

**February 2026**

DNB Research Newsletter

## Research highlights

### **1. Estimating the natural rate of interest in a macro-finance yield curve model**

In a forthcoming article in the *Journal of Business & Economic Statistics*, Gavin Goy and his co-authors propose a new macro-finance model to reconcile the dual role of the natural rate of interest: as the benchmark real interest rate that closes the output gap and as the time-varying long-run real interest rate that determines the level of the yield curve. [Read more](#)

### **2. Who's on FIRE? Household characteristics and the formation of inflation expectations**

The DNB working paper by Gabriele Galati, Maarten van Rooij and co-authors studies how consumers form and revise inflation expectations using a unique, highly balanced monthly panel of Dutch households. The paper documents substantial differences across consumers and shows that many households rely on simple heuristics. Only a very small group of respondents, primarily highly educated and wealthy men, forms expectations in a way consistent with rational expectations. [Read more](#)

### **3. An econometric investigation on the stability of stablecoins: Are these coins stable or is their stability just a flip of the coin?**

Forthcoming in the *Journal of Financial Market Infrastructures*, this paper by Lala AlAsadi, Ronald Heijmans and co-authors examines the stability of major USD-backed stablecoins (USDT, USDC, DAI, and TUSD). The authors find that, while stablecoins generally maintain their pegs and absorb volatility under normal conditions, their behaviour diverges under stress. Smaller stablecoins show temporary deviations, and systemic connectedness spikes during crises. Stablecoins can therefore transmit financial stress when confidence falters. The paper recommends tailored regulation, enhanced monitoring, and stronger global coordination to mitigate systemic risks. [Read more](#)

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#### 4. Macroprudential policy, household credit and house prices

In a recent DNB working paper, Francesco Caloia, Mauro Mastrogiacomo and co-authors investigate how changes in credit availability influence house prices in the Netherlands. They show that a relaxation of lending standards leads to higher transaction prices, higher shares and amounts of overbidding, and lower sale times in the housing market. This highlights how borrower-based measures contain systemic risk not only by limiting household leverage, but also by curbing house price growth over the cycle. [Read more](#)

#### 5. PhD defense Flavio De Carolis

On December 15, Flavio defended his PhD thesis *"Let's get physical: How floods and storms affect asset prices and capital structures"* at Maastricht University. Flavio is currently a research fellow at the DNB's Statistics division. [Read more](#)

Publications (since September 2025)

#### Working Papers

##### [853 - Optimal Conventional and Unconventional Monetary Policy Mix](#)

Sami Alpanda, Serdar Kabaca, Kostas Mavromatis

##### [852 - Who's on FIRE? Household characteristics and the formation of inflation expectations](#)

Lovisa Reiche, Gabriele Galati, Richhild Moessner, Maarten van Rooij

##### [851 - Who manages the household purse? Factors shaping payment task allocation between partners and its implications](#)

Carin van der Cruijssen, Dörthe Kunkel, Rick Nijkamp

##### [850 - Predictability of Monetary Policy Surprises and Euro Area Macroeconomic Dynamics](#)

David Worms

##### [849 - From Silent Generation to Gen Z: Who Appreciates a Social and Sustainable Bank Most?](#)

Nicole Jonker, Bo Beeker, Hans Brits

##### [848 - The cost of closure: the relation between the presence of bank branches and trust](#)

Marie-Claire Broekhoff, Carin van der Cruijssen

##### [847 - The Role of Ambiguity in the Monetary Policy Transmissions: Evidence from the European Repo Market](#)

Natalie Kessler, Poramapa Poonpakdee

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[846 - An econometric investigation on the stability of stablecoins: Are these coins stable or is their stability just a flip of the coin?](#)

Lala AlAsadi, Oluwasegun Bewaji, Aayush Gugnani, Tarush Gupta, Ronald Heijmans

[845 - Floods and homeowners' financial resilience: Survey-based evidence from the Netherlands](#)

Dorien de Leeuw, David-Jan Jansen

[844 - Fiscal Drag in Theory and in Practice: a European Perspective](#)

Esteban García-Miralles et al

[843 - How do rising temperatures affect inflation expectations?](#)

Dimitris Georgarakos, Geoff Kenny, Justus Meyer, Maarten van Rooij

[842 - Macroprudential Policy, Household Credit and House Prices](#)

Francesco Caloia, Madi Mangan, Mauro Mastrogiacomo

[Local institutional ownership and price discovery around extreme weather events](#)

Rob Bauer, Dirk Broeders, Flavio De Carolis

ECB Working Paper Series No 3069

[The fiscal sources of euro area inflation through the lens of the Bernanke-Blanchard model](#)

Dennis Bonam, Mariana Montserrat Cerra Pacheco, Cristina Checherita-Westphal

ECB Working Paper Series No 3153

## **DNB Analyses**

[Reflectie op de doelmatigheid en mogelijke gevolgen van directe regulering van spaarrentes](#)

Nils Brouwer, Bram Thomassen

[Risico's voor financiële instellingen door de blootstelling aan techaandelen](#)

Loes van der Jagt

[Overstromingen en financiële stabiliteit: De impact van zeespiegelstijging](#)

Francesco Caloia, David-Jan Jansen, Emma Kasteleyn

## **Published journal articles**

[Rational disclosure or privacy paradox? Consumer data-sharing in financial app ecosystems](#)

Nicole Jonker, Hans Brits

Electronic Markets, 35, 103(2025)

[Green Transition in the Euro Area: domestic and global factors](#)

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Kostas Mavromatis, Pablo Garcia, Pascal Jacquinot, Crt Lenercic, Niki Papapodopolou and Edgar Silgado-Gomez  
European Economic Review, Volume 182

[Fearless woman: Financial literacy, confidence, and stock market participation](#)

Tabea Bucher-Koenen, Rob Alessie, Annamaria Lusardi and Maarten van Rooij  
Management Science, 71(9), 7414–7430.

[Debiasing training reduces confirmation bias in national risk analysts](#)

Bas Heerma van Voss, Haewon Yoon, Irene Scopelliti, Rowena Zweet, Ira Helsloot, Carey K. Morewedge  
Scientific Reports 15 (42529)

[The euro area carbon bond premium](#)

Marleen de Jonge, Dirk Broeders, David Rijsbergen  
The European Journal of Finance, 1–31

[Walk the green talk? A textual analysis of pension funds' disclosures of sustainable investing](#)

Rob Bauer, Dirk Broeders, Annick van Ool  
Journal of Pension Economics and Finance. 2025;24(2):297-325

**Forthcoming journal articles**

[Estimating the Natural Rate of Interest in a Macro-Finance Yield Curve Model](#)

Claus Brand, Gavin Goy, Wolfgang Lemke  
Journal of Business and Economic Statistics

[Forecasting Dutch inflation using machine learning methods](#)

Robert-Paul Berben, Rajni Rasiawan, Jasper de Winter  
International Journal of Central Banking

[Reactions of household inflation expectations to a symmetric inflation target and high inflation](#)

Gabriele Galati, Richhild Moessner and Maarten van Rooij  
Oxford Bulletin of Economics and Statistics

**Published books/articles in Books**

[Trust in financial institutions and central banks](#)

Carin van der Cruijssen and Anna Samarina  
In: Elgar Encyclopedia of Public Choice

For a complete list of publications, see our [website](#).

**Other publications**

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[When ownership changes, their banks change too: How acquisitions reshape corporate bank relationships in Europe](#)

Steven Poelhekke, Razvan Vlahu, Vadym Volosovych  
SUERF Policy Brief No 1343

[Commitment vs Credibility: Macroeconomic Effects of Climate Policy Uncertainty](#)

Fulvia Marotta, Maria Sole Pagliari, Jasper de Winter  
SUERF Policy Brief No 1268

[Wie beheert de huishoudkas?](#)

Carin van der Cruijssen, Dörthe Kunkel and Rick Nijkamp  
Wijzer in geldzaken and De Nederlandsche Bank

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## Research seminars

### Past

**16 October 2025:** Banking in the Presence of Climate Risk

Natalya Martynova (Deutsche Bundesbank)

**23 October 2025:** Fire sales of safe assets

Gabor Pinter (BIS)

**30 October 2025:** Beyond Multipliers: Distributional Income Effects of Government Spending in the Euro Area

Alexander Kriwoluzky (BIW Berlin)

**20 November 2025:** Inflation and Floating-Rate Loans: Evidence from the Euro-Area

Glenn Schepens (European Central Bank)

**27 November 2025:** Updating Beliefs About the Macroeconomic Steady State

Lena Draeger (University of Hannover/Kiel Institute)

**04 December 2025:** Banks regulatory risk tolerance

Nikola Tarsahev (BIS)

**11 December 2025:** Socially Responsible Investing in the Political Context

Marco Ceccarelli (Vrije Universiteit Amsterdam)

**18 December 2025:** Scenario Synthesis and Macroeconomic Risk

Matteo Luciani, (Federal Reserve Board)

**19 January 2026:** Unequal Decoupling

Federica Romei (University of Oxford)

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## **Forthcoming**

**29 January 2026:** The (In)finite Money Glitch

Co-Pierre Georg (Frankfurt School of Finance and Management)

**02 February 2026:** The impact of central bank backstops on sovereign risk premia: Evidence from the ECB's Transmission Protection Instrument

Bernd Schwaab (European Central Bank)

**05 February 2026:** Global Banks' Macroeconomic Expectations and Credit Supply

Steven Ongena (University of Zurich)

**09 February 2026:** The Monetary Dynamics of Hyperinflation Reconsidered

Luca Benati (University of Bern)

**12 February 2026:** Identifying Non-Gaussian Structural Shocks

Filippo Ferroni (University of Bologna)

**19 February 2026:** TBA

Rogier Quaedvlieg (ABN Amro)

**26 February 2026:** TBA

Peter Karadi (European Central Bank)

**05 March 2026:** TBA

Michele Lenza (European Central Bank)

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## Conferences

**[9-10 April, 2026](#) DNB Retail Payments Research Conference 2026: "Future-proof payments: innovative, resilient and inclusive"**

The payment world is evolving rapidly. Staying up-to-date with the latest knowledge is vital, and sharing research findings is crucial to maintaining a safe, reliable, accessible, and efficient payment system. The upcoming DNB Retail Payments Research Conference offers an excellent opportunity for central bankers, economists, and policymakers to share their knowledge and ideas.

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## Research highlights, details

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## **1. Estimating the natural rate of interest in a macro-finance yield curve model**

The natural rate of interest,  $r^*$ , plays a dual macro-finance role: as the benchmark real interest rate that closes the output gap and as the time-varying long-run real interest rate that determines the level of the yield curve. Yet the literature has typically addressed its macro and finance roles separately. In their new paper, Gavin Goy, Claus Brand and Wolfgang Lemke developed a novel macro-finance model where they jointly estimate the equilibrium real interest rate, trend inflation, interest rate expectations and bond risk premia for the United States. Their results show that both macro and financial information are relevant to make inference for  $r^*$ .

### **Read more?**

See Journal of Business & Economic Statistics, [Estimating the Natural Rate of Interest in a Macro-Finance Yield Curve Model](#), by Claus Brand, Gavin Goy and Wolfgang Lemke.

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## **2. Who's on FIRE? Household characteristics and the formation of inflation expectations**

The authors study how consumers form and revise inflation expectations using a unique, highly balanced monthly panel of Dutch households. They develop a Bayesian framework that nests Full-Information Rational Expectations together with common forecasting heuristics and test it by recovering person-specific belief-updating rules from individual time-series regressions.

This individual-level approach reveals substantial heterogeneity in how households process information over time. On average, consumers systematically overreact to current inflation, in line with patterns found for professional forecasters. Only 2.5 percent of respondents, predominantly wealthier and more educated men, behave in a way that is consistent with Full-Information Rational Expectations. Most consumers rely on simple heuristics, particularly adaptive expectations.

The results show that heuristic learning, rather than Full-Information Rational Expectations, characterizes expectation formation for majority of households. Heterogeneity in belief updating is both large and systematic.

### **Read more?**

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See DNB Working Paper 852, [Who's on FIRE? Household characteristics and the formation of inflation expectations](#), by Lovisa Reiche, Gabriele Galati, Richhild Moessner, Maarten van Rooij

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### **3. An econometric investigation on the stability of stablecoins: Are these coins stable or is their stability just a flip of the coin?**

This paper analyses the stability and systemic relevance of major USD-backed stablecoins (USDT, USDC, DAI, and TUSD), using data from 2020 to 2023. Stablecoins are designed to maintain a fixed value, typically pegged to the US dollar, and have become central to cryptoasset markets. Despite their intended stability, their resilience depends heavily on reserve quality, redemption mechanisms, and market confidence. The study investigates: (1) how stablecoins respond to macro-financial shocks, and (2) how interconnected they are with broader financial markets. Results suggest heterogeneous reactions to shocks such as spikes in volatility, interest rate changes, and Bitcoin price drops.

USDC and TUSD exhibit short-lived but noticeable deviations from their \$1 peg following shocks, while DAI responds mildly. USDT, the largest and most liquid stablecoin, remains largely unaffected. All stablecoins revert to their peg within days, suggesting that stablecoins act as volatility absorbers rather than amplifiers. During calm periods, stablecoins behave largely as isolated markets, receiving volatility from other assets but not transmitting it. However, during major stress events, such as the COVID-19 market turmoil in March 2020, the connectedness index spikes sharply. Stablecoins can become channels of contagion when confidence in their reserves or redemption mechanisms is shaken. Thus, stablecoins are stable in normal times but can transmit stress in crises. The authors recommend tailored regulation, enhanced monitoring, and stronger global coordination to mitigate systemic risks. With appropriate safeguards, stablecoins can support financial innovation without becoming sources of instability.

#### **Read more?**

See DNB Working Paper 846, [An econometric investigation on the stability of stablecoins: Are these coins stable or is their stability just a flip of the coin?](#), by Lala AlAsadi, Oluwasegun Bewaji, Aayush Gugnani, Tarush Gupta, Ronald Heijmans

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#### 4. Macroprudential policy, household credit and house prices

This paper combines data on the universe of Dutch housing transactions with individual tax records of homebuyers to investigate the relation between borrowing capacity, household leverage, and house prices. Using an identification strategy based on exogenous shifts in borrowing capacity, the study shows how a relaxation of lending standards leads to higher transaction prices, higher shares and amounts of overbidding transactions, and lower sale times in the housing market. This effect is more pronounced in locations with tight housing supply, among liquidity-constrained but credit-unconstrained buyers, and for more expensive properties. The key policy implication is that macroprudential borrower-based measures contain systemic risk not only by reducing household leverage, but also by curbing house price growth over the cycle. Conversely, this suggests that relaxing such measures may exacerbate - rather than attenuate – the affordability issue in the housing market.

##### Read more?

See DNB Working Paper 842, [Macroprudential Policy, Household Credit and House Prices](#), by Francesco Caloia, Madi Mangan, Mauro Mastrogiacomo.

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#### 5. PhD defense Flavio De Carolis

In December 2025 Flavio successfully defended his PhD thesis “Let’s get physical: How floods and storms affect asset prices and capital structures.”.



*What are the main findings?*

My research shows that acute physical climate risks have economically meaningful effects on asset prices, investor behavior, and firms’ real outcomes. Price reactions depend strongly on information frictions and market segmentation:

local investors process climate shocks more efficiently, foreign investors adjust portfolios heterogeneously, and firms’ financial structures, as leverage and debt maturity, critically shape resilience to floods and storms.

*How does this relate to DNB policy?*

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These findings are directly relevant for DNB's financial stability mandate. They show how physical climate risk can lead to abrupt asset repricing, heterogeneous investor responses, and amplification through leverage and information gaps. This supports DNB's emphasis on improving climate data, disclosure, stress testing, and the integration of physical risks into supervisory and macroprudential frameworks.

*What are you going to do next?*

I currently work as a postdoctoral researcher at the Geneva Finance Research Institute and I am a visiting researcher at DNB. I will continue to conduct applied research at the intersection of climate finance and policy. Going forward, I aim to strengthen my collaboration with central banks. I am expanding my research to study how geopolitical tensions and climate risks jointly affect capital allocation, asset prices, and financial stability in segmented global markets.

**Read more?**

See Flavio's PhD Thesis [complete text](#).

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