

December 2023

DNB Research Newsletter

Research highlights

1. Macroeconomic reversal rate in a low interest rate environment

In a paper accepted for publication in the International Journal of Central Banking, Jan Willem van den End, Paul Konietschke, Anna Samarina, and Irina Stanga examine nonlinearities in the monetary policy transmission mechanism in the euro area. They study whether the effects of monetary policy shocks on different components of aggregate demand change once the economy is in a low interest rate environment. This change is associated with the macroeconomic reversal rate. [Read more.](#)

2. Frictions in scaling up central bank balance sheet policies: How Eurosystem asset purchases impact the repo market

In a forthcoming article in the Journal of Banking & Finance, Tomas Carrera de Souza and Tom Hudepohl explore the influence of the Eurosystem's asset purchase programme on the money market. More specifically, they consider how repo interest rates are affected in a regime marked by a substantial central bank footprint on bond markets. [Read more.](#)

3. The CO2 content of the TLTRO III scheme and its greening

In a recent DNB working paper, Chiara Colesanti Senni, Maria Sole Pagliari and Jens van 't Klooster assess the carbon footprint of the ECB's TLTRO III programme and discuss the effectiveness of a "green" credit easing scheme in the euro area. [Read more.](#)

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

In a recent DNB working paper, Francesco Caloia, Kees van Ginkel and David-Jan Jansen study how floods can impact financial stability via credit risk. Using geocoded data for 650 billion real estate exposures, they find capital depletions of 30-50 basis points for most flood types. [Read more.](#)

5. PhD Defense – interview with Cindy Biesenbeek

Cindy Biesenbeek defended her PhD dissertation 'Beyond the mean: essays on labor and housing economics' at Rijksuniversiteit Groningen on October 16. Cindy is currently working as a policy advisor in DNB's economic policy and research division. [Read more.](#)

6. 26th Annual Research Conference

The 26th Annual Research Conference took place on November 2 and 3. The conference theme was: "Challenges for monetary policy during normalization". Here, you can get a quick glimpse that will enable you to pretend you were there. [Read more.](#)

Publications (since September 2023)

Working Papers

[796 - Floods and financial stability: Scenario-based evidence from below sea level](#)

Francesco Caloia, David-Jan Jansen, Kees van Ginkel

[795 - Towards financial inclusion: trust in banks' payment services among groups at risk](#)

Marie-Claire Broekhoff, Carin van der Crujisen and Jakob de Haan

[794 - The Use of Financial Apps: Privacy Paradox or Privacy Calculus?](#)

Hans Brits and Nicole Jonker

[793 - Robust monetary policy under shock uncertainty](#)

Mario Carceller del Arco and Jan Willem van den End

[792 - The CO2 content of the TLTRO III scheme and its greening](#)

Chiara Colesanti Senni, Maria Sole Pagliari and Jens van 't Klooster

[791- Homeownership and flood risk: a disconnect between awareness and actions?](#)

David-Jan Jansen

DNB Analyses

[Geo-economic fragmentation: economic and financial stability implications](#)

Wilko Bolt, Jan Willem van den End, Jos de Grip, Kostas Mavromatis, Ralph Verhoeks and Nander de Vette

[The heterogenous effects of the Economic and Monetary Union on trade](#)

Oscar Soons and Fons van Overbeek

[Measuring intra-bank complexity by \(not\) connecting the dots with LEI](#)
Gert Rietveld, Nana Lange and Patty Duijm

Published journal articles

[Capital regulation induced reaching for systematic yield: financial instability through fire sales](#)

Martijn Boermans and Bram Van der Kroft
Journal of Banking and Finance, 2024, 158, 107030.

[Price diffusion across international private commercial real estate markets](#)

Bing Zhu, Dorinth van Dijk and Colin Lizieri
Journal of International Money and Finance, 2024, 140, 102976.

[No country is an island. International cooperation and climate change](#)

Massimo Ferrari Minesso and Maria Sole Pagliari
Journal of International Economics, 2023, 145, 103816.

[The price of flexible jobs: wage differentials between permanent and flexible jobs in the Netherlands](#)

Cindy Biesenbeek and Maikel Volkerink
De Economist, 2023, 171, 367-401.

[Central bank capital management](#)

Paul Wessels and Dirk Broeders
Journal of Risk Management in Financial Institutions, 2023, 16(3), 304–315.

Forthcoming journal articles

[Inflation expectations anchoring: new insights from micro evidence of a survey at high-frequency and of distributions](#)

Gabriele Galati, Nikos Apokoritis and Richhild Moessner
International Journal of Central Banking

[The international impact of a fragile EMU](#)

Demosthenes Ioannou, Maria Sole Pagliari and Livio Stracca
European Economic Review

[The effects of climate change on the natural rate of interest: a critical survey](#)

Francesco Paolo Mongelli, Wolfgang Pointner and Jan Willem van den End
WIREs Climate Change

[Frictions in scaling up central bank balance sheet policies: how Eurosystem asset purchases impact the repo market](#)

Tomas Carrera de Souza and Tom Hudepohl
Journal of Banking and Finance

[What triggers consumer adoption of Central Bank Digital Currency?](#)

Michiel Bijlsma, Carin van der Crujisen, Nicole Jonker and Jelmer Reijerink
Journal of Financial Services Research

[Macroeconomic reversal rate in a low interest rate environment](#)

Jan Willem van den End, Paul Konietschke, Anna Samarina and Irina Stanga
International Journal of Central Banking

Forthcoming books/articles in books

Key challenges for macroprudential policies currently
Gabriele Galati and Richhild Moessner
In: Fourth Edition of the Oxford Handbook of Banking

Published books/articles in books

Climate scenario analysis for central banks
Matteo Bonetti, Dirk Broeders, Marleen Schlooz and Vincent Streichert
In: O. M. Lehner, T. Harrer, H. Silvola and O. Weber (eds.), The Routledge Handbook of Green Finance, 2023, Routledge.

Other publications

[Voordeel familiehypothek groter dan jubelton](#)

Economisch Statistische Berichten
Gerard Eijnsink and Mauro Mastrogiacomo

[Midden- en kleinbedrijf betaalt een hogere rente en dit duidt op marktfalen](#)

Economisch Statistische Berichten
Guus Brouwer, Frank van Hoenselaar and Michiel Nijhuis

[Grootste pensioenfondsen beleggen niet beter](#)

Economisch Statistische Berichten
Jaap Bikker and Jeroen Meringa

[De implicaties voor monetair beleid vanuit de Nederlandse inflatieverwachtingen](#)

KVS Preadviezen
Gabriele Galati and Richhild Moessner

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

Events

Research seminars

Past

10 Oct 2023: Monetary Policy in the Age of Social Media: A Twitter-Based Inflation Analysis

Benjamin Born (Frankfurt School of Finance & Management)

17 Oct 2023: An agent-based model of the macro-economy

Cars Hommes (Bank of Canada, University of Amsterdam)

24 Oct 2023: Firm liquidity and the transmission of monetary policy

Margherita Bottero (Bank of Italy)

31 Oct 2023: What drives inflation? Disentangling demand and supply factors

Boris Hofmann (University of St. Gallen)

21 Nov 2023: Bang for the Buck: Aggregate Impact of Firm-Level R&D Incentives

Petr Sedlacek (University of New South Wales)

28 Nov 2023: Foreign Portfolios and Domestic Business Cycles with Heterogeneous Agents

Ralph Luetticke (University of Tübingen)

5 Dec 2023: Estimating the Missing Intercept

Christian Matthes (Indiana University)

12 Dec 2023: Monetary Policy and Endogenous Financial Crises

Cristina Manea (BIS)

21 Dec 2023: Which Exchange Rate Matters to Global Investors?

Kristy Jansen (USC Marshall)

Forthcoming

09 Jan 2024: TBA

Tommaso Monacelli (Bocconi)

16 Jan 2024: TBA

Leonardo Melosi (University of Warwick)

23 Jan 2024: TBA

Rogier Quaedvlieg (European Central Bank)

30 Jan 2024: TBA

Rick van der Ploeg (University of Oxford)

06 Feb 2024: TBA

Martin Wolf (University of St Gallen)

13 Feb 2024: TBA

Dirk Niepelt (University of Bern)

27 Feb 2024: TBA

Annukka Ristiniemi (European Central Bank)

05 Maart 2024: TBA

Michael Ehrmann (European Central Bank)

12 Maart 2024: TBA

Roman Goncharenko (KU Leuven)

Other news

DNB's 2023 Annual Research Conference was on the topic of "Challenges for monetary policy during normalization". It took place in Amsterdam. Keynote speakers were Annette Vissing-Jorgensen and Stephen Cecchetti.

The second XAmsterdam Macroeconomic Workshop took place in Amsterdam and was jointly organized by DNB, the Tinbergen Institute and the Economics Departments of the University of Amsterdam, Vrije Universiteit Amsterdam and Erasmus University Rotterdam. Keynote speakers were Monika Piazzesi and Martin Schneider.

Cindy Biesenbeek defended her Ph.D. thesis at the University of Groningen. The title of her thesis is "Beyond the mean: essays on labor and housing economics".

Yasmine van der Straten was awarded a prize for best student paper at the CEPR European Conference on Household Finance. Her paper is entitled "Flooded house or underwater mortgage? The implications of climate change and adaptation on housing, income and wealth"

Research highlights, details

1. Macroeconomic reversal rate in a low interest rate environment

We find strong evidence for the existence of a macroeconomic reversal rate. Specifically, our results show that the monetary policy transmission changes in a low interest rate environment due to different dynamics in the responses of macroeconomic aggregates to monetary policy shocks across two interest rate regimes. In the normal rate regime, an expansionary monetary policy shock increases investments, private consumption, and the output gap. In a low-rate regime, the responses of these variables become negative. Savings decline after a monetary easing shock in the normal rate regime, while they increase in the low rate regime. This indicates that in a low-rate environment, further monetary policy easing raises savings, contrary to what accommodative monetary policy intends. Bank lending also behaves differently in a low-rate regime, as an expansionary monetary shock leads to a decline in credit volumes and not an increase, like in a normal rate regime.

Read more?

See ECB Working Paper 2620 [Macroeconomic reversal rate in a low interest rate environment](#) by Jan Willem van den End, Paul Konietschke, Anna Samarina, and Irina Stanga, forthcoming in International Journal of Central Banking. [Go to the Top.](#)

2. Frictions in scaling up central bank balance sheet policies: How Eurosystem asset purchases impact the repo market

Using transaction-level repo market data, the study finds that asset purchases reduce repo interest rates, which is driven by both the marginal purchases (flow effect) and the cumulative holdings (stock effect) of assets. The impact of these holdings on repo rates intensifies nonlinearly with their size. The study addresses the scalability of such balance sheet policies, showing that an increase in central bank holdings exacerbates spillovers to other markets, indicating scaling frictions in these policy measures.

Read more?

See T. Carrera de Souza and T. Hudepohl (2024), Frictions in scaling up central bank balance sheet policies: How Eurosystem asset purchases impact the repo market, [Journal of Banking & Finance, 158](#).

[Go to the Top.](#)

3. The CO2 content of the TLTRO III scheme and its greening

Central banks are interested in supporting an orderly transition to a low-carbon economy, which would attenuate climate-related economic and financial risks. This paper focuses on the climate impact of refinancing operations by taking the ECB TLTRO III program as a case study. By combining sectoral emission data with information on take-up and lending, we find that the CO2 emission content of loans by participating institutions between March 2020 and March 2021 amounts to about 151 CO2 megatons, which corresponds to 8% of overall CO2 emissions in the euro area at the end of 2019. We then use a theoretical model to show that a "green" credit-easing scheme in the euro area could increase banks' costs for lending to polluting companies, thus re-directing loans to less-polluting firms. However, the financial stability implications of such a policy should be carefully considered, as well as the related legal and operational challenges.

Read more?

See DNB Working Paper 792 [The CO2 content of the TLTRO III scheme and its greening](#) by Chiara Colesanti Senni, Maria Sole Pagliari and Jens van 't Klooster.

[Go to the Top.](#)

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

We use a scenario-based analysis including single- and multiple-breach floods to understand the link between flood risk and financial stability. We deploy 38 adverse scenarios to quantify flood-related property damages as well as credit risk on bank exposures secured by property. The analysis focuses on the Netherlands, a country situated partly below sea level where banks are highly exposed to real estate and insurance policies exclude property damages caused by some types of floods. The findings suggest capital depletions for the banking sector ranging from 30 to 50 basis points for most scenarios and highlight how starting-point loan-to-value ratios are one important driver of capital impacts. If climate change continues, more frequent and severe floods or broader flood-related macrofinancial disruptions may have stronger implications for financial stability than our estimates so far indicate.

Read more?

See DNB Working Paper 796 [Floods and financial stability: Scenario-based evidence from below sea level?](#) by Francesco Caloia, Kees van Ginkel and David-Jan Jansen.

[Go to the Top.](#)

5. PhD Defense – interview with Cindy Biesenbeek

What is your research about?



Two of the most important decisions in life are where to work and where to live, and these decisions may have a substantial impact on an individual's well-being. My dissertation explores several issues regarding labor and housing economics in the Netherlands.

The first topic concerns wage inequalities between employees with different contract types and in various work sectors. The second topic examines the effect of a new housing market regulation, the Loan-to-Value limit, on homeownership. The third topic addresses the relation between homeownership, unemployment, and interregional migration.

What did you find?

One of the main findings of my thesis is that results are heterogeneous across individuals and time. For example, unemployed individuals are more likely to move to a different region during the first three months of unemployment but not so much after that. Standard micro-econometric models in these fields of literature, such as Ordinary Least Squares, ignore time dependency and/or heterogeneity, and this may provide incomplete or even biased results.

How did you experience doing a part-time PhD?

I greatly enjoyed the combination of policy work and doing a part-time PhD. The policy work helped me to place research questions in a broader perspective, and EBO is an inspiring place to work.

Read more? See [Cindy's thesis](#).

[Go to the Top.](#)

6. 26th Annual Research Conference

The conference featured two keynote speeches by Stephen Cecchetti and Annette Vissing-Jørgensen, a policy panel with Gaston Gelos, Huw Pill, and Stephen Cecchetti, and ten high-quality research papers.

Read more?

An extended summary of the conference and information on the program, papers, presentations, and discussions are available at [2023 - Challenges for monetary policy during normalisation](#)

[Go to the Top.](#)

Contact: Office.ebo@dnb.nl



DeNederlandscheBank

EUROSYSTEEM