors affect retention



Greig et al. (2026), Figure 3(a): survival by advisor type, measured using other clients.

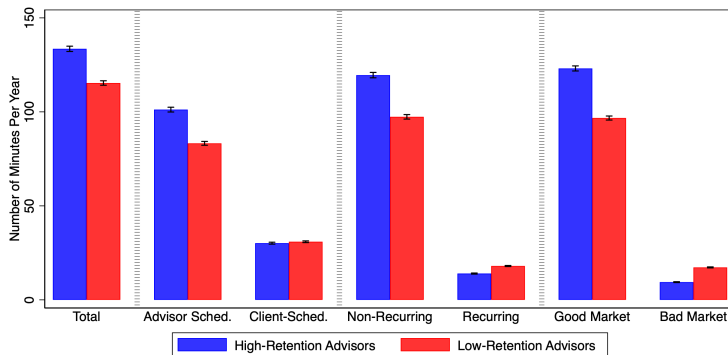
Clients quasi-randomly assigned to low-retention advisors are more likely to quit the service.

Human input matters most when returns disappoint.



Greig et al. (2026), Figure 5: clients of low-retention advisors respond more strongly to poor portfolio returns.

More contact is only part of the story



Greig et al. (2026), Figure 7(a): higher-retention advisors initiate more contact.

Meeting time matters, but cannot explain most of the variation in quit rates across advisor groups.

- **Learning:** clients start with beliefs about the service's returns. Greater prior precision means less uncertainty and less sensitivity to a disappointing return.
- **Ongoing support:** clients may value reassurance and being advised, beyond portfolio performance. Related idea: trusted “Money Doctors” reduce anxiety about taking risk. (Gennaioli, Shleifer and Vishny, JF 2015)
- In our model, improving ongoing support alone delivers about 90% of the client and firm surplus gains from moving from low- to high-retention advice, while holding prior precision unchanged.
- Human support can add value alongside automated portfolio management.

Human support can help households use technology. Product design also matters.

The promise

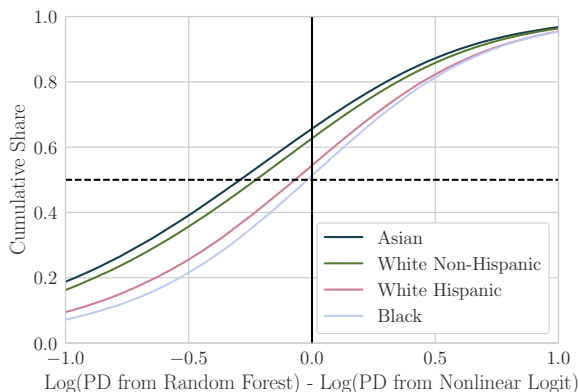
- Lower costs and easier access.
- More scope for customization.
- Easier search and comparison.
- Automated implementation of a financial plan.

The peril

- Reducing frictions can encourage riskier purchases and worse performance. (Kalda et al., 2024)
- Personal data enable price discrimination.
- Better prediction can distribute gains unequally.
- Some households still need human support. (Greig et al., 2026)

Better prediction can distribute gains unequally

Machine learning uses flexible patterns in borrower data to predict mortgage default.



Fuster, Goldsmith-Pinkham, Ramadorai and Walther (JF, 2022), Figure 5(b). Negative values: lower predicted default risk under Random Forest than Nonlinear Logit.

Lower predicted risk is less common for Black and Hispanic borrowers.

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Will large language models solve the problem?

- Accessible conversation could lower the cost of financial guidance.
- Early evidence is promising: following LLM advice in life-cycle simulations increases diversification and savings buffers. (Choukhmane, de Silva, Lin and Akuzawa, 2026)
- Personalization has limits: portfolio advice changes little across countries or with stated pension generosity. (Bäckman, 2026)
- **A new dimension of inequality?** Advice and simulated outcomes could vary with users' financial literacy and prior AI experience.
- Can LLMs provide the confidence and ongoing support people value? **Test whether households act on good advice, including during bad markets. More research will be extremely helpful.**

Putting the burden of effort back where it belongs

Campbell and Ramadorai, *Fixed: Why Personal Finance Is Broken and How to Make It Work for Everyone* (PUP, 2025)

- Households should not need to become experts in every financial product they use.
- Clear product templates and transparent price units make comparison easier for people and for software.
- Rules on conflicts of interest help align advice with the customer.
- Regulation can create the conditions in which useful technology works.

Simple, cheap, safe and easy. Standardized designs and transparent prices; mandatory to offer in each category and to choose the most important products.

- **Transaction accounts:** money-market interest; explicit fees and costs for standard usage scenarios.
- **Lines of credit:** fixed fees and rates; no per-transaction or late fees; linked to employment rather than impulse spending.
- **Insurance:** transparent claims and payouts; mandatory, auto-triggered catastrophe cover in high-risk areas.
- **Mortgages:** no teaser rates or points; auto-refinancing, assumable and portable.
- **One retirement account:** automatic enrolment at first employment; moves with you.

- **Product proliferation:** define comparable core terms and monitor changes in the menu, as well as prices.
- **Unequal gains:** assess who benefits and who pays when technology changes risk assessment or advice.
- **Human support:** retain a route to accountable help when automated services cannot resolve a problem.
- Test the design, observe firms' responses, and revise it as the market changes.

What can change?

- Who benefits and who pays depends on how household behaviour interacts with firms' pricing and product design.

The goal should be to stamp out regressive cross-subsidies.

- Technology can improve financial decisions, but requires caution and awareness. Human advice can help households make better use of technology.
- Regulation must account for firms' endogenous responses. Monitor outcomes after introduction and adjust regulation when adverse outcomes emerge.
- The aim is better financial decisions for all, not merely more activity.

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