October 2026

DNB Research Newsletter

Research highlights

1. Floods and financial stability: Scenario-based evidence from below sea level

How could floods affect financial stability? Considering increasingly frequent extreme weather events, policymakers need appropriate tools to assess potential financial vulnerabilities. In a recently published article in the Journal of Financial Stability, Francesco Caloia, Kees van Ginkel, and David-Jan Jansen study one possible transmission channel, linking flood-related property damage to credit risk, and illustrate how scenario analysis can help inform the wider policy debate.

Read more

2. Do markets dream of artificial intelligence? Macroeconomic effects and international spillovers of AI news shocks

How does news about artificial intelligence affect the wider economy? A recent DNB working paper by Maria Sole Pagliari develops a financial-market-based measure of AI news and traces its effects in the United States and the euro area using a Bayesian VAR model. In the US, positive AI news is followed by an early rise in investment demand, while broader activity responds more gradually and price pressures build from producer to consumer prices. The effects also spread through production networks and across borders: In the euro area, financial markets, the exchange rate and external price pressures adjust before domestic real activity strengthens. Read more

3. Hidden by complexity? Measuring stablecoin, crypto and decentralised finance ecosystems

This DNB working paper by Timothy Aerts, Ronald Heijmans, Jan Paulick, and Violeta Vuletic examines how blockchain design and technical implementation affect the measurement of cryptoasset and decentralized finance (DeFi) activity. Using granular data from Bitcoin, Ethereum and Tron, the authors show that widely used indicators depend heavily on methodological choices, making on-chain metrics imperfect proxies for economic activity. Read more

4. The anatomy of transmission: Pass-through of market rates to bank deposit rates in the euro area

In this DNB working paper, Jan Kakes and Anna Samarina analyse the pass-through of market interest rates to bank deposit rates in the euro area. Using bank-level data for 2007–2025, they apply local projections and an error-correction model. The empirical results show that pass-through is nearly complete for term deposits, but very limited for demand deposits, and generally more pronounced for corporate clients than for households. Read more

5. PhD defence Daniel Schmidt



On October 8, Daniel defended his PhD thesis “Household heterogeneity and financial decision-making: Three essays on housing, risk, and retirement” at the University of Amsterdam. Daniel is currently a research economist at DNB’s Economic Policy and Research division. Read more

Publications (since June 2026)

Working Papers

874 - Bidding with Confidence: The Effect of Financial and Economic Beliefs on Housing Markets
Arjan de Leuw, Marc Franck, Dorinth van Dijk

873 - Consumer multi-banking and bank cross-selling of financial services
Wilko Bolt, Nicole Jonker

872 - US monetary policy spillovers through global commercial real estate
Dennis Bonam, Dorinth van Dijk, Gavin Goy, Bing Zhu

871 - Do markets dream of Artificial Intelligence? Macroeconomic effects and international spillovers of AI news shocks
Maria Sole Pagliari

870 - Hidden by complexity? Measuring stablecoin, crypto and decentralised finance ecosystems
Timothy Aerts, Ronald Heijmans, Violeta Vuletic, Jan Paulick

869 - Are households ready to weather a digital storm in retail payments? Evidence from the Netherlands
Carin van der Cruijsen, Nicole Jonker

868 - Systemic at Home: the Persistence of a Too-Big-to-Fail Premium in Europe
Laura Deen, Daniel Dimitov

867 - ESG Disclosure and Green Investment in the EU
Anouk Levels

866 - The Macroeconomic Consequences of Green and Brown Government Spending
Fulvia Marotta, Giorgio Rossetto, Lennard Schlattmann

865 - The anatomy of transmission: pass-through of market rates to bank deposit rates in the euro area
Jan Kakes, Anna Samarina

864 - Bank valuation and macroprudential capital buffers
Eric Cuijpers

863 - Energy and Monetary Policy in the Euro Area
Alice Albonico, Guido Ascari, Qazi Haque, Kostas Mavromatis, Andra Smadu

DNB Analyses

Monetary policy and Inequality: Model Assessment and Literature Review
Timo Haber, Inge Klaver, Stefan Wöhrmüller

Private assets and financial stability: the role of Dutch insurers and pension funds
Ralph Verhoeks, Annick van Ool, Anna Thoolen, Daniel Dimitrov

Can banks finance the EU's strategic priorities?
Guus Brouwer, Kenny Martens, Jan Kakes, Marloes van Schaik, Bram Thomassen

Uncertainty and the transmission of monetary policy in the euro area
Maria Sole Pagliari, Minke van der Heijden

Voldoende vraag, tekort aan kapitaal: Wie gaat de nieuwbouw van huurwoningen financieren?
Niek de Meijier, Daniel Schmidt, Gerard Eijsink, Gerbert Hebbink, Dorinth van Dijk

Published journal articles

Reactions of household inflation expectations to a symmetric inflation target and high inflation
Gabriele Galati, Richhild Moessner, Maarten van Rooij
Oxford Bulletin of Economics and Statistics, 88(5), 982–993.

Floods and financial stability: Scenario-based evidence from below sea level
Francesco Caloia, Kees van Ginkel, David-Jan Jansen
Journal of Financial Stability, 84, 101545

Floods and Homeowners' Financial Resilience: Survey-Based Evidence from the Netherlands
Dorien de Leeuw, David-Jan Jansen
De Economist, 174, 211–226

Fiscal policy and inflation in the Euro Area
Guido Ascari, Dennis Bonam, Lorenzo Mori, Andra Smadu
Journal of International Economics, 162, 104281

The euro as an institutionally diverse monetary union
Enrico Perotti, Oscar Soons
European Journal of Political Economy 93, 102797

Other publications

Better involved in payments with the household purse than sorry
Carin van der Cruijsen, Dörthe Kunkel, Rick Nijkamp
SUERF Policy Brief No. 1533

Lagere olieafhankelijkheid beperkt economische schok
Jan Willem van den End, Laura Lehtonen, Rixt Swierstra
Economisch Statistische Berichten 111(4860), 396-397, 31 July 2026

Werknemers lopen voor op werkgevers bij AI-gebruik
Frank van Moock, Maarten van Rooij
Economisch Statistische Berichten, 21 August 2026

Concerten van Harry Styles wakkerden inflatie aan
Daniëlle Hooijenga, Íde Kearney
Economisch Statistische Berichten, 14 October 2026

Mondiale hitteschokken leiden tot hogere prijzen
Dennis Bonam, Fulvia Marotta
Economisch Statistische Berichten, 20 October 2026

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Research seminars

Past

02 July 2026: Beyond the Short Run: Monetary Policy and Innovation Investment

Michaela Elfsbacka-Schmöller (European Central Bank)

09 July 2026: Credit Cycles and Creditor Rights

Martin Kornejew (Bocconi University)

03 September 2026: Macroeconomics of Mental Health

Job Boerma (University of Wisconsin-Madison)

10 September 2026: People's understanding of macroeconomic shocks

Jessica Piccolo (University of Padova)

17 September 2026: Probabilistic Forecasting with Time Series Foundation Models: a Central Banker perspective

Marta Banbura (European Central Bank)

24 September 2026: The Housing Cost Channel: Search Frictions and Rent

Rachel Ngai (LSE)

08 October 2026: Can LLMs Mimic Household Surveys? From Representative Agents to Population Distributions

Ami Dalloul (University of Duisburg-Essen)

15 October 2026: The Housing Ladder

Matthijs Korevaar (Erasmus University)

22 October 2026: Mortgage Credit Expansion, Housing Transactions, and Local Consumption

Neeltje van Horen (University of Amsterdam)

Forthcoming

29 October 2026: Climate insurance protection gap: competitiveness, fiscal and financial stability implications for Europe

Irene Monasterolo (Utrecht University)

19 November 2026: TBA

Lena Draeger (University of Hannover/Kiel Institute)

26 November 2026: TBA

Evi Pappa (UC3M)

03 December 2026: TBA

Jean-Paul Renne (HEC Lausanne)

10 December 2026: TBA

Urszula Szczerbowicz (SKEMA, Paris)

17 December 2026: TBA

Geert Mesters (NY Fed)

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Events and Conferences

10-11 November 2026 – Shocks, inequality, and trade-offs: Monetary policy in a heterogeneous economy (29th DNB Annual Research Conference)

The final program is ready and registration is now open (until 1 November).

16-17 December 2026 – 5th Xamsterdam Macroeconomic workshop

Call for papers closes 24 October

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Research highlights, details

1. Floods and financial stability: Scenario-based evidence from below sea level

Extreme weather risks are receiving growing attention from financial authorities. In this paper, we examine whether flood events could affect the financial system through a credit risk channel. Using data on nearly €650 billion in real estate exposures and 38 adverse flood scenarios, we estimate how flood-related property damage may translate into credit risk for lenders.

Our results suggest that the direct impact on bank capital remains contained in most scenarios. At the same time, the analysis focuses on only one transmission channel: losses associated with damage to pledged real estate. There are still several open questions for both research and policy. How should wider economic disruptions be incorporated into financial stability analysis? How may increasing flood risks affect insurance markets, property values and lending behavior? And how can financial institutions and authorities best prepare for a changing climate? Our paper provides a starting point for addressing these questions.

Read more?

See Journal of Financial Stability, Floods and financial stability: Scenario-based evidence from below sea level, by Francesco Caloia, Kees van Ginkel, and David-Jan Jansen.

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2. Do markets dream of artificial intelligence? Macroeconomic effects and international spillovers of AI news shocks

Measuring these macroeconomic effects is difficult because expectations about AI may change well before the technology shows up in productivity or output data. To identify AI news shocks directly from financial markets, a daily equity factor is constructed based on the relative performance of firms with high versus low exposure to AI. This is combined with a Bayesian VAR using sign, magnitude and narrative restrictions around major AI-related announcements. The identification is validated against a chronology of innovation, adoption and policy events and, at higher frequency, using one-minute market data around OpenAI's GPT-4o announcement. The resulting daily AI news shocks are then aggregated to monthly frequency and used in Bayesian smooth local projections to trace their effects on the US and euro area economies.

The results point to a gradual transition from expectations to adoption. In the United States, positive AI news is followed by an early and persistent increase in capital-goods orders, while broader activity responds more slowly. Producer prices rise before consumer prices, suggesting that investment and demand for complementary inputs create resource pressures before the wider productive benefits of AI materialise. Sectoral evidence shows that the effects are initially concentrated in industries more closely connected to the AI production network and subsequently spread to the broader economy. The shock also generates sizeable spillovers to the euro area: equity prices rise, the euro depreciates and import and energy prices increase before domestic real activity strengthens. Inflation expectations and nominal rates also rise. The findings therefore highlight a policy-relevant timing mismatch: financial and inflationary spillovers can arrive quickly, while the productive gains from AI adoption take longer to materialise.

Read more?

See DNB Working Paper 871, Do markets dream of artificial intelligence? Macroeconomic effects and international spillovers of AI news shocks, by Maria Sole Pagliari.

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3. Hidden by complexity? Measuring stablecoin, crypto and decentralised finance ecosystems

Despite the transparency of public blockchains, deriving meaningful economic insights from on-chain data is far from straightforward. This paper identifies three structural measurement challenges that affect widely used indicators of cryptoasset and DeFi activity. First, Bitcoin's transaction architecture can substantially distort measures of transaction volumes and market capitalisation depending on how change outputs, lost coins and valuation methods are treated. Second, Ethereum's programmable smart-contract environment generates millions of contracts and tokens, making it difficult to distinguish economically relevant activity from technical noise and spurious deployments. Third, stablecoins issued across multiple blockchains can serve very different economic functions, complicating cross-chain comparisons. Using data from Bitcoin, Ethereum and Tron, the authors demonstrate that commonly used on-chain indicators are highly sensitive to methodological assumptions. The findings highlight the need for transparent, bounded and classification-based measurement approaches and suggest that blockchain indicators should be interpreted as informed estimates rather than direct measures of economic activity.

Read more?

See DNB Working Paper 870 or BIS Working Paper 1377, Hidden by complexity? Measuring stablecoin, crypto and decentralised finance ecosystems by Timothy Aerts, Ronald Heijmans, Jan Paulick, and Violeta Vuletic.

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4. The anatomy of transmission: pass-through of market rates to bank deposit rates in the euro area

In addition to heterogeneity in the pass-through depending on deposit and client types, the empirical results show that pass-through is significantly lower in the low-interest rate environment. Furthermore, pass-through is lower in more concentrated banking markets. Deposit rates are also stickier at banks with larger liquidity buffers, stronger capital positions, and greater reliance on deposit funding. For household demand deposits, pass-through is stronger when customers switch banks more often and payment account fees are higher. This is consistent with a "deposit franchise": banks keep deposit rates sticky to offset the fixed costs of providing payment services.

The findings have several policy implications. For monetary policy, transmission is asymmetric and weaker in a low-interest-rate environment, underscoring the need for complementary tools. Reforms that enhance banking competition and lower switching costs could also strengthen pass-through.

Read more?

See DNB Working Paper 865, The anatomy of transmission: pass-through of market rates to bank deposit rates in the euro area, by Jan Kakes and Anna Samarina.

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5. PhD defence Daniel Schmidt

On October 8, Daniel successfully defended his PhD thesis “Household heterogeneity and financial decision-making: Three essays on housing, risk, and retirement”.

What are the main findings?

My thesis studies three different decisions: whether to move house, when to retire, and whether to insure against floods. In each case, choices depend on income, wealth, age, and public policy. Across all chapters, heterogeneous-agent models prove useful for understanding household financial decisions and evaluating policy reforms.

How does this relate to DNB policy?

The chapter on property taxation is most relevant for DNB's advisory role. I find that replacing the Dutch property transfer tax with a recurring property tax increases residential mobility and improves welfare. The other chapters focus on the US, so their policy implications are not directly applicable to the Netherlands.

What are you going to do next?

I joined DNB's Economic Policy and Research division, where I focus on the housing market. The project I am most excited about looks at different ways of reducing fiscal subsidies for homeowners. Much of what I learned during my PhD applies directly to this work.

Read more?

See Daniel's PhD thesis.

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