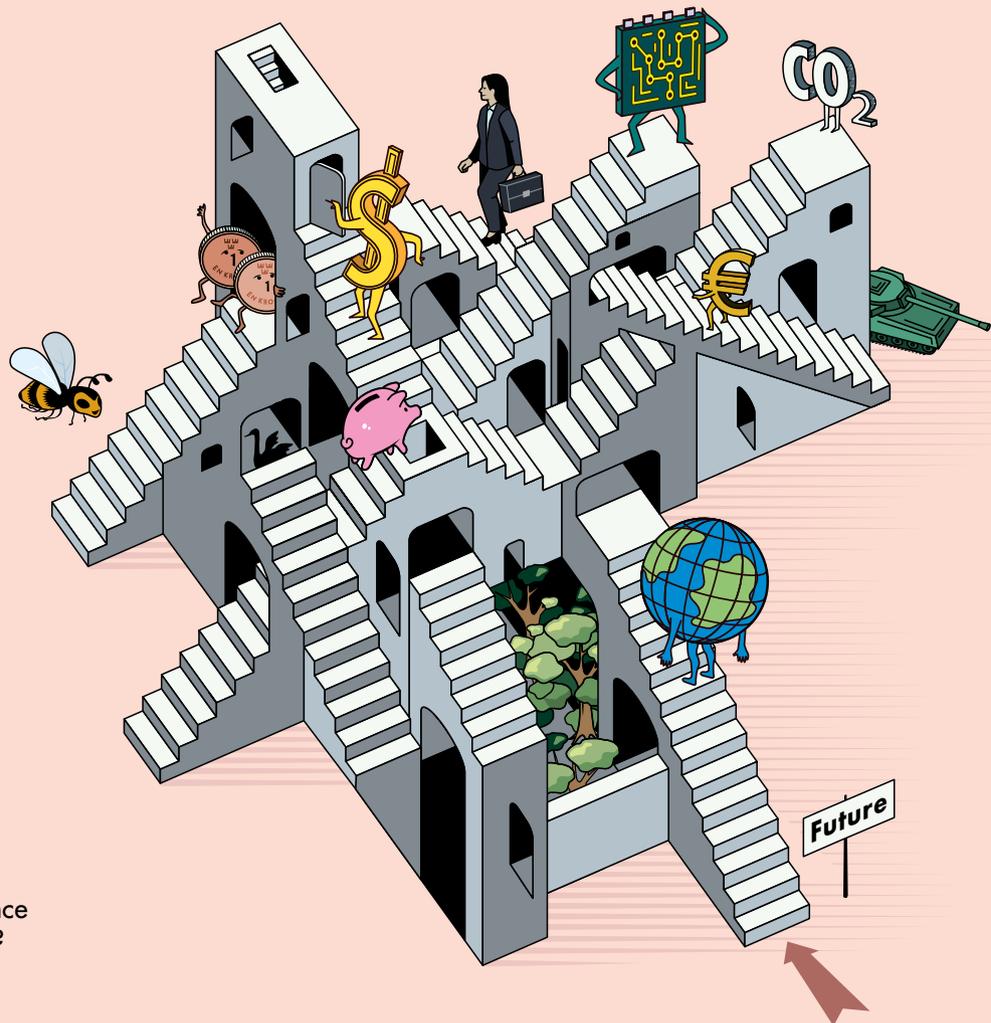


# FINANCE AT A CROSSROADS



## Unlocking Chapter 11

How SHoF Research Was  
Used to Evaluate Sweden's  
COVID-19 Tax Deferrals

Is Europe Getting the Balance  
Right on Green Regulation?

Risk Attitudes, Patience,  
and the Concentration of  
Wealth at the Top

CEOs Took a Finance  
Course—and Their Firms  
Got More Profitable

What Drives Loyalty and Trust  
in Fintech?

# Creating impact through research

## Words from the Director

The initial steps of academic research often take place in a quiet office somewhere in a university, on a floor far away from students and the bustle and excitement of the financial sector. This is often solitary work. Later stages of the research process, however, are more social. A central part is the presentation of work at seminars and conferences, where researchers receive feedback and can spread their ideas. Once a paper has been presented a few times—occasionally many, many times—it must pass through the hoops of peer review to eventually find its home as an article in a journal.

In finance, three journals are considered the first tier, and a few more also count as very good. Placing research in these outlets is demanding, with a high risk of failure, but the reward is great: precisely because these journals are so selective, publishing there is a strong badge of quality. In 2025, faculty at SHoF's academic partners published a record 13 articles in the top three journals, and another five in the next tier. This is truly remarkable productivity, and some of this outstanding work is described in the report below.

Let me highlight one active area of research: sustainable finance. The intersection of climate and household finance was the subject of a conference organized by SHoF's Anders Anderson, Marieke Bos, Anastasia Girshina, and Paolo Sodini together with the European research hub CEPR.

At the conference, Michael Greenstone (University of Chicago) noted that the climate crisis can be understood as a global energy challenge: we need energy that is affordable, does not drive climate change, and avoids harmful air pollution. In different places and at different income levels, these goals carry different urgency. Much discussion focused on which policy tools can help advance them.

Caroline Flammer (Columbia University) pointed to blended finance, where subsidies can encourage investments that benefit biodiversity, for example. As is typical when economists discuss climate, CO<sub>2</sub> taxes were popular. Recent work by SHoF's Gustav



Martinsson, Per Strömberg, and Christian Thomann documents the impact of Swedish CO<sub>2</sub> taxes: even low taxes encourage firms to make operational changes that reduce emissions or improve efficiency. However, they show that the largest emitters need much higher taxes to adjust, as reducing their emissions requires capital investment in new technologies. The 2014 increase in EU Emissions Trading System prices therefore drove significant investment among the worst polluters.

Sustainable finance will continue to evolve rapidly. SHoF researchers—and our partners across Sweden and Europe—are helping to build the evidence base needed for sound policy, effective incentives, and a smoother transition for households and firms alike.



**BO BECKER**  
Director, Swedish House of Finance

Cevian Capital Professor of Finance and Head of  
Department of Finance, Stockholm School of Economics

# About the Swedish House of Finance

The Swedish House of Finance at the Stockholm School of Economics is Sweden’s national research center for financial economics. It hosts internationally distinguished researchers and enables financial research and development of the highest quality.

The Swedish House of Finance (SHoF) provides an independent platform for dialogue, open to everyone with an interest in finance. The center generates daily contact between academia, the public, and the private financial sectors, which in turn leads to new research, new private initiatives, and a basis for better decisions and meaningful regulation of the financial sector. The ultimate goal of the center is to strengthen financial research, create impact through achieving a critical mass of world-class researchers, and share positive externalities with the private and public sectors as well as academia in Sweden.

SHoF has succeeded in attracting world-class academic researchers, as well as top-tier students. It has built an ecosystem for financial research and development. This provides decisionmakers in Sweden with access to the world’s collective expertise in finance.

## SHoF provides a platform for:

- Creating a physical research infrastructure
- Establishing a national center for financial data
- Launching a doctoral course program in finance available to all doctoral students in Sweden
- Carrying out programs for research interactions: to provide open seminar series, invite guest researchers, and arrange conferences
- Supporting the recruitment of international researchers to Swedish academic institutions, and sharing research infrastructure with researchers in Sweden
- Obtaining research financing from the Swedish financial industry

## A National Mandate

- 1. National PhD Program:** Highest standards. Open to all Swedish universities
- 2. Data Center:** Provides both international databases and Swedish administrative data developed by the in-house data center, available to all researchers in Sweden
- 3. Research:** Fellowship program, publication incentives, support for travel and recruitment
- 4. Infrastructure:** Offices, lectures, conferences, seminars and a researcher visiting program
- 5. Outreach:** Seminars, conferences and research communication aimed at both academics and decision makers within the private and public financial sector



# In this Issue

## Europe’s Financial Future

- 06** What Will It Take to Build a Truly Unified Capital Market in Europe?
- 08** Can Small Businesses Survive Chapter 11?
- 10** A Case for EU-Wide Insolvency Reform to Boost Credit Markets

## Finance in a Volatile World

- 14** Investors Feel Losses More in Calm Markets, Study Finds, Challenging Core Models
- 16** How SHoF Research Was Used to Evaluate Sweden’s COVID-19 Tax Deferrals
- 17** Ex-SEC Chief Economist Discusses Finance Under Trump
- 18** Not Just Deficits: How Trade Networks, Not Balances, Drive Currency Markets

## Sustainable Finance, Global Stakes

- 22** Money vs. Morals: Do Swedes Follow Through?
- 24** Households on the Front Line of the Energy Transition
- 26** Is Europe Getting the Balance Right on Green Regulation?
- 28** Banks, Birds, Bees: Biodiversity Risks Back on the Finance Agenda

## Households Under Pressure

- 32** Risk Attitudes, Patience, and the Concentration of Wealth at the Top
- 35** Book Project Promotes Financial Literacy Among Youth
- 36** When Borrowing Fails: The Risks of Unproductive Debt in Modern Economies

## Power and Performance

- 40** CEOs Took a Finance Course—and Their Firms Got More Profitable
- 43** How Firms Use Performance Pay to Mitigate “Promotion Risk”
- 45** Strengthening Networks and Visibility in the Financial Sector

## Markets Transformed

- 48** Digital Pension Apps Boost Retirement Contributions, Study Finds
- 50** What Drives Loyalty and Trust in Fintech?
- 51** SHoF Video Interview Series

## Organization

- 54** Our Researchers
- 59** Data Center
- 60** National PhD Program
- 62** Center Financing
- 64** Governance
- 66** Partners

“You need to allow markets to mature and deepen. Don’t rush it.”

**READ MORE ON PAGE 7**

# Europe’s Financial Future

**E**urope’s financial system is at a critical juncture. Swedish House of Finance (SHoF) activities in the past year highlight how fragmented regulations, legal frameworks, and institutional incentives continue to slow progress toward a unified capital market. At the SNS/SHoF Finance Panel seminar, experts stressed the foundational role of common “financial plumbing”—from clearing and settlement to supervisory standards. Students at the Stockholm School of Economics carried these issues forward in a private discussion with EU Commissioner Maria Luís Albuquerque, raising questions about retail investor access and barriers to cross-border finance.

Insolvency reform emerged as another central theme shaping Europe’s competitiveness. Edith Hotchkiss’ (Boston College) analysis of U.S. Chapter 11 and Subchapter V, presented at a seminar hosted by SHoF and the Stockholm Center for Commercial Law (SCCL), demonstrated how procedural design affects survival rates for distressed firms. SHoF Director Bo Becker’s joint work for the European Systemic Risk Board further argues that Europe’s current patchwork of national insolvency laws undermines recovery values, incentivizes zombie lending, and pushes complex firms—including Scandinavian Airlines (SAS) and Northvolt—to restructure abroad. His interview on Northvolt’s bankruptcy adds practical insight into why firms seek predictability.

Across research, seminars, and policy discussions, the message is consistent: Europe’s financial future depends on removing structural barriers that hinder integration, innovation, and investment.

# What Will It Take to Build a Truly Unified Capital Market in Europe?

**Despite years of political backing, Europe's Savings and Investment Union (formerly known as Capital Markets Union) remains a work in progress. At a seminar in Stockholm, leading experts explored what's needed to turn ambition into action.**

The seminar hosted by Studieförbundet Näringsliv och Samhälle (SNS) and the Swedish House of Finance (SHoF) brought together Nicolas Véron of Bruegel and the Peterson Institute for International Economics, Kristin Magnusson Bernard, CEO of Första AP-fonden (AP1), Stefan Ingves, SHoF Senior Fellow, and Johan Almenberg, State Secretary to the Minister for Financial Markets, to discuss the challenges and opportunities of a future Capital Markets Union (CMU), the European Union's initiative to create a single, integrated capital market across member states, particularly within the eurozone.

Over the past decade, the idea of a CMU within the EU has been the subject of extensive discus-

sions, with various proposals aimed at harmonizing regulations across member states. Despite these efforts, progress has been limited, and significant challenges remain. As Stefan Ingves put it: "Everyone's in favor but nothing happens."

The reason, he argued, lies in the complexity of reconciling many overlapping objectives across 27 member states, making it hard to reach a consensus. He said that the most important first step is to have a uniform "financial plumbing" in the EU. That includes the infrastructure behind clearing and settlement, common standards for financial instruments, and interfaces that make cross-border investment function more seamlessly.

"So everyone on the European markets understands what they are buying and selling," Ingves said.

Legal alignment is also needed, particularly around rules regarding emissions, listings and regulatory supervision. Institutions such as the European Securities and Markets Authority (ESMA) must be given the tools to play a more central role.

Nicolas Véron, with a perspective both from the inside and outside of the EU, noted that the perception of ESMA's role has improved over the past decade. He argued that the geopolitical shifts of recent years have added new relevance to the CMU agenda—though the pace of change remains glacial.

Kristin Magnusson Bernard said there are reasons to be cautiously optimistic about the Savings and Investment Union (SIU), a policy initiative aimed

at giving opportunities to EU citizens to invest in capital markets to boost potential household wealth and retirement security.

As a complement to the CMU, the SIU's goal is to lower the barriers to enter the EU financial markets for long term investments. To make this work, Europe needs accessible tools for retail investors and to enhance financial literacy, Magnusson Bernard said. She also called for more opportunities for pension funds to invest in public and private equity.

The fragmentation across jurisdiction and investor types must also be reduced and it is important to level the playing field across jurisdictions, she said. At the same time, Magnusson Bernard added that there is no quick fix because building equity tolerance as an investor is a skill you learn over time, and that takes time and experience. And there are also different cultural norms around "risky" investments that need to shift in the EU.

"You need to allow markets to mature and deepen. Don't rush it," she said. ♦

*The seminar took place on March 31, 2025. The Capital Markets Union initiative (2015-2025) has since been succeeded by the Savings and Investment Union.*

## EVENT

### Students Raise Strategic Questions on Barriers to Cross-Border Investment and Access to Finance in the EU



Albuquerque (middle) with students, April 3, 2025.

Maria Luís Albuquerque, European Commissioner for Financial Services and the Savings and Investments Union, joined students at the Stockholm School of Economics (SSE) for a timely discussion on Europe's capital markets. The conversation was moderated by Jan Starmans (SHoF/SSE).

## ANNOUNCEMENT

### Magnus Dahlquist Appointed to New Expert Council Advising on Norway's Sovereign Wealth Fund

Magnus Dahlquist (SHoF/SSE) has been appointed to Norway's new expert council advising the Ministry of Finance on managing the Government Pension Fund Global — one of the world's largest sovereign wealth funds. "I am honored to serve on the Expert Council and look forward to contributing to its work," said Dahlquist. The council is chaired by Karen Helene Ulltveit-Moe (University of Oslo) and includes Harald Magnus Andreassen (SpareBank 1 Markets).



L-R: Pehr Wissén (SHoF), Stefan Ingves (SHoF), Kristin Magnusson Bernard (AP1), Nicolas Véron (Bruegel), March 31, 2025.

# Can Small Businesses Survive Chapter 11?

Chapter 11 bankruptcy has long been costly and complex, especially for small businesses. Edith Hotchkiss, a Boston College professor, discusses recent reforms to the U.S. Bankruptcy Code, and the shifting balance between debtor and creditor interests.



## The Challenge of Chapter 11 for Small Businesses

The U.S. bankruptcy system has historically favored larger firms, which often emerge from Chapter 11 intact—though some struggle post-bankruptcy, with re-filings dubbed “Chapter 22” Small businesses, however, face steep challenges. Many fail to reorganize due to high costs, long timelines, and reliance on individual owners or managers.

“Bankruptcy is expensive and time-consuming,” Hotchkiss said at a seminar hosted by the Swedish House of Finance (SHoF) and the Stockholm Center for Commercial Law (SCCL). “The magnitude of the expenses, which increase with the time in bankruptcy, can easily wipe out the entire value of the company.”

The process also imposes heavy administrative burdens. Negotiation frictions add to the difficulty, Hotchkiss noted, particularly when creditors push for liquidation.

## Subchapter V: A Solution for Small Businesses?

In 2019, the U.S. introduced the Small Business Reorganization Act, creating Subchapter V for firms with liabilities under \$7.5 million. The goal: reduce costs, accelerate timelines, and improve business survival rates.

Subchapter V eliminates requirements such as disclosure statements and creditors’ committees. Court deadlines are stricter, and business owners can retain equity, even if doing so violates the absolute priority rule. A court-appointed trustee mediates negotiations, Hotchkiss said.

“The key provisions here are things that very systematically reduce the cost of the process. For example, by getting rid of disclosure statements, there’s no creditors’ committee, and imposing very tight deadlines,” she noted.

## Impact on Reorganization Outcomes

Early research suggests Subchapter V is effective. Businesses eligible for the program are 36% more likely to confirm a plan of reorganization and exit bankruptcy 38% faster.

These improvements have not come at the expense of creditors. Unsecured recovery rates have remained stable, and there is no evidence so far that Subchapter V sustains unviable firms.

“Not only does it increase the probability of reorganization, but companies reorganize faster. We are not finding any evidence that it negatively impacts the unsecured recovery rates,” Hotchkiss said. “And we also find that it doesn’t have any negative impact on post-bankruptcy survival.”

## Policy Changes Could Undermine Progress

In June 2024, the eligibility threshold dropped from \$7.5 million to approximately \$3 million, limiting

## KEY TAKEAWAYS

- Chapter 11 favors big firms
- Subchapter V is faster, cheaper, with fewer hurdles
- 36% more firms reorganize, 38% faster exits under Subchapter V
- But new limits on eligibility for Subchapter V may force firms into costlier Chapter 11

access to Subchapter V. The impact remains uncertain, but some firms may now be forced into costlier traditional Chapter 11 proceedings.

“How Subchapter V works for even smaller businesses is an important question,” Hotchkiss said.

## Broader Trends in U.S. and Global Bankruptcy Law

Larger firms are spending less time often using pre-negotiated plans. Private equity-backed firms and distressed debt investors are playing an increasing role in restructurings.

Globally, many countries—including the UK, Spain, and the Netherlands—have introduced debtor-friendly reforms. Meanwhile, countries such as India and Malaysia have moved to strengthen creditor rights.

“Reforms globally have moved in the general direction of making reorganization proceedings more attractive from the perspective of debtors, although there are certainly counterexamples,” Hotchkiss noted.

## Looking Ahead

The effectiveness of bankruptcy reforms will depend on balancing debtor and creditor interests while ensuring viable firms recover. The long-term impact of Subchapter V, particularly after the threshold reduction, remains uncertain.

“What we need to watch closely is whether these reforms create more opportunities for businesses to recover—or simply shift the challenges elsewhere,” Hotchkiss concluded. ♦

## EVENT

### Unlocking Chapter 11: Navigating Bankruptcy and Insolvency Across Europe & the U.S.



L-R: Bo Becker (SHoF/SSE) and Anko van der Werff (SAS), March 14, 2025.

The Swedish House of Finance (SHoF) and the Stockholm Center for Commercial Law (SCCL) hosted a discussion on the future of insolvency regulation, focusing on the contrasts between European and American approaches. The conversation explored the strengths and weaknesses of Chapter 11 compared to Sweden’s corporate restructuring framework, asking who benefits most from the U.S. system and whether it is suitable for companies of all sizes. Panelists also considered what lessons European policymakers might draw from non-U.S. Chapter 11 cases as they prepare the next reform package. The discussion featured Edith Hotchkiss, Professor at Boston College, and Anko van der Werff, President & CEO of SAS, and was moderated by Bo Becker, Director of SHoF.

# A Case for EU-Wide Insolvency Reform to Boost Credit Markets

Europe's fragmented insolvency laws are holding back creditor recoveries, enabling zombie firms to linger, and slowing progress on capital markets integration. Swedish House of Finance's (SHoF) Bo Becker says in a new European Systemic Risk Board report.

## KEY TAKEAWAYS

- EU insolvency laws remain fragmented, pushing firms to restructure abroad
- Zombie firms stall growth and misallocate capital
- Capital Markets Union needs strong insolvency rules to unlock investment
- Experts propose an EU-wide opt-in framework to improve recovery and predictability

In the latest *ASC Insights*, Bo Becker (SHoF/SSE) and Martin Oehmke (LSE) write that insolvency frameworks across the EU could be improved further through additional reforms, leading to better outcomes for insolvent firms and enhanced financial stability.

While several reforms have helped modernize national systems, the authors say fundamental weaknesses persist, especially when restructuring large, complex firms.

"Several large European firms have opted to use Chapter 11 of the U.S. Bankruptcy Code to restructure instead of filing for bankruptcy in Europe," the authors note, referencing recent high-profile cases including Scandinavian Airlines and Northvolt.

"In recent years, no large firm (with a complex balance sheet, intangible assets and multinational operations) has restructured under any of the

European insolvency frameworks. This suggests that these are not (yet) fit to deal with complex restructurings."

### Zombie Firms and Fragmented Laws

Becker and Oehmke highlight the economic costs of weak insolvency rules, including the rise of so-called "zombie" firms—non-viable businesses kept alive by bank lending that distorts competition and ties up productive resources.

"Zombie lending misallocates credit away from new firms and firms with growth opportunities towards old firms with existing bank debt," they write.

Despite the EU's 2019 directive on preventive restructuring and recent efforts to harmonize certain aspects of insolvency law, the report says key challenges remain: "Insufficient harmonization across countries, poor timing of restructuring processes and insufficient expertise in and around courts handling insolvency."

The report also notes that the average EU score for resolving insolvency is 70.2 out of 100. This score is lower than some OECD countries (74.9) or the scores for Japan (90), Norway (85.4) and the United States (90.5).

### Proposal: An EU-Wide Opt-In Framework

To overcome political and legal barriers to full harmonization, the authors propose creating an EU-wide "opt-in" insolvency framework. This "28th regime" would operate alongside national systems and offer firms a predictable, court-supervised

process for restructuring.

"Because the EU-wide opt-in insolvency framework would be created from scratch, it could be structured to specifically include the desirable features of efficient insolvency frameworks," Becker and Oehmke say. These features include multi-creditor procedures, cramdown mechanisms to overcome creditor holdouts, contract rejections, and protection of going-concern value.

The framework would target large firms and complex restructurings while allowing smaller firms or those well-served by national regimes to stay within domestic systems.

"An EU-wide insolvency framework that firms can opt into [...] would allow firms that benefit from a uniform EU-wide system to reap those benefits, while still allowing others to remain under their current national frameworks," the authors write.

### Capital Markets Union at Stake

Becker and Oehmke tie their proposal directly to the EU's long-standing ambition to build a stronger Capital Markets Union (CMU).

"Improved European insolvency frameworks would provide a boost for the CMU and help facilitate growth in EU bond markets, bank lending and non-bank private credit," they write.

Without reform, they warn, Europe's reliance on bank credit will limit investment capacity, concluding:

"Recessions, financial crises and periods of stress [...] highlight the need for orderly, value-maximizing resolution systems." ♦

*ASC Insights* is a publication series by the European Systemic Risk Board that presents short and accessible analyses of risks in the financial system. It highlights emerging vulnerabilities linked to macroeconomic conditions, financial markets, and structural trends, and translates technical monitoring work into clear messages for a broad audience, including policymakers, market participants, and the general public.

## ANNOUNCEMENT

### Bo Becker Joins FIRS Board

The Financial Intermediation Research Society (FIRS) has appointed Bo Becker (SHoF/SSE) to its board. FIRS promotes research on how capital flows from savers to borrowers through banks, capital markets, and fintech platforms.

Founded in 2006, FIRS brings together leading scholars in banking, credit markets, and financial regulation. Its annual conferences draw prominent researchers, including Nobel laureate Douglas Diamond and Raghuram Rajan, former IMF Chief Economist and the Reserve Bank of India's previous governor.

"FIRS organizes one of the most important annual conferences and plays a big role in the global financial community," Becker said.

## VIDEO INTERVIEW

### Navigating Corporate Insolvency: Lessons from Northvolt's Bankruptcy



Bo Becker (SHoF/SSE) explains what happened at Northvolt, the core corporate finance principles for high-growth firms, and why the company turned to U.S. bankruptcy laws.

"That's why it's important to learn from situations like this and ask [...] how can we replicate some of that, learn from that, and create an insolvency system in Europe that can handle companies that are viable, that have a future of growth and value creation for the economy."

“Investors perceive losses as more painful during calm markets than in volatile ones.”

**READ MORE ON PAGE 14**

# Finance in a Volatile World

**V**olatility continues to reshape the global financial landscape, and research featured in this chapter illustrates how shocks interact with policy, behavior, and market structure. Sweden’s COVID-19 tax deferral program is one example. In its evaluation, the National Audit Office relied on methods developed by Gustav Martinsson (SHoF/Stockholm University) and Christian Thomann (SHoF/KTH) to assess whether liquidity support reached viable firms, how it influenced borrowing, and the extent to which bank loans were substituted with tax deferrals. Their work helped clarify both the program’s stabilizing effects and its fiscal costs.

Regulation and political uncertainty also come into focus. In an interview with SHoF, former SEC Chief Economist Jessica Wachter examined potential shifts in U.S. financial policy—including crypto enforcement and climate disclosures—under a second Trump administration, emphasizing how changing priorities may affect transparency and investor protection. Research by Tobias Sichert (SHoF/SSE) and David Schreindorfer (Michigan State University) challenges core risk-pricing assumptions by showing that losses feel more painful to investors during calm markets than in volatile periods, raising questions for traditional asset-pricing models.

Complementary interviews—featuring Elisabeth Kempf (Harvard) on CEO ideology, Jon Thor Sturluson (Finansinspektionen) on Iceland’s banking crisis, and Ai Jun Hou (Stockholm University) on trade networks and currency risk—extend this theme. Together, these contributions underline how volatility interacts with institutions, incentives, and expectations in ways that demand flexible, evidence-based policymaking.

# Investors Feel Losses More in Calm Markets, Study Finds, Challenging Core Models

Investors perceive losses as more painful during calm markets than in volatile ones, according to a new study, casting doubt on traditional asset pricing models and offering new insight into how risk is priced.

## New Way to Gauge Investor Risk

Tobias Sichert (SHoF/SSE) and David Schreindorfer (Michigan State University) introduce a new statistical method to estimate the pricing kernel and return distributions from option prices, showing that negative stock market returns are far more painful to investors during calm, low-volatility periods.

“The pricing kernel’s projection onto stock market returns reveals how investors’ marginal utility varies with returns,” the authors say. “The steeper curve in periods of low volatility shows that negative returns are significantly more painful to investors when they occur in calm markets.”

Using data from equity index options, the authors estimate that a 10% market drop is about three

## KEY FINDINGS

- Losses hurt more in calm markets
- Volatility boosts expected returns
- Crash risk drives risk premia
- Equity premium bound breaks in crises

times more painful for investors when it happens in a calm market than during a volatile one. This suggests investors’ risk sensitivity depends on the broader market environment; losses feel sharper when they come as a surprise.

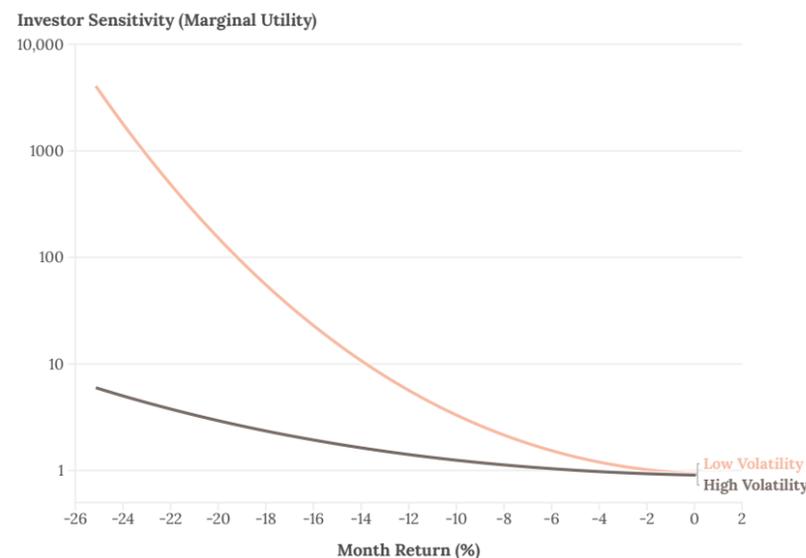


FIGURE 1

### Investor Sensitivity in Calm vs. Volatile Markets

Losses feel worse when markets are calm

This chart shows how investors react to losses. The y-axis measures loss sensitivity from option prices: pink for calm, low-volatility markets; brown for turbulent, high-volatility markets. Sensitivity rises as losses grow, especially sharply in calm periods.

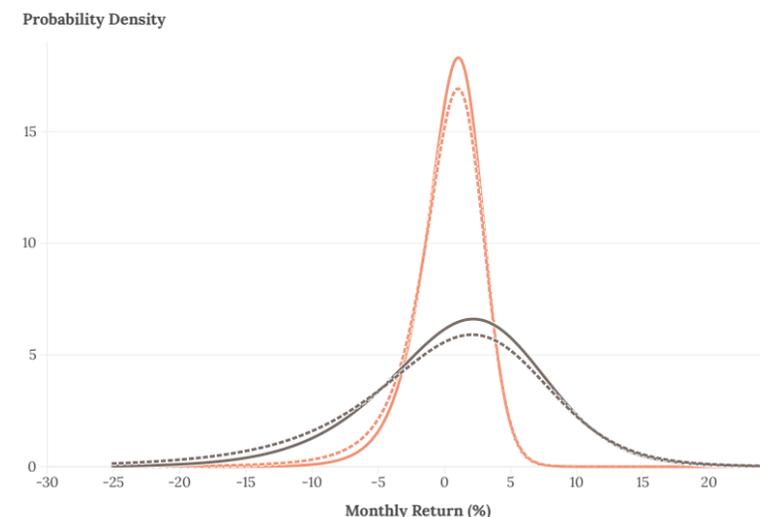


FIGURE 2

### Return Distributions in Calm vs. Turbulent Markets

In turbulent times, investors brace for losses—and price them in more heavily

This chart compares real-world and risk-neutral expectations of monthly stock returns in calm (pink line) and turbulent (brown line) markets. In calm periods, pricing mirrors expectations; in volatile ones, the gap widens—especially on the downside—showing stronger risk aversion.

## Standard Models Fall Short

The study offers a new lens on expected returns, volatility, and investor behavior. It shows that rising volatility pushes expected returns up through higher risk but down through lower risk prices. Standard models, the authors find, fail to capture key features of risk pricing or explain stock market risks.

“None of the models come close to capturing basic properties of conditional return distributions or the pricing kernel,” they say. “This is troubling because it is arguably the models’ main objective to explain the nature and pricing of stock market risks.”

## Challenging a Seminal Study

The paper challenges the equity premium lower bound proposed in 2017 by Ian Martin (LSE), showing that it does not hold during crises such as the 2008 financial crash or the COVID-19 shock. In volatile periods, the bound overstates how much extra return investors should expect.

“Martin’s lower bound on the equity premium is violated in high-volatility periods,” the authors say. “Martin’s bound overstates the extent to which risk premia spike during economic crises.”

## A Stronger Link Between Risk and Return

The paper reignites debate over whether riskier markets reliably offer higher returns.

“Our estimates imply a strong risk–return trade-off despite countercyclical risk prices,” the authors write, noting that a one standard deviation increase in volatility raises expected returns by 3.8 percentage points annually.

They also provide the first time-series evidence linking skewness risk–exposure to rare, extreme losses—to higher expected returns. A one standard deviation drop in skewness increases returns by about 1 percentage point per year, suggesting investors demand extra compensation not just for volatility but also for the risk of sudden downturns. ♦

## VIDEO INTERVIEW

### Lessons from the Banking Crisis in Iceland



Jon Thor Sturluson (Finansinspektionen) discusses the lessons learned from Iceland’s financial crisis, emphasizing the importance of cautious emergency liquidity assistance, effective bank resolution, and avoiding past mistakes.

“You had almost the entirety of the financial system collapsing simultaneously. So, it is a financial crisis or banking crisis of a scale that you rarely see.”

## How SHoF Research Was Used to Evaluate Sweden's COVID-19 Tax Deferrals

**During the COVID-19 pandemic, Sweden introduced temporary tax deferrals to ease business liquidity shortfalls. Riksrevisionen, or the Swedish National Audit Office, reviewed their effectiveness in a new report, using insights from SHoF research.**

**D**uring the COVID-19 pandemic, Sweden introduced temporary tax deferrals to ease liquidity shortfalls for businesses, allowing them to postpone payments on employer contributions, payroll taxes, and VAT. The policy aimed to support viable firms facing short-term financial strain.

To assess its effectiveness, the Swedish National Audit Office (Riksrevisionen) conducted a review, drawing heavily on research by Swedish House of Finance (SHoF) researchers Gustav Martinsson (Stockholm University) and Christian Thomann (KTH) on government-backed credit interventions during past crises. Martinsson also served as the reference expert for the report.

### Identifying Financially Constrained Firms

Applying the methodology from Martinsson and Thomann's study, Riksrevisionen categorized firms based on pre-pandemic financial indicators, using data from the Swedish Tax Agency (Skatteverket), Statistics Sweden, and the Swedish Companies Registration Office (Bolagsverket).

Both the study and the review found that firms with weaker financial health before the crisis were overrepresented among those seeking deferrals, raising concerns about whether the measure effectively targeted financially viable businesses.

### Assessing the Impact on Liquidity

The report measured how the tax deferrals affected firms' liquidity by tracking changes in cash holdings and short-term debt levels. By comparing businesses



L-R: Christian Thomann (SHoF/KTH) and Gustav Martinsson (SHoF/Stockholm University)

based upon the potential size of deferrals, Riksrevisionen examined whether deferrals reduced firms' exposure to financial distress and if it led to an increase in working capital. The findings suggested that the tax deferrals improved liquidity and reduced financial distress.

### Credit Substitution and Crowding Out

A central concern in Thomann and Martinsson's study was whether government-backed credit initiatives crowded out private lending. Riksrevisionen applied a similar approach and found that firms' borrowing increased and that to some degree bank loans were replaced by tax deferrals.

### Estimating Fiscal Costs

Following the researchers' cost-benefit framework, Riksrevisionen evaluated the long-term fiscal impact of the tax deferral program. The government initially estimated a net cost of SEK 2.6 billion, assuming that most deferred taxes would be repaid. However, Riksrevisionen found that the actual cost was closer to SEK 10 billion due to unpaid taxes and firm defaults. ♦

## Ex-SEC Chief Economist Discusses Deregulation, Climate Disclosures, Crypto Shift Under Trump

**A second Trump administration could bring "a recalibration of priorities" to U.S. financial regulation, says Jessica Wachter, former Chief Economist at the Securities and Exchange Commission (SEC).**



**J**essica Wachter (Wharton School of Business) says a second Trump administration would likely shift the SEC's focus toward capital formation and competition, easing emphasis on investor protection.

"Under a second Trump administration, I expect a recalibration of priorities," Wachter said in an interview with the Swedish House of Finance. "Several Commissioners have already signaled a desire to change course, including potentially ending certain ongoing litigations." She added that crypto regulation could see "clearer compliance rules and potential temporary relief," with enforcement targeting "clear fraud rather than broader regulatory violations."

As former head of the SEC's Division of Economic and Risk Analysis (DERA), Wachter oversaw nearly 200 staff, supporting over 100 rule proposals, from money market fund resilience to Treasury market clearing.

She said deregulation could reduce burdens on public firms and encourage listings: "Reducing overly burdensome regulations could lower costs for issuers, expand investment opportunities, and promote capital formation." But she warned of tradeoffs: "Loosening disclosure requirements or weakening oversight could reduce transparency and investor protections."

On climate disclosures, Wachter noted that the SEC's rule "was stayed in response to a legal challenge," but expects companies will continue voluntary reporting: "Even if the SEC rule is withdrawn, disclosures may remain fragmented and difficult for investors to interpret. ♦

### VIDEO INTERVIEW

#### How Important is CEO Ideology in Global Trade?



Elisabeth Kempf (Harvard) explains new research on how U.S. corporate leaders' political views can influence their companies' international trade relationships.

"Financial literacy doesn't protect you from bias creeping into your decisions."

# Not Just Deficits: How Trade Networks, Not Balances, Drive Currency Markets

As governments contend with rising tariffs, economic nationalism, and geopolitical tensions—from the U.S.-China trade war to sanctions and supply chain shocks driven by war and climate change—understanding how trade influences currency markets has become a pressing concern.

A new study provides a fresh perspective. In *The Trade Imbalance Network and Currency Returns*, Ai Jun Hou (Stockholm University), Lucio Sarno (Cambridge University), and Xiaoxia Ye (University of Nottingham) argue that the structure of global trade relationships—not just the size of a country’s trade balance—can help explain and predict movements in exchange rates.

Rather than treating trade as a collection of isolated deficits and surpluses, the authors view it as a network of imbalances, with each country connected to others through chains of exports and imports. Their central insight: a country’s position in this network matters as much as, if not more than, the size of its trade deficit or surplus.

A country that is deeply embedded in global trade flows—interacting with many others directly and indirectly—carries more systemic importance. If such a country runs a persistent imbalance, it creates more complex risks for investors and financial intermediaries who buy and sell its currency, the study shows. As a result, its currency must offer higher returns to compensate for that risk.

## Beyond Simple Deficits

Economists have long used a country’s net trade position as a shorthand for currency pressure: more imports than exports, and the currency may weaken. But this ignores the tangled reality of global commerce. Changes in one trade relationship often affect others—and those effects ripple across borders.

To capture that complexity, the researchers construct what they call the trade imbalance net-

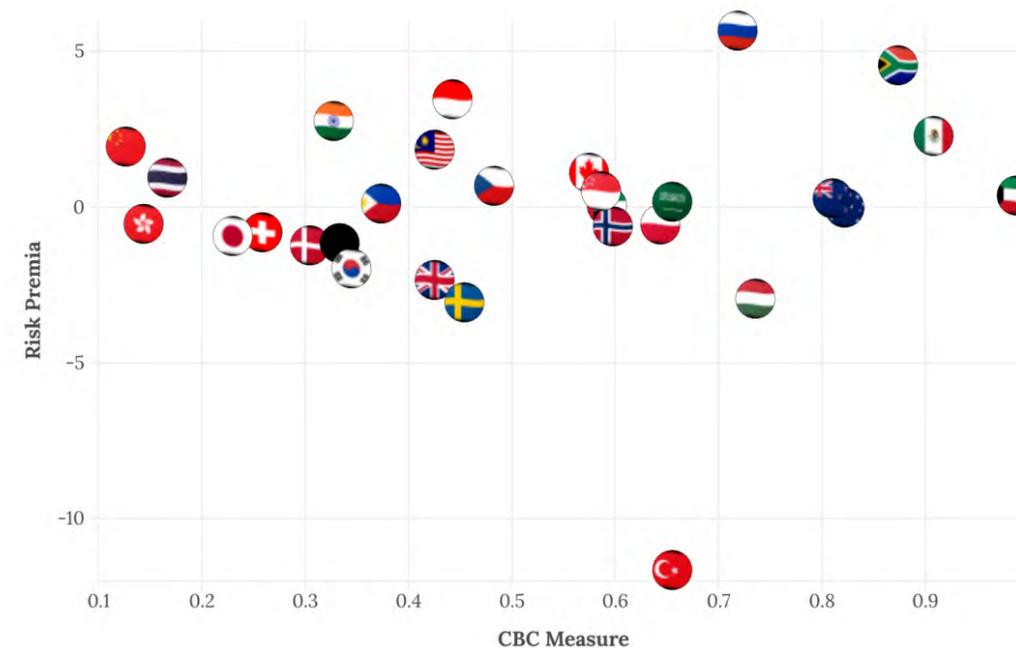
## KEY TAKEAWAYS

- Study looks at global trade networks instead of trade balances
- CBC: Measures trade centrality and currency volatility based on who owes whom
- High CBC (e.g. Mexico) = more central, more volatile, higher risk premia
- Low CBC (e.g. Japan) = safer, lower risk premia
- CBC reveals hidden risks that tools like the VIX miss

work. Each link represents not just the volume of trade between two countries, but the direction of imbalance—who owes whom. They then calculate how central each country is within this network and combine that with a measure of how volatile its currency tends to be. The result is a score called the Centrality-Based Characteristic, or CBC.

Countries with high CBC scores, such as Mexico or New Zealand, are more central in the network and have more volatile currencies. Their currencies tend to offer higher expected returns, reflecting greater compensation for risk. Countries with low CBC scores, such as Japan or Thailand, are more peripheral and more stable; their currencies offer lower returns.

Using data from 41 currencies between 1995 and 2021, the authors find that the CBC is a strong pre-



**FIGURE 1** This chart shows how the centrality of 30 global currencies in trade relates to the average returns investors earn from holding them, using data from 2016 to 2021. A higher CBC score means a country is more connected to global trade imbalances and has a more volatile currency—making it riskier to hold. See the paper for the full figure.

dictor of exchange rate movements. Currencies ranked by CBC delivered consistently high returns relative to their risk—outperforming well-known strategies like the carry trade, which profits from differences in interest rates between countries.

“Sorting currencies on CBC generates strong predictability of currency excess returns,” the authors write. “The CBC factor captures different information” than other well-known indicators, such as interest rate spreads or market volatility.

## The Domino Effect of Trade Shocks

The framework also helps explain why trade conflicts have global consequences. During the 2018-2019 U.S.-China trade war, it was not only the yuan and the dollar that moved. Currencies in countries such as South Korea, Mexico, and Thailand also responded—despite not being directly involved.

The authors show how such shocks cascade through the trade imbalance network, influencing investor behavior and altering currency risk even in places far from the original dispute.

## Implications for Investors and Policymakers

For central banks, finance ministries, and investors, the CBC offers a more nuanced view of currency risk, the authors say. It suggests that interconnect- edness, not just imbalance size, plays a critical role.

And it helps explain why countries facing similar trade gaps can see different currency outcomes.

The CBC also correlates with—but does not replicate—conventional risk metrics such as the CBOE Volatility Index (VIX) or TED spread. It captures structural features of the global economy that these market-based gauges may overlook. ♦

## VIDEO INTERVIEW

### Why Do Firms Hold So Much Cash?



Neng Wang (CKGSB) explains how financing costs, long-term trends, and shocks like COVID-19 drive firms to build large buffers.

“Standard models often underestimate the cash holdings due to inability to account for randomness and uncertainty.”

“Industrial policy must balance climate objectives with competition policy.”

**READ MORE ON PAGE 27**

# Sustainable Finance, Global Stakes

**S**ustainable finance is increasingly central to economic decision-making, and the work in this chapter shows how households, firms, and policymakers navigate the transition. New insights from the SUSY Monitor reveal a widening gap between climate concern and willingness to pay for green investments, framing a broader discussion about the pressures facing households, firms, and capital markets.

At the Swedish House of Finance (SHoF) Annual Conference, hosted this year with the Centre for Economic Policy Research (CEPR), Michael Greenstone (University of Chicago) explored the trade-offs between affordable energy, clean air, and lower emissions, while Caroline Flammer (Columbia) assessed both the promise and the limits of blended finance for climate and biodiversity projects. Industry speakers pointed to risks for households, including stranded assets and rising costs, and banks outlined how climate-risk integration will reshape lending.

Europe’s regulatory landscape is also shifting. At a conference hosted by SHoF and House of Governance and Public Policy (GaPP), experts from policy, industry, and academia warned that excessive subsidies may weaken competition and emphasized the need for predictable rules. A separate SHoF event on biodiversity risk underscored persistent data gaps and growing evidence of nature loss as a financially material risk, showing that sustainable finance is no longer peripheral: it is foundational to economic resilience and long-term policy design.

# Money vs. Morals: Do Swedes Follow Through?

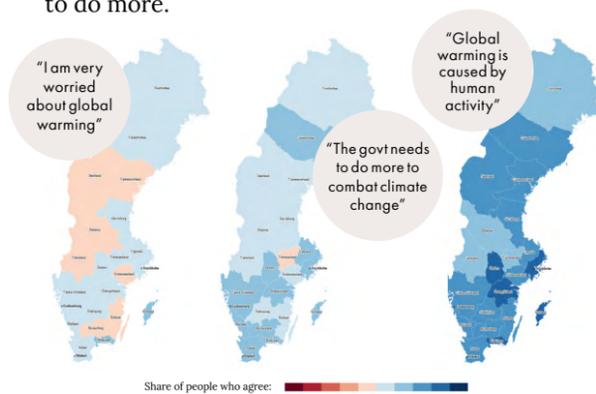
Sweden is known for its eco-friendliness. Swedes recycle diligently, bike year-round, and even experience “flygskam” (flight shame). As consumers, their climate commitment is clear. But what about as investors? Survey results show that while a majority of Swedes remain deeply concerned about climate change, fewer now believe its effects are immediate, and willingness to pay for green investments has declined.

## KEY FINDINGS

- New database maps climate and finance attitudes across Sweden
- Most Swedes remain “very worried,” but fewer see climate effects as immediate
- Only 16% would pay more for green investments, down from 34% in 2023
- Just 11% would accept lower pensions for greener portfolios

Swedes remain deeply concerned about climate change, but new survey data suggest they are increasingly reluctant to bear financial costs for climate action, particularly when it comes to sustainable investments.

According to the 2024 Sustainability and Consumer Finances Survey (SUSY), 78% of Swedes believe global warming is mainly caused by human activity, while 55% say they are “very worried” about the issue. A majority also want stronger government action on climate, with 63% saying the state needs to do more.

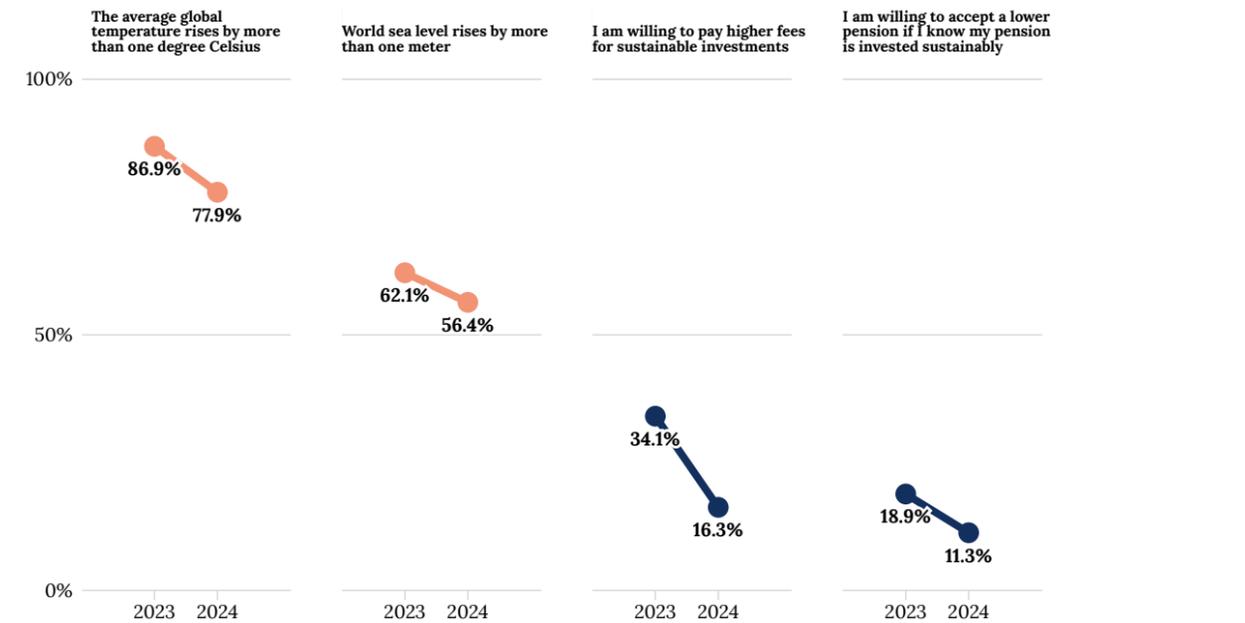


Yet, when asked about their willingness to pay for sustainable investments, enthusiasm wanes. Only 16% of Swedes in the 2024 survey said they would pay higher fees for green investments, down from 34% in 2023. Similarly, just 11% were willing to accept a lower pension in exchange for a sustainable portfolio—nearly half the rate reported the previous year.



“The findings point to a disconnect between climate concern and consumer financial behavior,” Anders Anderson, the Swedish House of Finance (SHoF) researcher behind SUSY, said. “Although Swedes maintain a strong environmental ethic in daily life, they appear increasingly hesitant to translate those values into investment choices, especially in a political climate where climate messaging is more divisive.”

The SUSY Monitor, launched alongside the new data, offers an interactive map detailing regional climate beliefs and financial attitudes across Sweden, as well as local demographics including income and unemployment. The 2024 survey was conduct-



## Climate Expectations and Sustainable Investments

The orange lines present the number of individuals who answered “Likely” or “Very likely” when asked “How likely do you think the following scenario is in the next 20 years?”

The blue lines present the number of individuals who answered “Agree” or “Strongly agree” when asked “To what extent do you agree with the following statement?”

ed between October 2024 and January 2025 and follows a previous edition from May to June 2023.

While core beliefs about climate science remains largely intact—78% of Swedes still believe Earth’s average temperature is likely to rise by more than one degree Celsius in the next 20 years—expectations of specific consequences are softening. Fewer Swedes in 2024 believe that sea levels will rise by more than one meter, compared to the prior year.

These shifts come as a new working paper by SHoF researchers Anders Anderson (SSE) and co-author David Robinson (Duke University), “Populism, Polarization and Green Investment,” highlights how climate beliefs are shaped by more than just scientific or environmental factors. The study finds that while local weather shocks typically increase concern about climate change, this effect is muted in areas marked by heightened political polarization or where media coverage around global warming is more intense. The paper argues that climate beliefs are becoming increasingly politicized—and that changes in these beliefs have long-term effects on financial behavior, including decisions around retirement savings years after opinions shift. ♦

## DATA VISUALIZATION

### The SUSY Monitor



Eline Jacobs (SHoF/SSE), one of the researchers behind the SUSY Monitor.

SHoF uses data visualizations to make research more accessible. The Sustainability and Consumer Finances Survey (SUSY) Monitor, for example, is an interactive map of climate beliefs across Sweden. Users can select survey questions, explore county-level insights, and compare regions with the national average. Demographic data, such as population density, income, and unemployment, is also included.

# Households on the Front Line of the Energy Transition

Speaking at the SHoF Annual Conference, co-organized this year with the Centre for Economic Policy Research (CEPR), experts urged policymakers to balance affordability, air quality, and climate goals, while warning that households face growing risks from stranded assets and rising costs.

## KEY TAKEAWAYS

- Blended finance can de-risk projects but evidence on scale is thin
- Homes and cars may become stranded assets, hitting households directly
- Transition costs will fall on taxpayers and consumers, not just governments
- Banks will be forced to integrate climate risks into mortgages and lending

### Cheap Power vs. Clean Air and Carbon

“Climate change has arrived,” said Michael Greenstone, a professor of economics at the University of Chicago. But he cautioned that it is “a mistake to focus on it in isolation.”



Michael Greenstone (University of Chicago), September 18, 2025.

Instead, he described a “global energy challenge” that requires balancing three priorities: inexpensive and reliable energy, cleaner air and reduced CO<sub>2</sub>.

“Humans were not put on the planet to minimize climate change,” Greenstone said. “They were put

on the planet to maximize their well-being.”

He noted that fossil fuels remain dominant because they are cheap and reliable, while renewables must “pay for their intermittency.”

The harms are unevenly spread, he added, with air pollution cutting life expectancy in emerging economies and warming hitting poorer regions hardest.

### “Blended Finance” Seeks to Unlock Capital



Caroline Flammer (Columbia), September 18, 2025.

Caroline Flammer, a professor at Columbia University, argued that blended finance can help channel private money into nature and climate projects.

“There are tons of capital out there,” she said. “But it just doesn’t flow in that direction, and it especially doesn’t flow into the Global South, where we need the capital the most.”

She said investors can generate returns by “bundling a public good with a private good.” Examples include forests that attract tourism, mangroves that protect real estate, or shade-grown coffee that improves quality and price.

“At first it seems challenging to get a financial return out of protecting nature,” she said. “But it is possible.”

Flammer however added that blended finance is

not a panacea:

“There is no silver bullet here,” she said. “We need more rigorous studies to understand how much concessionality is really needed.”

### Households Risk Stranded Assets

Marcus Svedberg, Chief Economist at Folksam, warned that both property and cars could lose value quickly.

“Spending their mortgage and houses that are not possible to insure or use as collateral, they may become stranded,” he said. “This is, of course, an enormous problem for the households, but it will also be a problem for the banks or society at large as financial stability.”

“More mitigation finance and more adaptation finance are needed,” Svedberg said. “By starting at the other end, by showing what the risks are to individual households, it may actually become easier to explain why this is important.”

### Transition Costs Will Fall on Consumers

Gabriel Lundström, Head of Sustainability at Skandia, said both physical and transition risks will be costly.

“No matter what path we take, it will lead to higher global risks in the global economies,” he said. “These risks will translate into costs for someone.”

He pointed to Europe’s dependence on imported energy: “We have a rather fragile energy system,” Lundström said. “We have to make our energy systems more resilient, both from a climate perspective and from a resilience perspective for Europe’s independence going forward. But that won’t be for free either. Someone has to pay the price tag.”

### Banks Move to Climate-Risk Pricing

Åsa Knudsen Sterte, Head of Climate and Sustainable Finance at SEB, said climate risk is still not integrated into household lending.

“Households do not know about the climate risk today,” she said. “We as a bank have 30-year commitments, but we only look at the ability to pay back the loan. We don’t look at the underlying collateral.”

She said that is now changing:

“The European Banking Authority has published guidelines on how to integrate ESG risks,” Knudsen Sterte said. “This will require banks to integrate both physical risks and transition risks into risk re-

ports and lending decisions. And when households can compare information, they will start to see which homes are associated with climate risks.”

### Balancing Act



L-R: Marcus Svedberg (Folksam), Gabriel Lundström (Skandia), Åsa Knudsen Sterte (SEB), Michael Haliassos (Goethe University Frankfurt/CEPR), September 18, 2025.

Speakers agreed that the transition will be judged not only by tonnes of CO<sub>2</sub> avoided but also by whether it protects households and preserves living standards.

“Every country around the world has to find its way to balance between these three goals,” Greenstone said. ♦

## VIDEO INTERVIEW

### Europe Put a Price on Carbon. Can the World Follow?



Michael Greenstone (University of Chicago) on how data advances reshape climate damage estimates and the policy value of the social cost of carbon.

“When you penalize CO<sub>2</sub> emissions, people find new and creative ways to reduce their emissions.”

# Is Europe Getting the Balance Right on Green Regulation?

Europe's push to decarbonize heavy industry hinges on balancing state support with fair competition, according to industry, regulatory and academic experts at a conference hosted by Swedish House of Finance (SHoF) and House of Governance and Public Policy (GaPP).



L-R: Mariassunta Giannetti (SHoF/SSE), Ola Hansén (Stegra), Catharina Belfrage Sahlstrand (ex-Handelsbanken), and Emanuele Tarantino (EU Commissioner/LUISS), October 3, 2025.

## Commission Flags Risks of Excess Subsidies

Keynote speaker Emanuele Tarantino, Chief Competition Economist at the European Commission, said the bloc must ensure subsidies remain targeted and efficient.

“We try to understand to what extent the contribution of the state is reasonable or not,” Tarantino told the conference, hosted by SHoF and Stockholm School of Economics’ GaPP. “We need to be careful in limits and boundaries, because otherwise

you lose precisely what you need. It is the incentive effect.”

He pointed to the EU Innovation Fund as a model, where projects across Europe compete for financing:

“This is the competition we like, because there are projects all around Europe competing for the fund and getting large amounts,” Tarantino said, however adding that growing reliance on national-level subsidies risked fragmenting Europe’s industrial policy.

## Steelmaker Stresses Carbon Pricing and Demand

From the industry side, Ola Hansén, Public Affairs Director at green steel startup Stegra, said the EU’s

## KEY TAKEAWAYS

- Industrial policy must balance climate objectives with competition policy
- Regulatory stability is key to investment, especially for SMEs
- For large-scale industrial projects, customer demand and carbon pricing are central

carbon market and customer demand were decisive in securing the company’s €6.5 billion project in northern Sweden.

“The common price is going to be number one policy for us,” he said, referring to the EU’s Emissions Trading System. “The ability to show demand and secure demand for our plant was initially what really made it possible to crowd the funding we needed to get the plant.”

Still, Hansén warned of political risks to the system: “It shows that also ETS [...] could be changed. It’s been there since 20 years, but things can change. If the prices get too high, we will get political interventions. We know that.”

## SMEs Rattled by Regulatory Rollback

Catharina Belfrage Sahlstrand, former Chief Sustainability and Climate Officer at Handelsbanken, highlighted how small and medium-sized enterprises (SMEs) are reacting to shifting EU rules. She pointed to the EU’s decision to ease sustainability reporting requirements for SMEs under the Corporate Sustainability Reporting Directive (CSRD), which had been expected to become a landmark regulation.

“Many companies now have woken up to the fact that EU regulation can actually disappear,” she said. “EU regulation that was, in the case of CSRD, long anticipated and a bit of a landmark regulation [...] could actually be clawed back to the drawing board after it had been adopted. That obviously creates uncertainty, which is the last thing that markets need when wanting to raise the will to invest.”

She added that the framing of sustainability has shifted away from moral imperatives.

“It’s very important to stress the facts that for

many of these companies, this is about future proofing,” Belfrage Sahlstrand said.

## Markets, Policy and Political Realities

In the panel discussion, speakers debated how to balance market mechanisms with targeted industrial policy. Hansén stressed demand and carbon pricing as the foundation, while Belfrage Sahlstrand underscored the power of certainty.

“The certainty that a certain scheme will remain in place is powerful in itself,” Belfrage Sahlstrand said.

Tarantino concluded that while Europe’s carbon market and border adjustment mechanism are already significant steps, the challenge lies in maintaining credibility.

“There are a number of frictions that prevent this to be fully deployed, but we are doing something already,” he said.

Hansén added that post-COVID subsidy trends could further weaken the EU framework:

“The trend has been [...] to open up for more and more subsidies on the mandate level. Europe has in a way weakened, or its mandate has weakened [...] So I think we would want to see very strict rules on that.” ♦



# Banks, Birds, Bees: Biodiversity Risks Back on the Finance Agenda

At a seminar hosted by the Swedish House of Finance (SHoF), researchers, asset owners and banks warned that biodiversity loss is becoming a material financial risk, while markets are still only beginning to price it.



L-R: Zacharias Sautner (University of Zurich), Johanna Fager Wettergren (Swedbank), Julia Ripa (AP4), Mark Sanctuary (KTH/Sustainable Finance Lab), Jan Starmans (SHoF/SSE), November 26, 2025.

In his keynote, Zacharias Sautner (University of Zurich) said emerging research shows that “nature risks are investment risks.” He argued that backlash against ESG often stems from a “fundamental misunderstanding,” saying investors must show that “these risks create financially material investment risk that we should care about from a financial value, not just values perspective.”

Evidence is mounting. Nearly half of firms surveyed already judge nature-related risks to be financially material. Sautner noted that companies with heavier biodiversity footprints tend to deliver

higher stock returns, suggesting investors demand a premium for bearing the risk. Physical exposures are also coming into view, he said, pointing to a lawsuit involving Tesla that shaved more than 3% off the firm’s share price in a single day over worries about water use.

## No Longer in ‘Premature’ Stage

Financial institutions are beginning to respond. Swedbank now treats biodiversity loss as a significant risk, said Johanna Fager Wettergren, the bank’s head of group sustainability.

“[The issue] is high on the agenda [...] all the way to the board’s agenda today,” she said. “It’s not premature anymore.”

## KEY TAKEAWAYS

- Nature risk is investment risk; many firms already view biodiversity loss as financially material
- Severe data gaps still limit meaningful assessment
- Biodiversity risk is more complex and local than climate risk, demanding asset-level transparency
- Panelists warn against over-regulation

Adapting climate-risk tools provides a starting point, yet nature risk brings its own awkward complications. It is intensely local, making measurement far harder. Client understanding is similarly uneven. Large firms may lead the way, but among smaller firms, Fager Wettergren said, “the awareness is still quite low, in general.”

AP4, one of Sweden’s largest pension funds, believes sustainable investing will yield stronger risk-adjusted returns. But data gaps remain an obstacle.

“We haven’t taken a position yet, and the reason for that is that we think the data is difficult, too noisy, and the area is very complex,” said senior analyst Julia Ripa. “But we are also losing patience on waiting for good data.”

Ripa said AP4 will now move forward regardless.

“We are going to start smaller, with one sub-category of biodiversity. So, I think it will be deforestation that we will research and see if the area is investable for us now.”

## Complexity and Information Gaps

Researchers cautioned that progress on biodiversity data still leaves major gaps. Mark Sanctuary of KTH said new tools—from satellite imaging to DNA analysis—are transforming monitoring, yet most species remain unidentified.

“Biologists are talking about 80% plus of the species on the planet are not even identified [...] others are saying [...] it’s closer to 99% if you include bacteria,” he said. “And that’s mind-blowing kind of uncertainty.”

## Calls for Better Regulation

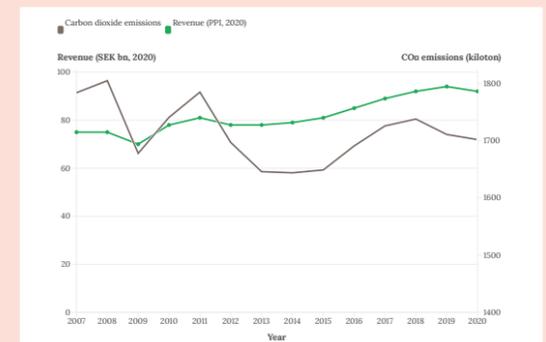
Panelists agreed regulation will determine how the field matures.

“Now we are in the kind of shift where the debate is about if we are over-regulating within the EU. I think there is one risk that we would go too far in the other direction,” Fager Wettergren said. “If it’s too complex, it’s burdensome, and it won’t help us. It will lead our focus wrong.”

Sautner added that investor coalitions are shrinking amid legal threats, especially in the United States, and urged clearer guidance on permitted coordination. He also warned against over-reliance on major ESG data vendors. ♦

## DATA VISUALIZATION

### Green Growth? Sweden’s Carbon Policy Boosted Productivity in Trucking, Study Finds



Sweden’s push to tax and regulate fossil fuels has long been held up as a test of whether climate policy can coexist with economic growth. An ongoing study of the country’s trucking industry, one of Europe’s biggest sources of transport emissions, suggests the answer may be yes.

“Carbon pricing and biofuel mandates can achieve emission reductions in transportation without reducing productive efficiency and even help to increase it,” say Gustav Martinsson (SHoF/Stockholm University), Per Strömberg (SHoF/SSE), and Christian Thomann (SHoF/KTH).

“Financial understanding is frequently shaped by family and social environment.”

**READ MORE ON PAGE 35**

# Households Under Pressure

**H**ouseholds stand at the center of financial adjustment, and the research and outreach in this chapter illuminate how economic pressures, behavioral differences, and policy interventions shape financial outcomes. New work by SHoF researchers shows how differences in risk tolerance, patience, and portfolio diversification compound over time, producing steep wealth concentration as more risk-tolerant investors earn higher returns. Their findings help explain persistent inequality and why market rebounds disproportionately benefit the wealthiest.

Debt dynamics also remain a critical concern. In a SHoF fireside chat, Atif Mian (Princeton) argued that many structural vulnerabilities that fueled the 2008 crisis—rising private debt, slowing productive investment, and widening financial surpluses—continue to weigh on long-term growth. His analysis raises important questions about the balance between private borrowing, public debt, and the need for stronger risk-sharing.

Policy design and financial capability play a growing role as well. In an interview, Peter Englund (SHoF/SSE) discussed Sweden’s review of mortgage rules and the need to balance accessibility with stability. Anders Anderson (SHoF/SSE) contributed expertise to *Dina 20 miljoner (Your 20 Million)*, a financial-literacy book aimed at teenagers, highlighting how early knowledge shapes lifetime behavior.

# Risk Attitudes, Patience, and the Concentration of Wealth at the Top

Why some people build wealth—and others don't—comes down to how they think about risk, saving, and investing, new ongoing research shows.

**W**hy do some people build up much more wealth than others? A new study suggests it's not just luck. It's about how people think and behave when it comes to investing.

In a recent paper, Swedish House of Finance researchers Gualtiero Azzalini (SSE) and Zoltán Rácz (SSE), together with Markus Kondziella (University of St. Gallen), argue that wealth inequality can be explained in part by personal traits: some people are more comfortable taking risks, more patient about saving for the future, and more willing to put their money in less diversified investments.

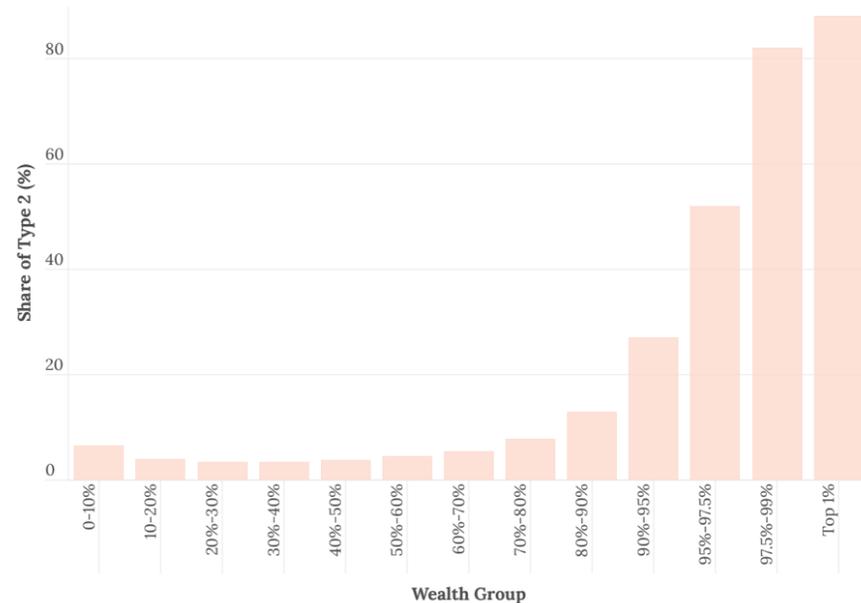
## Simulating How People Build Wealth

To explore this, the authors built a computer simulation of an economy where individuals work, earn income, decide how much to save, and choose be-

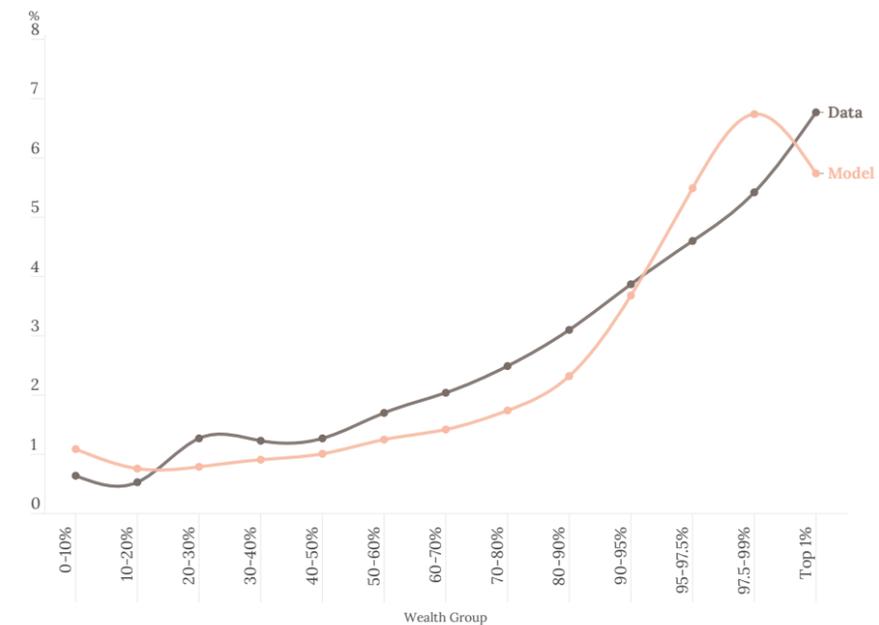
**KEY FINDINGS**

- New model links wealth to higher returns
- Few risk-tolerant, patient investors hold most wealth
- Most avoid risk, earn less, and save less
- Portfolio choices explain inequality and mobility
- Market booms mainly benefit the rich

tween safe and risky assets. The model also includes the ups and downs of the job market, especially how income becomes less stable during recessions.



**FIGURE 1**  
This chart shows the share of "Type 2" individuals—those who are more comfortable with financial risk and more focused on long-term rewards—across the wealth distribution. The wealthier the group, the higher the proportion of people with this mindset. In the top percentiles, the majority of individuals are classified this way, compared to very few at the bottom.



**FIGURE 2**  
**Excess Return**  
The chart shows that wealthier individuals earn higher returns. They also invest more in stocks and take on more personal risk.

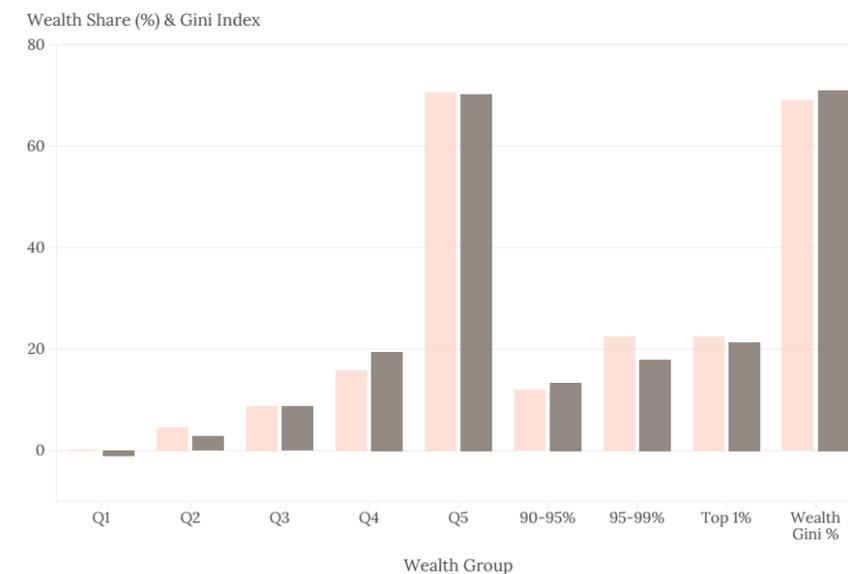
The researchers divide people into two types and make sure that the simulation matches real-world portfolio choice patterns. As an outcome of this approach, about 90% of the population consists of Type-one individuals, who are more cautious and impatient, and prefer to avoid risk and spread their money across many types of assets. Type-two individuals, just 10% of the population, are more comfortable with risk, willing to wait longer for rewards, and less diversified. The model simulation showed that people of the latter type ended up much wealthier over time, holding more than half of the total wealth in the economy.

## The Wealthy Don't Just Have More

Wealthy individuals in the model also behave differently: they invest more in stocks and other risky assets, take on more concentrated bets (like owning a business), and earn higher returns. These decisions compound over time, helping them rise to the top of the wealth distribution, the study shows.

"The compositional effect resulting from the rising fraction of these individuals as a function of wealth thus delivers the increasing relationship between wealth and the risky share even for the highest quantiles of the distribution," the authors write.

Meanwhile, the more cautious majority saves less,



**FIGURE 3**  
This chart shows how well the model matches real-world data, comparing how much wealth each group holds in the model versus in Swedish data from 2000–2007. Q1–Q5 refer to wealth quintiles. Q1 represents the poorest 20%, and Q5 the richest 20%.

avoids risk, and tends to stay in the middle or lower parts of the wealth distribution. Besides explaining portfolio choice differences between the poor and the rich, this effect generates a highly unequal distribution of wealth and wealth mobility patterns in line with Swedish administrative data.

### What Happens If Everyone Acts the Same?

To test their ideas, the authors created alternate versions of the model where everyone had the same preferences or faced the same risks. These simplified versions couldn't match the actual patterns of wealth and investment seen in the data.

"In all cases, either the match of the portfolio schedules, wealth inequality or mobility is worsened," the authors write.

The implication is clear: both people's financial attitudes and the risks they face matter. Without these differences, the model cannot explain why the wealthy invest—and succeed—the way they do.

### After a Shock, the Rich Pull Further Ahead

Finally, the authors tested what happens when the economy gets a sudden boost, like a stock market boom. The results showed that wealthy individuals

benefit most, since they hold more risky assets and are more likely to reinvest their gains.

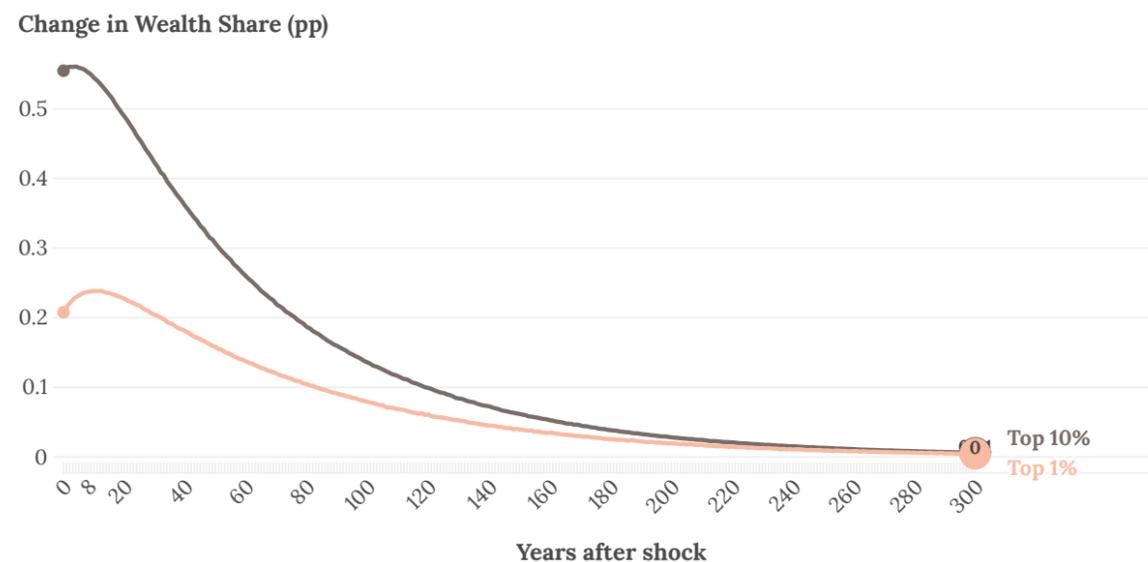
"The additional capital gains boost inequality, as agents in the right tail of the distribution have a larger share of their wealth invested in the risky asset," the authors say.

In alternative versions of the model where everyone had the same preferences or faced the same risks, the stock market boom even reduced inequality as in these specifications the richest counterfactually invested less in stocks.

### Lessons for Policy

The study highlights the importance of accounting for portfolio choices over the wealth distribution when studying topics related to capital income and inequality, the authors say. For the same reason, the framework developed in the paper is a promising starting point to investigate many policy relevant questions, such as the distributional effects of capital income and wealth taxation. ♦

FIGURE 4



This graph shows the change in the share of total wealth held by the top 10% and top 1% over 300 years (in percentage points) following a sudden increase in asset returns. The immediate spike reflects how wealthier individuals, who hold more risky assets, benefit from stock market booms. The effect is remarkably persistent: it takes more than two centuries for inequality to return to pre-shock levels, driven by patient, risk-tolerant investors who continue to accumulate wealth long after the shock.

## Book Project Promotes Financial Literacy Among Youth

Swedish House of Finance (SHoF) researcher Anders Anderson has contributed his financial economics expertise to the book *Dina 20 miljoner (Your 20 Million)*, a publication developed to support financial literacy among young people in Sweden.

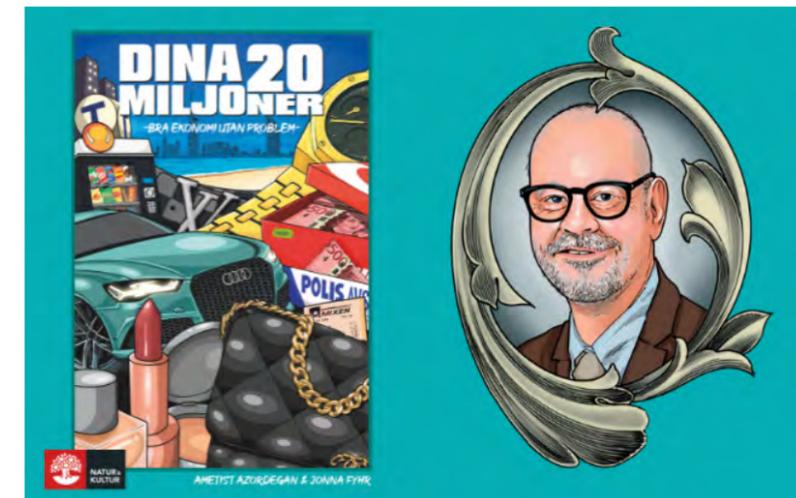
The initiative is driven by the Juice Studios Foundation, with project lead Ametist Azordegan, together with Jonna Fyhr and illustrator Felix Paulin. The book targets upper secondary school students and introduces key concepts such as budgeting, credit, debt, and long-term financial planning. Its purpose is to provide practical tools that help young people make informed and responsible financial decisions.

"It's generally difficult to find ways to reach those who are least interested. It's hard to get through," says Anderson. He explains that Azordegan had the networks needed to reach young audiences outside traditional educational channels.

Anderson's research indicates that individuals often overestimate their financial skills, particularly when perceived knowledge does not reflect actual competence. Financial understanding is frequently shaped by family and social environment. Young people with parents who discuss and model financial decision-making tend to develop familiarity with financial matters at an early stage, whereas others may lack access to this type of knowledge.

### PROMOTING FINANCIAL LITERACY THROUGH COLLABORATION

SHoF also participates in The Swedish National Network for Financial Education (Nationella nätverket för finansiell folkbildning), a national initiative promoting personal finance education, led by the Swedish Financial Supervisory Authority (Finansinspektionen). The network brings together more than 100 organizations to strengthen financial literacy in Sweden.



Book cover and portrait of Anders Anderson (SHoF/SSE) by Felix Paulin.

Anderson contributes throughout the book with research-based explanations and examples that connect academic findings with real-life choices. "The book speaks directly to young people's realities," he says. "It highlights how limited financial knowledge and certain behaviors can lead to mistakes and negative consequences, but also how better understanding can change habits and help prevent debt."

According to Juice Studios Foundation, youth indebtedness in Sweden has increased in recent years. Data from the Swedish Enforcement Authority shows debt levels among young people at historically high levels. The foundation notes that limited financial knowledge and lack of familiarity with the Swedish financial and legal systems increase vulnerability, particularly in socioeconomically disadvantaged areas.

To address this, the foundation combines educational lectures with the book to raise awareness and support better financial decision-making. ♦

# When Borrowing Fails: The Risks of Unproductive Debt in Modern Economies

What happens when borrowing no longer fuels growth but deepens economic fragility? At a Fireside Chat hosted by the Swedish House of Finance (SHoF), Princeton professor Atif Mian presented a thought-provoking analysis of the post-2008 global economy.



L-R: Paula Roth (SHoF/SSE) and Atif Mian (Princeton), May 23, 2025.

**D**rawing from his book *The House of Debt*, Mian argued that the financial crisis never truly ended, as debt-driven growth, rising inequality, and declining public investment continue to undermine long-term stability. The talk was moderated by Paula Roth, researcher at SHoF.

## The Great Recession and Its Aftermath

Atif Mian, Professor of Economics, Public Policy and Finance at Princeton University, argued that while financial markets recovered and surface-level indicators improved, the deeper structural imbalances that triggered the crisis, such as rising debt levels,

inequality, and weak investment, were never fully resolved.

“I realize it more and more, that the forces that led up to the 2008 recession and crisis, they very much remain with us,” he said.

He described the unusual nature of the recession, where unemployment soared without a clear external shock like war or disaster. Instead, the downturn stemmed from a financial system heavily reliant on private debt to sustain aggregate demand. Easier lending terms encouraged households to borrow more, especially for housing, fueling both consumption and rising home prices.

“There was a positive feedback loop between debt and asset values: as housing prices rose, borrowing increased, which in turn pushed prices higher,” he said and explained that when this debt-fueled model broke down, it triggered a prolonged period of economic stagnation.

“It’s like kicking the can down the road,” he remarked, highlighting how temporary fixes have failed to address deeper vulnerabilities. “And that has led us to deeper, long-term problems.”

## Productive vs. Unproductive Debt

Mian drew a distinction between productive and unproductive debt, noting that only the former supports investments with long-term returns. He argues that rising financial surpluses have driven a shift toward unproductive debt, creating an unsustainable economic path. As interest rates have been lowered to manage these imbalances, their effectiveness has diminished. Mian stresses that addressing structural issues behind recession and inequality requires a renewed focus on genuinely productive investments.

## Structural Issues and Inequality

Considering the deeper structural forces behind the 2008 financial crisis and its aftermath, Mian highlighted the dangers of debt-driven growth, the concentration of wealth, and the limits of conventional policy responses. To build a more resilient and equitable economy, he called for productive investment, risk-sharing mechanisms, and coordinated policy reforms.

He concluded that the post-2008 shift from private to public debt, driven by large fiscal deficits, reflects deeper structural problems. He pointed to growing financial surpluses among the wealthy, corporations, and sovereign wealth funds, which are funneled into the financial sector rather than the real economy. Understanding these imbalances, he argued, is key to addressing both the roots of the recession and the rise in inequality.

## Policy Responses and Risk Sharing

Mian argued that traditional tools like monetary policy failed to counter the collapse in private debt-financed spending during the 2008 crisis. Lower interest rates had little effect, especially among

wealthier creditors unlikely to boost spending. He emphasized that debt amplifies financial stress, particularly when risk is not shared between creditors and debtors, leaving borrowers to absorb the shock. To reduce inequality and promote productive investment, Mian called for better risk-sharing mechanisms, wealth taxes, and dynamic scoring of public spending.

“Even if you ignore all the taste-based arguments, there’s a macroeconomic case: risk sharing really matters for the functioning of the overall economy,” Mian concluded. “If you want to avoid recessions and huge declines in real value, risk sharing really matters. Because we are all connected.” ♦

## VIDEO INTERVIEW

### Rethinking Mortgage Rules in Sweden: Balancing Stability and Accessibility



Sweden is reviewing its mortgage regulations. A committee led by Peter Englund (SHoF/SSE) proposes changes to balance financial stability with housing accessibility.

“I think it’s challenging to try to apply insights from economic research [...] this is an opportunity to get one’s academic insights to work, to analyze a practical question.”

“Increasing female role models and improving the industry’s reputation are key to attracting more women to the financial sector.”

**READ MORE ON PAGE 45**

# Power and Performance

**F**irms are rethinking how they structure incentives, develop leadership, and support talent, and this chapter brings together research and events that shed light on those choices. Alvin Chen’s (SHoF/SSE) work on promotion risk explains why firms increasingly link compensation to overall company performance. When promotion opportunities are limited, performance-based pay can help offset uncertainty and improve alignment between employees and the firm. Meanwhile, a randomized field experiment in Mozambique showed how strengthening executives’ financial skills can free up working capital, boost investment, and increase profitability, especially where credit constraints are tight.

Questions of representation and inclusion also feature prominently. At the Women in Finance Glögg Mingle, SHoF highlighted the importance of data and visibility in expanding opportunities. Presentations from PhD students illustrated how diverse research interests and experiences strengthen the academic pipeline. In an interview, Renée Adams (Oxford) emphasized that representation alone is insufficient; board members must also have the authority and institutional support to influence outcomes.

# CEOs Took a Finance Course—and Their Firms Got More Profitable

A field experiment in Mozambique by Diogo Mendes (SHoF/SSE), Daniel Metzger (Rotterdam School of Management), and Cláudia Custódio (Imperial) shows that executive education can transform financial practices, freeing up cash and boosting returns, especially in developing countries.

In Mozambique, many large firms have long struggled with financial constraints. Few have access to formal credit lines, and many operate with inefficient cash management practices. But a recent study suggests that a simple intervention—giving top executives an intensive finance course—can change how companies run their books and invest for growth.

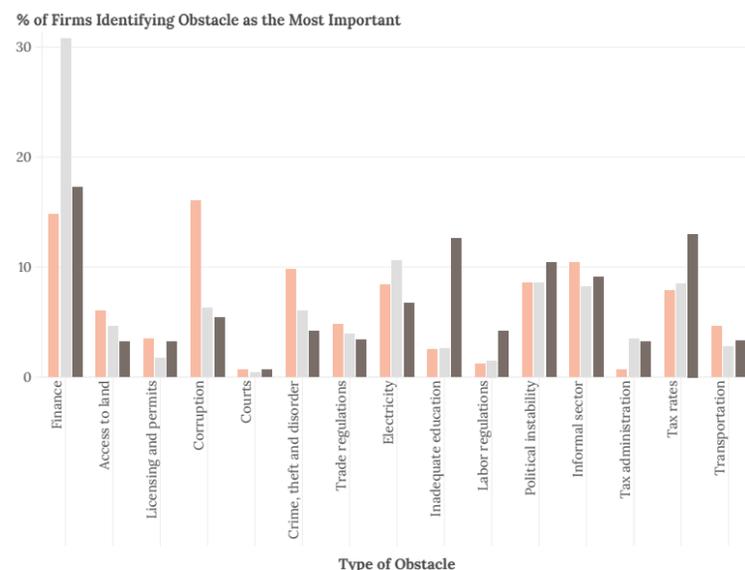
Researchers ran a randomized controlled trial with 92 medium and large firms in Mozambique, offering an 18-hour financial training program to top managers. The course, taught in an MBA-style format, covered valuation, capital budgeting, capital structure, working capital management, and risk management. The goal was to test whether teaching financial best practices to CEOs and CFOs would actually change corporate behavior.

## KEY FINDINGS

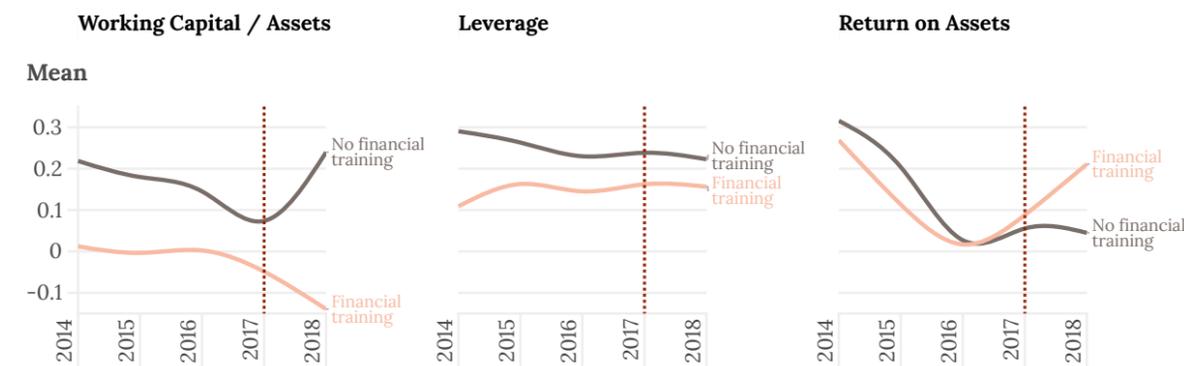
- Firms freed up cash by cutting working capital
- Receivables and inventories dropped
- Cash went into new investments, not reserves
- Smaller, less financially savvy firms gained most

### Less Cash Stuck in Operations

The biggest shift came in how firms managed their working capital. Before the course, companies kept large sums of money tied up in day-to-day operations through unpaid customer invoices and excess inventory. After the training, that changed.



**FIGURE 1**  
Biggest Obstacles to Business Operations in Mozambique



**FIGURE 2**  
How Firms Changed After Financial Training

These charts show how company finances changed after top managers received financial training (May 2017). The lines represent the average results for each group: firms that took the course and firms that had not yet taken it.

The companies that received the training reduced their working capital-to-assets ratio by 0.4 to 0.5 standard deviations, compared to firms that didn't participate at that time.

“This effect is driven by a reduction in accounts receivable of 0.4 to 1 standard deviation and a reduction in inventories of 0.2 to 0.3 standard deviations,” the researchers say.

Some firms hired additional staff to improve collections, while others started contacting clients more frequently to reduce payment delays. One firm set up a new system to track receivables weekly.

### From Operational Cash to Long-Term Investment

Importantly, the freed-up cash didn't sit idle. Firms reinvested it into their businesses, the study shows.

“Firms used the cash to increase their investment in long-term assets,” the researchers say. Capital expenditures over assets jumped by 9 to 13 percentage points.

Back-of-the-envelope calculations from the study suggest that the average treated firm unlocked about \$355,100 from faster collections and \$194,300

from reducing inventory—cash that they could channel into expansion, not just cash reserves.

### Bigger Returns, Same Sales

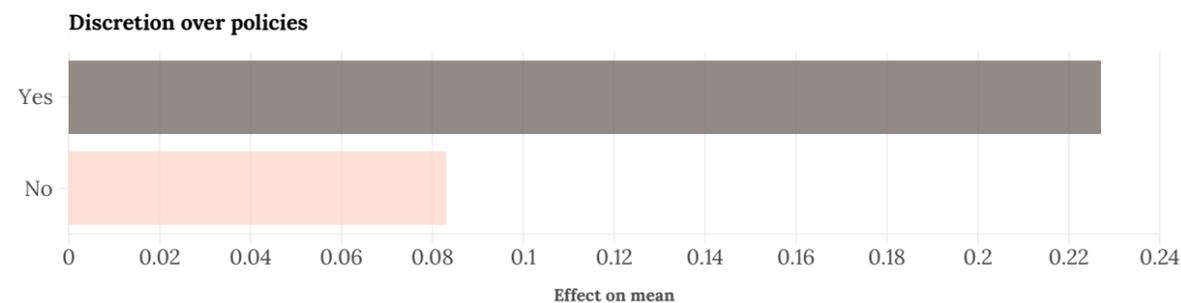
The study also shows that in participating firms, sales remained stable, but profitability soared. Return on assets—a key measure of firm profitability—increased by 0.6 to 1.1 standard deviations, or the equivalent of 14 to 23 percentage points.

“The increase in ROA is not explained by increased sales or a change in the sales-to-assets ratio,” the researchers say. “Instead, treated firms seem to become more efficient in their use of cash.”

### Who Benefited the Most?

The financial training wasn't equally effective for all firms. Companies where managers had more decision-making power saw larger changes.

Smaller firms and those with tighter financial constraints benefited more. Executives with no prior formal training in finance or accounting learned the most but only if they had a master's degree or higher.



**FIGURE 3**  
More Autonomy Led to Larger Changes

The bars show the average improvement from the program compared to firms that did not receive it. Executives with greater decision-making autonomy made larger changes.

“Participants with a higher degree of formal education profit more from our intervention, suggesting that a certain level of education might be needed to grasp the theoretical concepts and their implications, and to implement them in practice,” the researchers say.

**A Scalable Solution for Growth?**

The findings suggest that building managerial capital can unlock real productivity gains, even in environments with financial constraints and underde-

veloped capital markets.

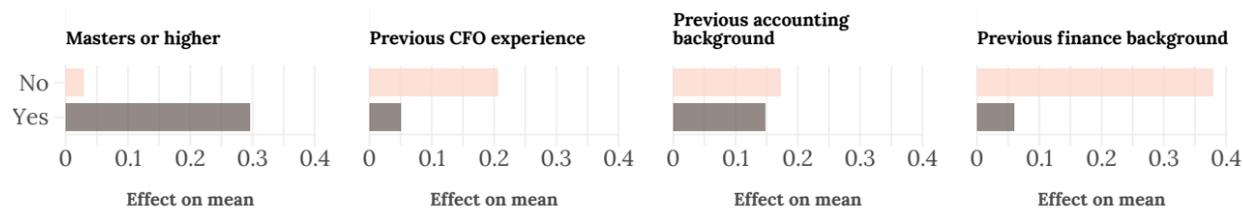
“Overall, our results show that financial expertise of managers are important for firm policies and that relatively small-scale financial education programs can improve financial practices and decision making, and possibly affect economic development,” the researchers say.

In Mozambique, that means less cash stuck in limbo and more of it fueling long-term growth. ♦

**FIGURE 4**

**Education and Previous Experience**

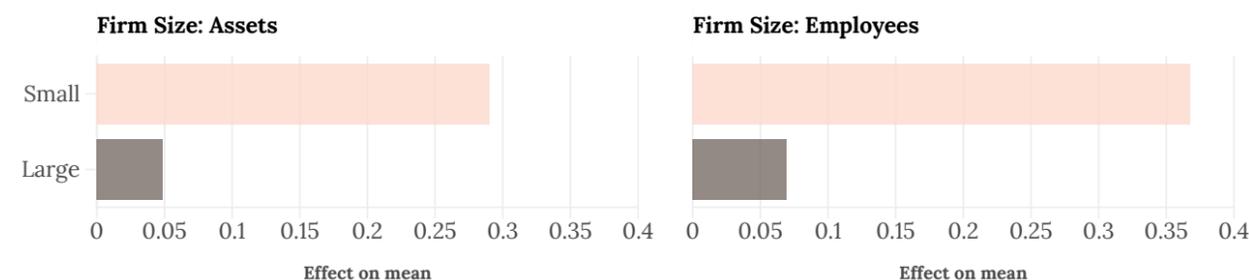
The bars show the average improvement from the program compared to firms that did not receive it. Executives with a master's degree or higher, but no prior CFO, accounting, or finance background, benefited the most.



**FIGURE 5**

**Smaller Firms Benefit More**

The bars show the effect on the mean—the average improvement from the program compared to firms that did not receive it. Smaller firms benefited the most.



**SSE PRIVATE CAPITAL CFO FORUM 2025**

The SSE Private Capital Financial Forum took place for the second year. The event examined the evolving role of the Chief Financial Officer (CFO), focusing on development challenges, strategic priorities, and technological advancements, and brought together CFOs from leading Swedish companies. The forum was hosted by SHoF’s Bo Becker (SSE) and Diogo Mendes (SSE).

**IN THE MEDIA**

**Can Start-Up Success Be Taught? (Financial Times, June 16)**

In a Financial Times feature exploring whether entrepreneurial success can be taught, Bo Becker (SHoF/SSE), discussed the surge in student interest in innovation and start-up finance. He noted that “we’re in the middle of an era of disruption,” with more business students seeing entrepreneurship as a rewarding career path.

# How Firms Use Performance Pay to Mitigate “Promotion Risk”

**In a work environment shaped by AI, remote work, and shifting demographics, career advancement is increasingly uncertain.**

**A** new study introduces “promotion risk”—the chance of being passed over despite strong performance—and shows how performance-based pay tied to firm results can help offset that risk.

**What is Firm Performance Pay?**

Firm performance pay links part of an employee's incentive compensation to the overall success of the company. Once reserved for top executives, this practice is increasingly common for non-executive employees, especially in companies that rely heavily on human capital.

While traditional economic theory advocates steady pay to protect workers from firm-level risks, Swedish House of Finance (SHoF) researcher Alvin Chen argues that this perspective changes when employees face promotion risk. In such cases, compensating workers based on the company's performance can act as a safety net, cushioning the financial impact of missed promotions.

**Stronger Company Performance, Greater Promotion Risk**

In many workplaces, promotions are scarce. A recent Google survey found that 77% of respondents noted limited promotion opportunities in their workplace. In such a setting, a paradox arises: a surplus of talented employees improves company performance but intensifies the competition for promotion.

Consistent with this observation, research shows that as co-workers perform better, individual promotion chances decline. Put differently, an abundance of talented employees may be good news for the company, it is bad news for employees hoping for a promotion.

**The Optimal Contract**

Chen’s research suggests that a firm can remedy the misalignment between its prospects and those of its employees by paying them more when it does better, making up for the decline in promotion prospects.

This insurance motive also helps explain why profit-sharing is typically reserved for high-performing employees. Low-performing workers are not candidates for promotion and therefore do not require the same level of promotion risk mitigation.

**A Strategic Tool, Not a One-Size-Fits-All**

While firm performance pay can offer a compelling solution to mitigate promotion uncertainty, it’s not universally applicable.

“My framework emphasizes how changes in the supply of talent affect promotion risk,” Chen notes. “But in some companies, changes in the demand of talent are more relevant.”

Companies with fewer organizational frictions—like start-ups or firms with flexible hierarchies—may expand promotion opportunities to accommodate an abundance of talent. For example, in recent years, many large law firms have introduced the position of non-equity partner to retain skilled associates who are not promoted to equity partner, effectively mitigating promotion risk without relying solely on compensation design. ♦

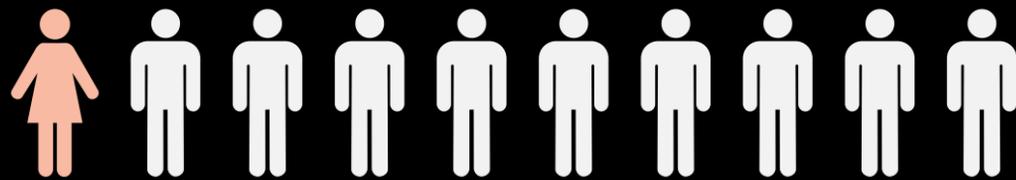
**IN THE MEDIA**

**UK Companies Outpace US Counterparts in Share Buyback (Financial Times, January 17)**

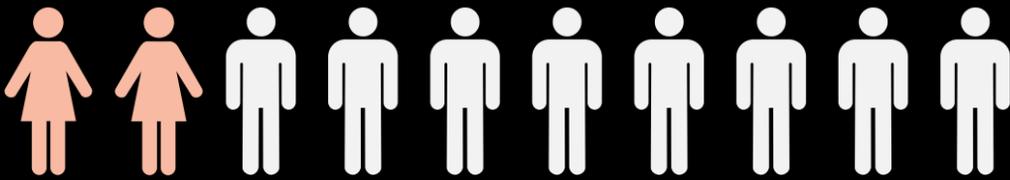
Alvin Chen (SHoF/SSE) explains in the Financial Times that while dividends are viewed as a commitment to shareholders, buybacks provide companies with greater flexibility and send a strong signal when shares are perceived as undervalued.

# WOMEN IN FINANCE

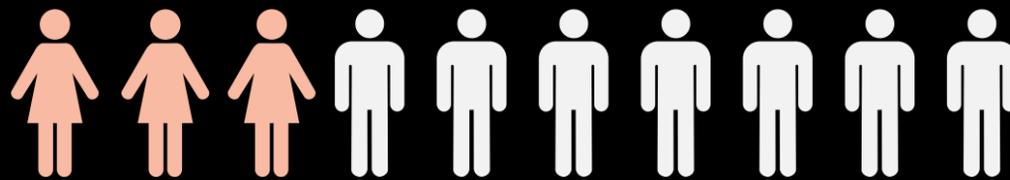
## Full Professors



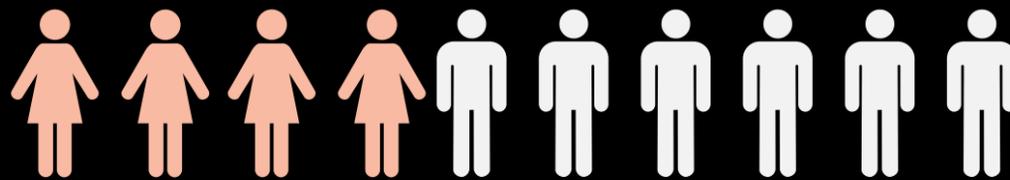
## Associate Professors



## Assistant Professors



## Research Associates (incl. PhD Students)



Women in Finance Academia: Representation by Career Stage, Women in Finance Data, Swedish House of Finance

# Strengthening Networks and Visibility in the Financial Sector

The Women in Finance Glögg Mingle, hosted by the Swedish House of Finance (SHoF) and Svensk Värdepappersmarknad (the Swedish Securities Markets Association) brought together a wide range of talented women from across Sweden’s financial sector.

The gathering offered an opportunity to build new connections, strengthen existing ones, and reflect on the future of women in finance.

The evening opened with Paula Roth, postdoctoral researcher at SHoF, who provided an overview of the work conducted at the Swedish House of Finance. She introduced the annual Women in Finance data collection—a key resource for understanding representation across the industry and explained why this mapping is vital for tracking progress. Roth concluded by sharing insights from her latest research focusing on debt and crime.

The event continued with presentations from three PhD students in finance, from SHoF and the Stockholm School of Economics, Anne Fitterer on her second year, Eline Jacobs on her first year, and Ausra Speer on her fourth year, each offering personal reflections on their paths into finance and the academic profession.

Fitterer spoke about her transition from the European Central Bank into academia, explaining what motivated that shift and her research interest which lies in investigating the nexus between climate change and central banks.

Jacobs shared what first drew her to finance research and how her experience as a research assistant influenced her decision to pursue a PhD. She has been engaged in visualizing data on climate beliefs across Sweden with the aim of making research insights more intuitive and engaging.

Speer discussed the inspiration behind founding the EmpowHERed CollabHERation initiative. She reflected on the need it addresses and the impact she hopes it will have in fostering collaboration and supporting women in male-dominated fields, including finance research.



L-R: Anne Fitterer (SHoF/SSE), Ausra Speer (SHoF/SSE), Urban Funered (Svensk Värdepappersmarknad), Eline Jacobs (SHoF/SSE), Paula Roth (SHoF), December 3, 2025.

Urban Funered, CEO at Svensk Värdepappersmarknad, presented findings from a survey by Kvinnor inom Finans i Sverige (KiFS), known in English as Women in Finance Sweden, offering insights into women’s experiences within Sweden’s financial industry. The survey showed that increasing female role models and improving the industry’s reputation are key to attracting more women to the financial sector.

The event helped to build strong networks, share knowledge, and strengthen the visibility of women in finance. ♦

## VIDEO INTERVIEW

### The Diversity Dilemma: Representation vs. Real Change in Corporate Boards



Renée Adams (Oxford) explains why board diversity alone does not guarantee change, how advocacy costs silence minority directors, and what this means for corporate governance and policy.

“Demographic diversity is not necessarily going to automatically lead to more equality.”

“Banks should serve their clients, but we must also consider those outside the system.”

**READ MORE ON PAGE 50**

# Markets Transformed

**F**inancial markets are being reshaped by digitalization, passive investing, and new forms of intermediation. The research and interviews in this chapter illustrate how these forces influence household behavior, price formation, and market stability. A recent study on digital pension apps shows that simple, user-friendly design—not information about tax benefits—increases voluntary retirement contributions. The strongest responses came from higher-income earners and men, highlighting both the potential and limits of digital nudges.

Interviews with experts explore how social media, robo-advice, and mobile platforms influence stock market participation, trust, and financial capability. Their insights raise important questions about how digital tools can support—not replace—critical thinking and financial understanding.

Other interviews explore how passive investing influences asset-price dynamics and efficiency, the rapid expansion of ETFs, the role of AI in shaping innovation and firm performance, and the distributional consequences of private capital growth. The Hans Dalborg Award presentations further highlight the breadth of emerging research on incentives, fintech adoption, and financial behavior.

# Digital Pension Apps Boost Retirement Contributions, Study Finds

The introduction of digital pension apps significantly increases voluntary retirement contributions, with the effect most pronounced among higher-income earners and men, a new study finds.

## KEY FINDINGS

- Digital pension apps boost contributions
- Ease of use matters: only the “quick and simple” reminder increased savings
- Reminders about tax benefits had little impact
- Contributions rose mainly among higher earners and men

Research published by Claudio Damiano (Lund University), Massimo Filippini (ETH Zurich), and Fabio Haufler (ETH Zurich) in the Review of Financial Studies examines the impact of a digital pension app rolled out in Switzerland, showing a 1.8 percentage point increase in voluntary contributions—an uptick from a baseline contribution rate of 2.8%. The study, based on Swiss pension fund data, provides empirical evidence on how financial technology affects retirement savings behavior.

“Providing access to the digital pension app has an important effect on retirement contribution decisions,” the authors write. “The overall probability of making a tax-favored contribution to the occupational pension plan increases by 1.8 percentage points following the introduction of the app.”

### Ease of Use, Not Tax Incentives, Drives Uptake

To understand what drives people to save more for retirement, the researchers conducted a randomized field experiment, testing how different re-

minders influenced pension app usage and voluntary contributions.

Participants who had not yet registered for the app were randomly assigned to one of four groups: some received no reminder, others received a basic letter informing them about the app, a third group was told the app could calculate their tax savings, and a fourth group was reminded that the app made contributions quick and simple.

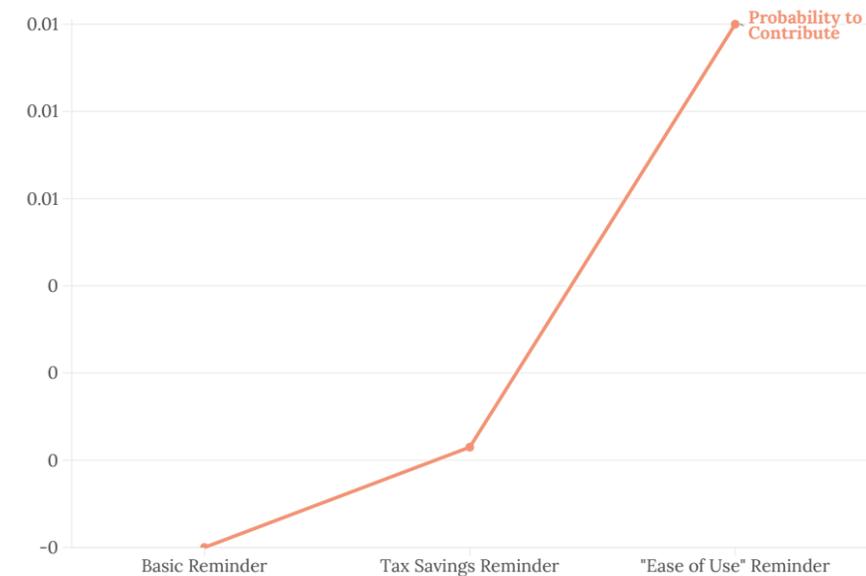
The results were clear—only those who received the ease-of-use reminder (fourth group) increased their pension contributions, while the other reminders had little to no effect. This suggests that removing obstacles to action is more effective than simply providing information about financial benefits.

“Merely receiving the letter containing a nudge toward the digital app’s ability to decrease the ‘hassle’ costs of making a contribution increases the probability of making a buy-in by about one percentage point, and the overall contributed amount by around 10%,” the authors say.

### Higher-Income Earners and Men Benefit the Most

The effect of the app introduction was not evenly distributed across demographics. The study finds that men and higher-income earners were significantly more likely to increase their contributions after gaining access to the digital tool.

“We find substantial effect heterogeneity, with contribution decisions of men, higher-income earners and individuals with larger potential of tax-favored contributions responding more to the



**FIGURE 1**  
**How Different Reminders Influence Pension Contributions**  
 Ease-of-use, not tax incentives, boosts pension contributions.

Probability of voluntary pension contributions by reminder type. Participants were randomly assigned to no reminder, a basic info letter, a tax savings prompt, or an ease-of-use reminder.

introduction of the pension app,” authors say in the study.

### Policy Implications

The study adds to growing evidence that FinTech solutions can drive financial behavior, particularly in areas where transaction costs deter action. But while digital tools help those who engage with them, the findings suggest they may not be enough to encourage saving among lower-income individuals or those less financially inclined.

“Together, this evidence points toward digital access boosting total retirement contributions, rather than merely shifting their timing,” the authors conclude.

With pension adequacy a growing concern across developed economies, the study’s findings could inform how governments and financial institutions design retirement planning tools to maximize participation across all income groups.

Several countries are adopting digital pension tools to simplify retirement planning. The Netherlands has already implemented such platforms, while Germany and the UK launched “Digitale Rentenübersicht” and the “Pension Dashboard” in 2023, making pension information more accessible. ♦

## VIDEO INTERVIEW

### Impact of Digitalization on Stockholding



Michael Haliassos (Goethe University Frankfurt/CEPR) discusses how retail stockholding is driven by social media, easy-to-use investment platforms, robo-advice, and low-cost ETFs:

“We have a current project where we recently asked ordinary German households why they are participating in the stock market [...] we were very surprised to see that 21% of participants mentioned social media as one of the top three factors, and in fact, 7% mentioned just social media as the only factor.”

# What Drives Loyalty and Trust in Fintech?

Digital banking and fintech services are rapidly changing how individuals manage their finances. In this interview, Mustafa Nourallah (Mid Sweden University) discusses key findings on user behavior, the role of design in financial decision-making, and the importance of trust when adopting new financial technologies.

## What is the key takeaway from your research?

One size does not fit all. FinTech applications must adapt to the diverse needs and preferences of users. We have young people, seniors, individuals with high financial literacy, and others with limited financial knowledge. A single design or approach cannot serve everyone effectively.

## Why are design and cognitive factors crucial for loyalty to banking apps?

Ease of use and cognitive support must work together. FinTech applications, such as mobile

banking apps, should be simple to navigate, but not so simplified that they hinder users' ability to understand information or make sound financial decisions.

## How can the banking industry benefit from this new perspective?

Banks should invest in developing financial apps that reduce clients' financial stress and strengthen their financial capability. It's not only about managing money, it's also about feeling secure and gaining financial stability.

## Did you find misconceptions about financial robo-advisors?

Yes. Many people view robo-advisors like takeout food, ready-made solutions that require no effort. But users still need to understand the basic methods and processes the robo-advisor uses to generate recommendations. Financial literacy remains essential.

## How might trust in robo-advisors change as AI advances?

I am concerned that younger generations may become completely dependent on AI or robo-advisors for financial decisions. AI can support us, but we should still process information, think critically, and evaluate suggestions before acting.

## What future research questions are most urgent?

We need to develop advisory tools for people who do not have access to traditional financial services, young people in marginalized areas, or individuals affected by conflict or crisis. Yes, banks should serve their clients, but we must also consider those outside the system. ♦



## HANS DALBORG AWARD

### Ceremony & Presentations



L-R: Mustafa Nourallah (Mid Sweden University), Jacob Dalborg, and Alvin Chen (SHoF/SSE), May 8, 2025.

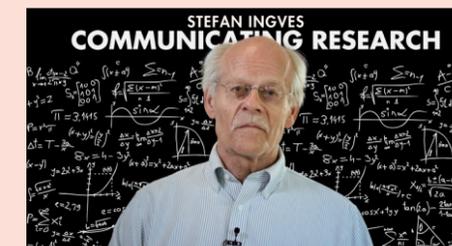
The recipients of this year's Hans Dalborg Award for Excellence in Research in Financial Economics are Alvin Chen, Resident Researcher at the Swedish House of Finance and Assistant Professor at the Stockholm School of Economics, and Mustafa Nourallah, Assistant Professor at Mid Sweden University.

# SHoF Video Interview Series

Each week, the Swedish House of Finance (SHoF) welcomes leading researchers from top universities to share their latest insights. A recurring theme this year was on the future of markets: how passive investing, technology, AI, and shifting investment behavior are reshaping finance and driving innovation.

## SPOTLIGHT

### The Power of Communication in Policy and Research with Stefan Ingves



Former Swedish Central Bank (Riksbank) governor and SHoF senior fellow Stefan Ingves discusses how in policymaking and research, ideas alone are not enough.

"The hardest thing when it comes to policy making is to communicate uncertainty."



### Is Passive Investing Quietly Rewriting the Rules of the Market?

Paul Huebner (SHoF/SSE) discusses how passive investment flows reshape asset prices, market volatility, and investor behavior.



### Does Passive Investing Put Market Efficiency at Risk?

Dimitri Vayanos (LSE) explains how the rise of passive funds can amplify demand for large firms, fueling bubbles and market inefficiencies.



### AI in Action: Unpacking Innovation and Market Dynamics

Anastassia Fedyk (UC Berkeley) explains how AI investment drives innovation and firm value, benefiting large firms with rich data while smaller ones lag behind.



### How Can Firms Retain Talent When Promotions Are Limited?

Alvin Chen (SHoF/SSE) explains how firms use performance-based pay to manage promotion risk when advancement opportunities are limited.



### Does Private Capital Cause Inequality?

Clara Martínez-Toledano (Imperial) shows how private market growth and tax breaks like the Qualified Small Business Stock exemption have widened U.S. wealth inequality.

Discover all SHoF video interviews on YouTube:



“A PhD is tough but rewarding.  
At SHoF, you’ll find world-class,  
supportive faculty.”

**READ MORE ON PAGE 61**

# Organization

**The Swedish House of Finance (SHoF) at the Stockholm School of Economics is Sweden's national research center in financial economics. It serves as an independent platform where academia, the private and public financial sector can exchange knowledge and gain access to a global network of leading researchers in finance.**



## **Research Team**

The international research team at the SHoF and the Department of Finance at the Stockholm School of Economics is one of the highest-ranked research teams in Europe according to the Olin Business School CFAR Ranking by Washington University in St. Louis.



## **Data Center**

Access to high-quality financial data for research purposes stimulates academic research and contributes to higher education. SHoF Research Data Center has a national mission to develop and distribute valuable datasets to the benefit of the academic community. By providing this data to researchers and students free of charge, SHoF Research Data Center lowers the barriers to empirical research.



## **National PhD Program and Academic Seminars**

The National PhD Program in Finance is open to all doctoral students in finance at Swedish universities and higher education institutions. It gives PhD students the opportunity to participate in top-quality graduate level courses in finance. Leading researchers from around the world are invited to discuss their latest work at weekly academic seminars.



## **Partners**

Funding is provided both by the Swedish government and the Swedish private financial sector. Our partners support independent, high-quality research in all areas of financial economics. SHoF collaborates with a range of academic institutions in Sweden and abroad. Our Swedish Academic Partner Program supports faculty recruiting and retention at finance departments and institutions in Sweden.

# Researchers

The Swedish House of Finance (SHoF) hosts resident researchers from the Stockholm School of Economics. In addition, many researchers from partner universities visit the center for a few days or up to several months, every year.



## ANDERS ANDERSON

Associate Professor, Stockholm School of Economics

Anderson's research focuses on **behavioral and consumer finance**, as well as trading behavior of individual and institutional investors. He is currently interested in the relationship between knowledge, confidence and choices, particularly in the area of **sustainable investment**.

*Read: Populism, Polarization and Green Investment*



## GUALTIERO AZZALINI

Assistant Professor, Stockholm School of Economics

Azzalini's research lies in the intersection of **macroeconomics** and **household finance**, with a focus on **income risk** and its consequences for agents' choices, **inequality**, and the macroeconomy.

*Read: Preference Heterogeneity and Portfolio Choices Over the Wealth Distribution*



## RAMIN BAGHAI

Professor, Stockholm School of Economics

Baghai's research focuses on **corporate finance**. His latest work explores how mergers affect the **mental health** of employees; how **credit ratings** are used in the delegated management of **fixed income assets** to limit risk taking; and whether the provision of **wage and employment insurance** by firms differs for men and women.

*Read: How Do Mergers Affect the Mental Health of Employees?*



## BO BECKER

Cevian Capital Professor of Finance, Stockholm School of Economics, and Director, SHoF

Becker's research is on **corporate finance**, especially **corporate credit markets**, **credit cycles** and **corporate governance**. Recent topics include how corporate debt contract features can improve investment efficiency, zombie lending to distressed borrowers in the Euro area, the design of delegated asset management in fixed income, and the optimal design of insolvency systems.

*Read: Disruption and Credit Markets*



## CLAS BERGSTRÖM

Professor Emeritus in Finance and Law, Stockholm School of Economics

Bergström's research areas include corporate finance, **corporate and securities law**.



## MARIEKE BOS

Docent and Deputy Director, Swedish House of Finance  
Professor of Finance, VU Amsterdam

Bos' research focuses on **household finance** and **empirical banking**, with current projects examining the impact of acquisitions on employee **mental health**, the economic effects of mental health diagnoses, intergenerational financial distress, and **consumer debt** resolution.

*Read: Impulsive Consumption and Financial Well-Being: Evidence from an Increase in the Availability of Alcohol*



## ALVIN CHEN

Assistant Professor, Stockholm School of Economics

Chen's research focuses on **finance and labor**, **corporate governance**, **sustainable investing**, and **financial markets**. His current research studies how broad-based equity pay compensation may encourage **employee engagement** despite the inherent free-rider problem faced by lower-level employees at large firms.

*Read: Encouraging Employee Engagement: The Role of Equity Pay*



## MAGNUS DAHLQUIST

Handelsbanken Professor of Finance, Stockholm School of Economics

Dahlquist's research interests lie in **asset management**, **asset pricing**, and **international finance**. He currently focuses on the **investment behavior** of individuals and institutions; **pension plan** design; **trading strategies** in the bond and currency markets; and **performance evaluation**.

*Read: Institutions' Return Expectations across Assets and Time*



## ADRIEN D'AVERNAS

Associate Professor, Stockholm School of Economics

D'Avernas' research explores financial markets and the macroeconomy, focusing on **financial intermediation**, **monetary policy**, and **digital money**. Recent work examines money market disruptions, Treasury bill shortages, and stablecoin stability.

*Read: The Central Bank's Balance Sheet and Treasury Market Disruptions*



## MEHRAN EBRAHIMIAN

Assistant Professor and Eva and Mats Qviberg Research Fellow, Stockholm School of Economics

Ebrahimi's research interests include **household finance**, **macro-finance**, and **human capital**. He uses empirical and theoretical approaches to study the impact of finance on the real economy, especially as it relates to **inequality**.

*Read: How Do Income-Driven Repayment Plans Benefit Student Debt Borrowers?*



## PETER ENGLUND

Professor Emeritus, Stockholm School of Economics

Englund's research areas include **real estate finance**, banking and **financial stability**. He is currently interested in taxation and other housing market policies as well as **macroprudential policy**.

*Read: Nordic Economic Policy Review 2021: Nordic Housing Markets and Policies*



**MARIASSUNTA GIANNETTI**

Katarina Martinson Professor of Finance, Stockholm School of Economics

Giannetti's research spans **production networks** and **trade credit**, intermediaries' organizational structures and fire sales, banking and monetary policy, financial integration, and **corporate governance** and **sustainability**.

*Read: Supply Chain Shortages, Large Firms' Market Power, and Inflation*



**ANASTASIA GIRSHINA**

Assistant Professor and Deputy Director of the Institute for Micro Data, Stockholm School of Economics

Girshina's research focuses on **household and real estate finance**, with recent work on how education and gender influence saving, portfolio choices, and wealth accumulation.

*Read: Why Women Earn Lower Real Estate Returns*



**BJÖRN HAGSTRÖMER**

Professor, Stockholm University

Hagströmer's main research interests are empirical market **microstructure** and empirical **asset pricing**. His current focuses include information revelation in **financial markets**, the causes, effects and measurement of liquidity, and **European capital markets**.

*Read: The Determinants of Limit Order Cancellations*



**MAGNUS HANSSON**

Assistant Professor, Stockholm University

Hansson's research interests center around **market microstructure**, **decentralized finance**, and **machine learning** applied within financial economics.

*Read: Price Discovery in Constant Product Markets*



**PAUL HUEBNER**

Assistant Professor, Stockholm School of Economics

Huebner's research focuses on **asset pricing** and **macro-finance**. He develops methods for jointly understanding asset prices and quantities and applies them to characterize institutional asset demand and its impact on asset prices and the broader economy.

*Read: Causal Inference for Asset Pricing*



**ALEXANDER LJUNGQVIST**

Professor, Stefan Persson Family Chair in Entrepreneurial Finance, Stockholm School of Economics

Ljungqvist's research spans **corporate finance**, **governance**, **taxation**, investment banking, IPOs, entrepreneurial finance, private equity, venture capital, **asset pricing**, **market microstructure**, **innovation**, and patents.

*Read: What is a Patent Worth? Evidence from the U.S. Patent 'Lottery'*



**GUSTAV MARTINSSON**

Professor, Stockholm University

Martinsson's research interests lie in **corporate finance**, climate and **sustainable finance** with a particular focus on **carbon pricing**.

*Read: The Effect of Carbon Pricing on Firm Emissions: Evidence from the Swedish CO2 Tax*



**DIOGO MENDES**

Assistant Professor, Stockholm School of Economics

Mendes' research focuses on **empirical corporate finance**, **financial economics**, and **development economics**, with current projects on financial information provision, and **financial literacy**.

*Read: Finance for All: Experimental Evidence of a Financial Literacy Program*



**MARCUS OPP**

Professor, Stockholm School of Economics

Opp's research focuses on **contract theory** and **financial intermediation**. His recent work, awarded the European Finance Association's 2020 Best Paper Prize in Responsible Finance, examines **socially responsible investment** and integrating **climate change** into financial regulation.

*Read: A Theory of Socially Responsible Investment*



**RICCARDO SABBATUCCI**

Associate Professor, Stockholm School of Economics

Sabbatucci's research is focused on **empirical asset pricing**. Lately, he has studied how **retirement plans** affect financial market dynamics and how high-frequency, firm-specific data can be used for **forecasting** purposes.

*Read: Shifting From Active to Passive: How Retirement Plans Impact Equity Prices*



**TOBIAS SICHERT**

Assistant Professor, Stockholm School of Economics

Sichert's research focuses on **asset pricing** and **financial econometrics**, using **machine learning** methods to explore option returns and their relationship to underlying stock returns.

*Read: Conditional Risk and the Pricing Kernel*



**PAOLO SODINI**

25th Anniversary Professor of Finance and Director of the Institute for Micro Data, Stockholm School of Economics

Sodini's research examines savings, **portfolio choices**, and **wealth inequality**. He studies the impact of homeownership on household decisions and gender bias in **real estate**, leveraging big data on Swedish finances.

*Read: Identifying the Benefits from Home Ownership: A Swedish Experiment*



**JAN STARMANS**

Associate Professor, Stockholm School of Economics

Starmans focuses on **climate finance**, **corporate finance**, and **law and finance**. He is currently examining how economic integration affects firms' climate insurance decisions and why businesses remain underinsured despite growing climate risks.

*Read: Insuring Climate Risks in Integrated Markets*



**PER STRÖMBERG**

SSE Centennial Professor of Finance and Private Equity, Stockholm School of Economics

Strömberg currently focuses his research on **private equity**, **angel investing**, and the effects of **carbon pricing** on firm behavior.

*Read: Carbon Pricing and Firm-Level CO<sub>2</sub> Abatement: Evidence from a Quarter of a Century-Long Panel*



**CHRISTIAN THOMANN**

Associate Professor, KTH Royal Institute of Technology

Thomann's current research interests lie in corporate responses to **carbon taxes**, **environmental policy** and technical change, **risk management** and insurance.

*Read: The Effect of Carbon Pricing on Firm Emissions: Evidence from the Swedish CO<sub>2</sub> Tax.*



**ROINE VESTMAN**

Professor, Stockholm University

Vestman's research interests focus on **households' and individuals' consumption, savings**, and housing choice and their **implications for the macroeconomy**. He also does research on the **design of pension plans**, and the functioning of the **mutual fund industry**.

*Read: Designing Pension Plans According to Consumption-Savings Theory*



**YE ZHANG**

Assistant Professor and Eva and Mats Qviberg Research Fellow, Stockholm School of Economics

Zhang's current research focuses on **sustainable finance** and **diversity** in the venture capital industry, as well as the rapid growth of accredited individual investors in **private markets**. She also studies bargaining in the housing and entrepreneurial finance markets. Much of her work employs field and lab-in-the-field experiments.

*Read: ESC Aversion: Experimental Evidence on Perceptions and Preferences*

**POSTDOCTORAL FELLOWS**



**MUSTAFA BULUT**

Swedish House of Finance



**ZOLTÁN RÁCZ**

Swedish House of Finance



**PAULA ROTH**

Swedish House of Finance

# Data Center

**The Swedish House of Finance's Research Data Center aims to develop and distribute valuable datasets for academics. Offering this data for free reduces barriers to empirical research for researchers and students.**

**Finbas**

A high-quality financial database containing daily end-of-day stock price data, corporate actions and fundamentals from the Nordic stock exchanges, MTFs and OTC markets. Data is available for Sweden since 1912, Norway since 1980, Denmark since 1993, and Finland since 1986.

**NASDAQ HFT**

NASDAQ HFT (High-frequency trading) database contains all messages (orders, cancellations, and trades) sent and received to the Stockholm Stock Exchange matching engine. All datasets are based on the NASDAQ Historical ITCH files.

**Serrano**

The Serrano Database compiles company-level financial history since 1997 and covers most legal forms in the Swedish business community.

**Nordic Compass**

Environmental, Social, and Governance data (ESG) information on 400+ publicly traded Nordic large and mid-cap companies since 2013. This data is collected from company reports and disclosures by a dedicated team, then organized and standardized. It includes ISIN codes and organization numbers, linking to other datasets.

**PAAtLink**

PAAtLink provides a file linking unique patent/trademark IDs with distinct organization IDs. The patent file covers all patents held by Swedish firms since 1990, sourced from Patstat, while organization numbers are pulled from the Serrano database. This pairing enables the connection of patent details with financial data for the corresponding patenting companies.

**Fama-French**

Factor The Fama-French three-factor model (market, size, value), developed by Eugene Fama and Kenneth French, improves on the traditional CAPM model by explaining a larger fraction of long-term expected return variations. This data set also includes the momentum factor proposed by Mark Carhart.

**Historical Archives**

The archives include: 1. Annual reports for companies listed at the Stockholm Stock Exchange from 1912 to 1978 2. Official stock lists from the Stockholm Stock Exchange from 1912 to 2007. 3. Weekly Swedish newspaper Affärsvärlden from 1901 to 2017 4. The annual publications of "Owners and Power in Sweden's Listed Companies" from 1985 to 2015.

**SHoF Fund Data Morningstar**

SHoF Fund Data Morningstar is a dataset containing detailed historical data of more than 9,000 investment funds that are available for sale in the Nordic countries, including Sweden, Norway, Denmark, Finland. The majority type of funds in the dataset are open-end mutual funds, but there are also a small fraction of ETFs, hedge funds, money market funds, and closed-end funds. The dataset is created based on fund data from Morningstar. The fund performance result is dating back to 1970.

# National PhD Program

The National PhD Program in Finance is designed to reinforce and complement PhD education in financial economics across Sweden. Within its national mandate, SHoF offers a set of courses, workshops, and research opportunities to PhD students enrolled at Swedish universities and higher education institutions.

**Core Courses:** Graduate-level courses covering the main areas of finance.

**Mini Courses:** Intensive courses in specialized areas of finance, typically taught by leading external experts. Open to all PhD candidates in financial economics at Swedish universities.

**PhD Visitor Program:** Opportunities for PhD students from other universities to visit SHoF, discuss their research with PhD students and faculty, and participate in research-related activities.

**National PhD Workshop in Finance:** An annual conference bringing together PhD students from across Sweden to present their research and receive feedback from faculty and peers.



14th National PhD Workshop in Finance: Ehsan Mahdikhani (SHoF/SSE) and Alexander Hübbert (Stockholm University) received the Ola Bengtsson Award for the best Finance PhD paper. Ye Zhang (SHoF/SSE) was also recognized for her excellent paper discussion. Pictured: Ehsan Mahdikhani, October 16, 2025.

## MINI COURSES TAUGHT IN 2025

### History of the Equity Premium Puzzle

With Rajnish Mehra, Arizona State University – September 18

This one-day mini-course traces the origins and evolution of the equity premium puzzle. The morning session covers the seminal 1985 paper by Mehra and Prescott and its implications. The afternoon explores subsequent research, highlighting major attempts to explain why observed equity returns so greatly exceed theoretical predictions.

### Continuous Time Finance

With Johan Walden, UC Berkeley, Haas School of Business – July 29–August 7

This course introduces continuous-time finance and stochastic calculus as applied to asset pricing. Topics include no-arbitrage theory, Brownian motion, Itô calculus, and partial differential equations. Applications range from the Black-Scholes formula to equilibrium models like the Lucas and Cox-Ingersoll-Ross economies, illustrating the foundations of modern financial engineering.

### Behavioral Finance

With Nicholas Barberis, Yale University – June 11–18

This course examines how psychology shapes financial decisions and markets. It covers foundational and contemporary work on beliefs, biases, and risk attitudes, with applications to asset pricing, investor behavior, and corporate finance. A central theme: behavioral insights are essential for understanding market fluctuations, bubbles, and investment dynamics.

### Topics in Financial Intermediation

With Manju Puri, Duke University – June 3–9

This course explores how financial intermediation is evolving. It begins with classic theories on banks, relationships, and information, then turns to recent issues like bank runs, FinTech, non-bank intermediaries, and digital currencies. Discussion centers on current research, policy challenges, and the shifting role of intermediaries in global finance.

# From Stockholm to Madrid and Leuven: SHoF Researchers Take on the Academic World

The Swedish House of Finance (SHoF) celebrates two new PhD graduates from the Stockholm School of Economics: Alessia Menichetti and Chunjie Wang. Menichetti shows how repeated online news drives market overreactions, while Wang proposes a simpler way to explain stock returns by examining entire firms. They now continue their academic careers at ESCP Business School in Madrid and KU Leuven.

This interview has been edited for brevity.

### What motivated you to focus on your area of research?

**AM:** My research has two key elements: retail investors and information. Retail investors are typically less sophisticated than professionals and often make suboptimal decisions. Collecting, understanding, and sharing the right information is essential but costly. I find studying these mistakes both fascinating and relevant today.

**CW:** I had many questions during my PhD, especially in asset pricing. While theories aim to describe markets precisely, many empirical anomalies remain. Since COVID, finance research has rapidly adopted computer science methods, giving young researchers like me the chance to revisit old questions with new tools. That's how my paper "Asset Pricing, Not Equity Pricing" began.

### How do you think your research contributes to current debates or challenges in finance?

**AM:** Rapid developments in ICT have transformed how we gather and share information. My research examines these changes. The decision-making environment of retail investors has also evolved—with mobile investing and rising inequality shaping behavior. These shifts make the topic rich for future research.

**CW:** Asset pricing aims to value all assets using shared principles, yet real-world models grow ever more complex. My work suggests such complexity may be unnecessary. If we identify the key drivers of cash flows, simpler models may suffice.



### What's one thing you know now that you wish you'd known at the start of your PhD?

**AM:** Asking for help isn't a weakness—it saves time.  
**CW:** The PhD can feel lonely. Feeling lost is normal. Don't be discouraged.

### What's next for you?

**AM:** I'll join ESCP as an Assistant Professor of Finance in September. I plan to expand my work on information and retail investors with more empirical analysis.

**CW:** I aim to refine my paper with stronger theoretical modeling and explore unstructured data to harmonize pricing across securities.

### How did being part of an international research environment shape your work?

**AM:** Exposure to diverse perspectives fosters critical thinking.

**CW:** Research thrives on idea exchange. Conversations across disciplines—even casual ones—can spark breakthroughs.

### What advice would you give to future PhD students?

**AM:** A PhD is tough but rewarding. At SHoF, you'll find world-class, supportive faculty.

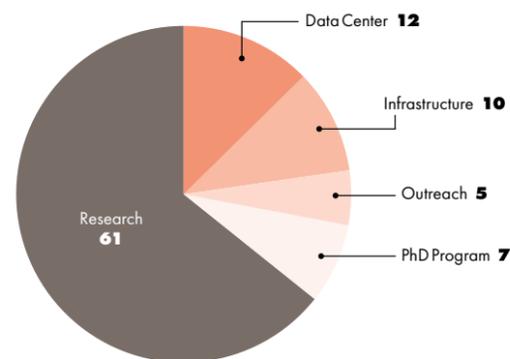
**CW:** The journey is long but fulfilling. SSE's finance department is strong, close-knit, and generous with mentorship and resources. ♦

# Center Financing

We are very grateful to all our partners for their financial support. Part of our success can be attributed to the fact that the Swedish House of Finance (SHoF) is recognized as an independent center of excellence. Mixed funding from government, research foundations and private industry allows for nonpartisan and unbiased research, which is equally important for the researchers themselves as well as those drawing on their competence.

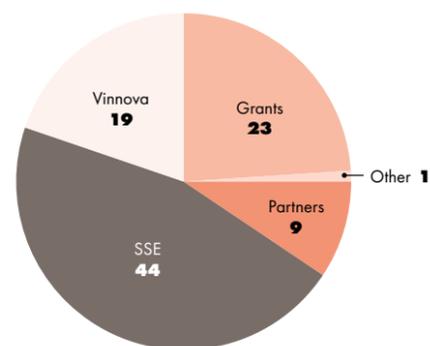
## Cost Distribution in 2025

Total costs in 2025 amounted to SEK 95.4 million, compared with SEK 96.9 million in 2024. The center's costs are organized across five areas of activity:



Note: Values are in MSEK

## Funding Distribution in 2025



Note: Values are in MSEK

**Research:** Salaries of researchers and funding for PhD students make up a significant part of research costs.

**Infrastructure:** The center aims to provide researchers with necessary research infrastructure, which is often difficult to fund through research grants alone. The core of these operations includes premises, management, and research administration.

**Data Center:** The Data Center has two principal tasks: (i) to develop national research databases in finance and an infrastructure which facilitates the work of researchers, and (ii) to provide researchers in Sweden with access to international databases in the field of finance.

**PhD Program:** The costs are related to the remuneration of teachers for doctoral courses and the reimbursement of expenses for course participants from Swedish universities and higher education institutions.

**Outreach:** Outreach activities are designed to bridge the gap between academia and practice by sharing research findings through conferences, seminars, press outreach, and social media.

# Disseminating research in 2025

33,181

YouTube views, extending SHoF research and events to a global audience

45%

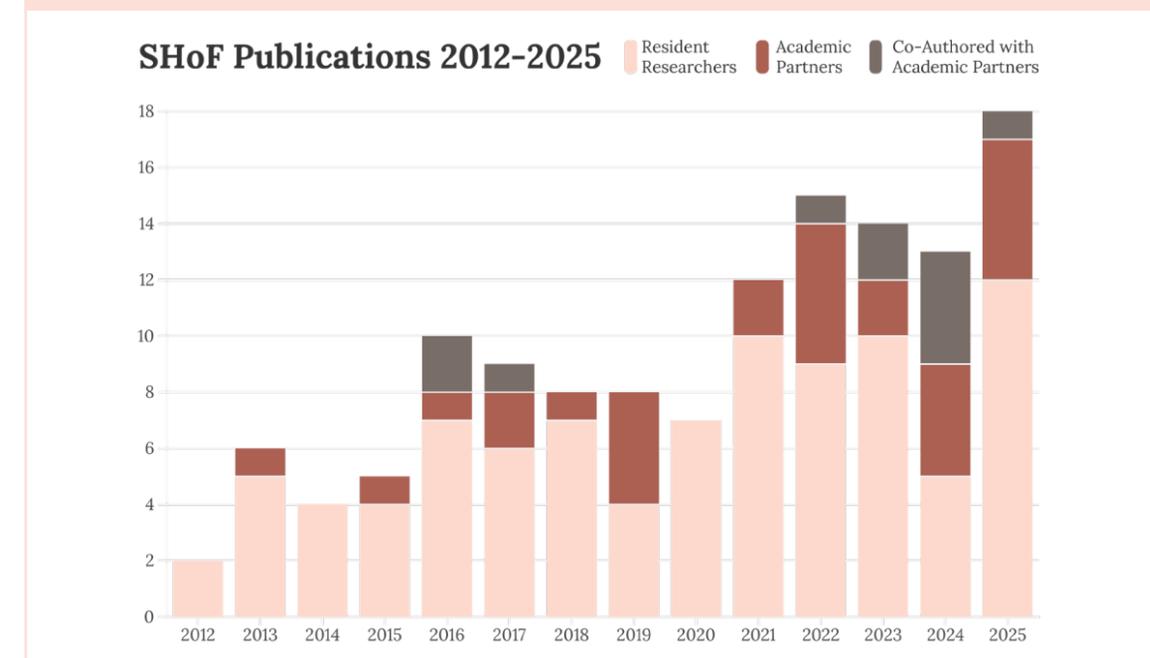
growth in overall news mentions and 50% growth in international media coverage

46%

women among SHoF event participants, up from 38% in 2024

18

publications by SHoF researchers, primarily in top-tier academic journals—a record high



18,002

downloads of Swedish House of Finance working papers on SSRN (Social Science Research Network)

369

new newsletter subscribers across academia, policy, and practice

1,500+

new organic LinkedIn followers, strengthening SHoF's digital reach

# Governance

## Board of Directors

The Board of Directors consists of representatives from the Swedish financial industry and Stockholm School of Economics.

NIKLAS EKVALL Chairman of the Board, Swedish House of Finance CEO, AP4	MARTIN BLÅVARG Executive Director Handelsbanken Research Foundations, Handelsbanken	KAROLINA EKHOLM Director General, Swedish National Debt Office
FREDRIK EKSTRÖM Chairman, Nasdaq Stockholm	URBAN FUNERED CEO, Swedish Securities Markets Association	KRISTIN MAGNUSSON BERNARD CEO, API
MARTIN PERSSON Head of Asset & Wealth Management, Nordea	MATTIAS PERSSON Chief Economist and Global Head of Macro Research, Swedbank	LARS STRANNEGÅRD President, Stockholm School of Economics
JOHN TURESSON Co-head of Corporate & Investment Banking, SEB	TORBJÖRN WINGÅRDH CFO, Stockholm School of Economics	

## Management Committee

The Management Committee plans, directs, and coordinates the activities at the Swedish House of Finance.

BO BECKER Director Head of Department of Finance, Stockholm School of Economics	MARIEKE BOS Deputy Director	MAGDALENA EMREUS Head of Outreach
GÖRAN ROBERTSSON Executive Director	HENRIK TALBORN Head of National Data Center	

## Scientific Advisory Board

The Scientific Advisory Board assists the management and the board with evaluating the academic activities of the Swedish House of Finance.

RENÉE ADAMS University of Oxford	DAVID ROBINSON Duke University	INGRID WERNER Ohio State University
-------------------------------------	-----------------------------------	----------------------------------------

## Advisory Board

The Advisory Board has a knowledge sharing mandate. The objective is to create a mutually beneficial knowledge exchange that drives research and development in the financial market. All our corporate partners are eligible to a seat on the Advisory Board.

ANNA-LENA AXBERGER Head of Country Management & Strategy, Danske Bank	GUSTAF BACKEMAR, Director Strategic Projects & Initiative, Triton	GUSTAV BARD Partner, Adelis Equity
CATHARINA BELFRAGE SAHLSTRAND Executive Chair, GoClimate Finance Fellow, Exponential Roadmap Initiative Ex-CSCO, Handelsbanken	ILINCA BENSON CEO, SNS	MARCUS BLOMBERG Head of Asset Management and CIO, Folksam
JAKOB CARLSSON CEO, Länsförsäkringar Liv	ERIKA ELIASSON EKBERGER Fintech Entrepreneur and Founder, Arith	TOMAS FLODÉN CEO, AMF
CHRISTOFFER FOLKEBO Senior Advisor, Warburg Pincus LLC, Board Member, C Worldwide Group, CEO, CAM 1 DK	URBAN FUNERED CEO, Swedish Securities Markets Association	MIKAEL HULDT Head of Asset Management, Afa
BJÖRN JANSSON Senior Partner, Carnegie	ANNA JEGNELL Director General, Ministry of Finance	JOAKIM KARLSSON Advisor, Nordic Capital
PETER LAGERLÖF CIO, Lannebo	PER LINDGREN Head of Asset Management, Skandia	KRISTIN MAGNUSSON BERNARD CEO, API
JOHAN MALM CEO and Board Member, Öhman Group	JAN STÅHLBERG Founder and CEO, Trill Impact	JONAS SYNNERGREN Senior Partner, Cevian
	GABRIEL URWITZ Founder and Chair, Segulah AB	

# Partners

## Academic



## Foundations and Donors

- Annika and Gabriel Urwitz Foundation
- Bertil Danielsson Foundation
- Eva and Mats Qviberg
- Hans Dalborg Foundation
- Jacob Palmstierna Foundation
- Jan Wallander and Tom Hedelius Foundation
- Johan and Jakob Söderberg Foundation
- Marianne and Marcus Wallenberg Foundation
- MISTRA
- Nasdaq Nordic Insamlingsstiftelse
- Nobelstiftelsen
- Riksbankens Jubileumsfond
- Stiftelsen för Finansforskning
- Stiftelsen Svenska Fondhandlarföreningens Understödsfond
- Tore Browaldh Foundation
- Torsten Söderberg Foundation

## Government



## Corporate



“

We thank our partners and friends for making the Swedish House of Finance a world-class institution. Your generous support of time, resources, and expertise makes our work possible. We welcome companies, organizations, public institutions, and private donors to join us in strengthening Sweden’s financial market through frontier research and fact-based dialogue.”

—BO BECKER, Director, Swedish House of Finance



SHoF researchers and staff at Finansloppet, September 4, 2025.

# SWEDISH HOUSE OF FINANCE



Bertil Ohlins gata 4, 113 50 Stockholm  
+46 8 736 91 00  
[info@houseoffinance.se](mailto:info@houseoffinance.se)