

# ASKing the right questions: Stock market participation in Denmark

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## 1 Motivation and research question

Participation in equity markets is a key determinant of long-term wealth accumulation and financial security. Stock markets have historically delivered significantly higher average returns than traditional bank savings accounts (e.g., Fama and French, 2001), and the advent of low-cost, index tracking investment funds has made private investing easier and cheaper than ever (Li and Atamanchuk, 2025). Despite these advantages, only 25% of Danes directly participated in the stock market in 2022. Beyond this, many of those who invest are prone to not optimizing their holdings to minimize taxation, as evidenced by the limited take-up of the *Aktiesparekonto* (ASK), which offers investors significantly lower taxes on capital gains.

While many explanations have been proposed for why people do not invest or optimize their holdings, none accounts for much of the variation (Gomes et al., 2021). Recent research, however, suggests a new perspective: individuals drastically overestimate the time and effort required for stock market investing (Duraj et al., 2025). The two projects we propose, which combine a survey experiment, sent to both investors and non-investors, with data from administrative records, will be the first to quantify the impact of this misperception on investment choices.

Specifically, among **non-investors** we will study the impact of the belief that successful participation in the stock market requires significant time investments and frequent stock monitoring and trading. We will (i) quantify the prevalence of this belief and (ii) utilizing an information treatment, we will estimate the causal effect of correcting it on stock market entry, measured in the administrative data. Thus, we will be able quantify the importance of the active investing fallacy on low stock market participation.

For **investors**, we will test whether the low uptake of ASKs in Denmark is similarly due to perceived complexity and insufficient information about it. Specifically, we will (i) elicit investors' reasons for not opting to invest through an ASK and (ii) test the causal impact of an information treatment on investor behavior.

Our project is of clear interest to Danish policy makers, financial educators and others seeking to promote informed participation in capital markets. Since our survey experiment tests whether simple, evidence-based information can shift beliefs and participation behavior, it is informative about the power of financial education as a policy tool for improving financial outcomes.

## The Active Investing Fallacy (AIF)

Recent research suggests that (mis-)perceived entry costs, such as the time required to “learn about the stock market,” represent a major barrier to participation (Chopra and Haaland, 2023). Duraj et al. (2025) document that 80% of non-investors, and even 70% of investors, believe that devoting more time to stock selection and portfolio management substantially increases returns or prevents losses. These beliefs stand in sharp contrast to robust evidence from financial economics showing that active investing typically underperforms passive, well-diversified strategies (Barber and Odean, 2000).

For non-investors, we will elicit the perceived monetary and time costs of stock market participation, and study whether correcting these beliefs affects investment choices (see section 2 for details on the experiment). In particular, our research questions are:

- **How do misperceptions about the value of active investing affect stock market participation?**
- **Can providing information about the benefits of passive investing vs. active investing increase the likelihood of participating?**

Entry and participation costs are central to theoretical models of stock market non-participation (see, e.g., Cocco et al., 2005). Yet, they remain empirically underexplored (Barber and Odean, 2013; Menkhoff and Westermann, 2025). Further, while recent studies have investigated the impact of beliefs on investment choices *for investors* (Giglio et al., 2021; Laudenbach et al., 2024), we are the first to study *non-investors*. Thus, our study addresses a significant gap in the literature, offering insights valuable to the large field of researchers studying households’ financial decisions.

## ASKing the right questions (ASK)

In 2019, the Danish government introduced a tax-preferred investment account called the *Aktiesparekonto* (ASK) to make stock investing more attractive, especially for new investors (Regeringen, 2017). Capital gains on holdings inside an ASK are taxed at 17%, rather than the usual 27%. For many types of investments, most importantly, Exchange Traded Funds (ETFs) approved by the Danish tax authority (i.e., listed on *Skat’s Positivliste*), holding them in an ASK dominates holding them in a normal investment account. Despite the clear monetary advantages, only 20% of investors held assets in an ASK at the end of 2022; for new entrants, the share was even smaller.

For this project, we will focus on current investors, in order to abstract from reasons not to participate in the stock market at all, and focus only on those holding assets in an Aktiesparekonto or not. In particular, we will answer the following question:

- **What are the main reasons for not investing through an ASK, despite holding financial products that could be held in an ASK?**
- **Does information about the account’s properties and tax-benefits lead to significant increases in ASK uptake?**

Our study contributes to the growing literature on investment choices, which shows that many investors forgo higher after-tax returns by selecting high-fee or suboptimal financial products (e.g., Choi et al., 2011; Kinnerud and Lorentzon, 2025). However, in

contrast to these studies, which require individuals to alter their portfolio composition or risk exposure, our design isolates a friction in *account* choice rather than *asset* choice. Thus, our project will provide novel evidence on how real and perceived barriers shape real financial decisions in a setting where the optimal benchmark is well-defined and observable.

## 2 Method and data strategy

Our project consists of two main data sources. First, a survey with two experimental components with 100,000 randomly selected Danes between ages 18 and 55 (to allow sufficient time until retirement). Second, Danish administrative data from Statistics Denmark on stock market participation, as well as a rich set of background variables. The stock market data includes information on holdings of stocks and investment funds, broken down by whether they are held within an ASK or not. We will use data on past and current holdings (2020-2025) and compare this to stock market participation data from 2026, which we will receive in 2027. We expect a response rate of 20% to the survey, which is in line with previous surveys (e.g., Gravert, 2024). Of the participants, about 80% are expected to be non-investors and 20% active on the stock market. Hence, we expect to have 16,000 respondents for the first project (AIF) and 4000 respondents for the second project (ASK). With this response rate we are powered to detect at 2pp increase in stock market participation and a 4pp increase in ASK take-up.

**Survey** The first part of our survey is identical for both investors and non-investors. Then we will funnel non-investors into the *Active Investing Fallacy Experiment* and the investors into the *Aktiesparekonto Experiment*. The survey will begin with questions about consent and demographics, followed by a set of financial literacy questions. Participants will then answer questions assessing their ability to invest, including aspects such as liquidity and debt. Subsequent sections will explore their perceptions and expectations about financial markets, as well as personality traits such as trust and patience. The survey will then address beliefs about the skills and effort required to participate in the stock market. Finally, participants will be guided into the AIF and ASK experimental modules based on their current investment status.

**Active Investing Fallacy (AIF) Experiment.** Non-investors will be randomly assigned to one of three equal-sized groups. The *Control* group will receive no information. The *Market Return* treatment will present a 20-year visualization of a broad market index (e.g., MSCI World) and explain that a buy-and-hold strategy would have outperformed a savings account with minimal time commitment. The *Active Investing Fallacy* treatment will include the same visualization and explanation as in the *Market Return* treatment, supplemented with academic evidence that active trading typically underperforms the market due to costs (in about 99 out of 100 cases).

**Aktiesparekonto (ASK) Experiment.** Investors will first be asked whether they currently have invested through an Aktiesparekonto (ASK) and if not, why not. We will clarify if they own types of financial products that could be held in an ASK. Those without an active ASK who own eligible financial products will be randomly assigned to one of two

equal-sized groups. The *Control* group will receive no information. The *Tax Benefit Treatment* group will receive a short explanation of the ASK's tax advantages and a simulation of tax savings.

**Outcomes** In both experiments, comprehension checks will follow the treatments. The main outcomes will measure participants' intentions to either start investing (AIF) or open an ASK within the next three months (stated intentions). For those not willing to invest or open an ASK, we elicit their concerns. All participants will have the option to download a brief guide explaining either how to start investing (AIF) or how to open an ASK and the relevant tax rules (behavioral proxy to measure interest). A follow-up survey three months later will measure whether participants followed through and, if not, the reasons for inaction.

### 3 Feasibility, timing & budget

The proposed project is highly feasible. Both Christina Gravert and John Kramer already have access to the necessary Danish registry data. In a previous EPRN funded project, Switching in the Danish Electricity Retail Market, Christina has successfully used the same methodology of conducting a survey experiment and linking it with outcome data in the registers.

We will begin survey design and implementation in December 2025 and field the survey in February 2026. A follow-up survey will be sent in May 2026 to respondents who indicated plans to invest. Over the summer, we will merge the survey data with background data from DST and analyze treatment effects on stated intentions to invest or open an Aktiesparekonto. Two working papers will be prepared by the end of 2026, with a rapid analysis prioritized for the policy-relevant ASK paper. Once 2026 tax data become available in late 2027, we will update the analyses and submit the papers for publication. Although waiting for the tax data delays completion, incorporating realized investment behavior will substantially strengthen the contribution and publication prospects in top journals such as AEJ: Public Policy or the Journal of Finance.

We apply for funding to invite 100,000 participants via e-Boks (with one reminder), send one follow up to participants and to incentivize participation through 100 gift cards of 500 DKK each. Funding is also requested for data processing at DST to merge survey and register data in 2026 and update it in 2027–2028, as well as for six months of research assistance for survey implementation and data matching. We plan to present the working papers at three international conferences and to disseminate findings to Danish policymakers, at the EPRN conference and to Finans Danmark.

### 4 Project Participants

Christina Gravert is an associate professor at the University of Copenhagen and a member of the Center for Economic Behavior and Inequality. She completed her PhD in 2014 at Aarhus University. Christina has received a Carlsberg Semper Ardens Accelerate Grant

in 2024 and has been the project leader on several experimental studies investigating behavioral barriers. She has 17 publications with over 1300 citations on Google scholar. She is the co-founder of Impactually and is currently serving as a scientific advisory board member for Société Générale.

John Kramer is a tenure-track assistant professor at the Department of Economics at the University of Copenhagen. He completed his PhD in Economics in 2022 at the Institute for International Economic Studies (IIES), Stockholm University. John's research focuses on macroeconomics and applied econometrics, with particular interest in the distributional effects of economic policy. His work has been published in leading journals such as the *American Economic Journal: Macroeconomics* and the *IMF Economic Review*.

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