March 2022

DNB Research Newsletter

DeNederlandscheBank
EUROSYSTEEM

Research highlights

1. Does monetary policy affect income inequality in the euro area?

In this forthcoming publication in the Journal of Money, Credit and Banking, Anna Samarina (DNB) and Anh Nguyen (IMF) examine how the ECB's expansionary monetary policy affected income inequality in 10 euro area countries during 1999-2014. The authors distinguish two channels – labor-market and financial – through which monetary policy can have distributional effects. The labor-market channel is captured by wages and employment and the financial channel by asset prices and returns. They find that expansionary monetary policy reduces income inequality, especially in the periphery countries. The labor-market channel enhances the equalizing effect, while the evidence for the financial channel is limited. Read more

2. Inflation dynamics and the Phillips curve: new evidence from DNB research

Changes in inflation dynamics are one of the main challenges central banks are facing. A common finding is that inflation has become less sensitive to domestic aggregate demand fluctuations, i.e. that the Phillips curve has become flatter. Two recent DNB working papers present new insights into the key drivers and implications of this trend. Read more

3. The macroeconomic effects of uncertainty shocks

We study the effects of various uncertainty shocks – of supply-side, demand-side, or financial sector origin – in a structural model with borrowing constraints and a monetary-macroprudential policy mix. Our analysis reveals that when financial uncertainty shocks hit the economy, the effects are significantly larger, with output responding about ten times stronger compared to both productivity and preference uncertainty shocks. Read more

4. Real estate and climate transition risk: A financial stability perspective

Real estate plays an important role in debates on the transition to a carbon-neutral economy as well as on the balance sheet of the financial sector. Based on detailed real-estate data and climate scenario analysis, this Occasional study by Francesco Caloia, David-Jan Jansen, Helga Koo, Remco van der Molen and Lu Zhang analyzes climate transition risks in real estate and their impact on Dutch financial institutions. Read more

Publications (since Dec 2021)

Working Papers

741 - The effect of introducing a Loan-to-Value limit on home ownership
Cindy Biesenbeek , Mauro Mastrogiacomo, Rob Alessie and Jakob de Haan

740 - Excess liquidity and the usefulness of the money multiplier
Jan Marc Berk and Jan Willem van den End

739 - Uncertainty shocks and the monetary-macroprudential policy mix
Valeriu Nalban and Andra Smadu

738 - Borrower-based measures, house prices and household debt
Francesco Caloia

737 - How QE changes the nature of sovereign risk
Dirk Broeders, Leo de Haan and Jan Willem van den End

736 - Getting the balance right: Crypto, stablecoin and CBDC
Wilko Bolt, Vera Lubbersen and Peter Wierts

735 - How does the Phillips curve slope vary with repricing rates?
Emmanuel de Veirman

734 - The unbearable lightness of equilibria in a low interest rate environment
Guido Ascari and Sophocles Mavroeidis

733 - The inflation rate disconnect puzzle: On the international component of trend inflation and the flattening of the Phillips curve
Guido Ascari and Luca Fosso

Occasional Studies

Real estate and climate transition risk: A financial stability perspective
Francesco Caloia, David-Jan Jansen, Helga Koo, Remco van der Molen and Lu Zhang

Rente en verandervermogen: Een scenario-analyse van de winstgevendheid van Nederlandse banken
Jorien Freriks, Jan Kakes, Herwin Loman, Chris Oudshoorn and Maarten Postma

DNB analyses

Economische gevolgen van de oorlog in Oekraïne
Robert-Paul Berben, Thomas van den Berg, Wilko Bolt, Menno Broos, Jan Willem van den End, Kasper Goosen, Gerbert Hebbink, Minke van der Heijden, Ide Kearney, Dylan Pastoor, Marc Reinke, Ilona van Schaik and Guido Schotten

Financiering voor de verduurzaming van de woningvoorraad
Jessica Havlínová, Bas Heerma van Voss, Lu Zhang, Remco van der Molen and Francesco Caloia

The carbon footprint of bitcoin
Juan Pablo Trespalacios and Justin Dijk

Jaaroverzicht FD-sentimentsindicator: 2021 in de achteruitkijkspiegel
Jasper de Winter and Dorinth van Dijk

Impact aanbodbeperkingen op de Nederlandse economie in internationaal perspectief
Yannick Hemmerlé and Ilona van Schaik

Published journal articles

(Dis)Solving the Zero Lower Bound equilibrium through income policy
Guido Ascari and Jacopo Bonchi
Journal of Money, Credit and Banking, 2022, 54, 519-535.

Non-linearities, state-dependent prices and the transmission mechanism of monetary policy
Guido Ascari and Timo Haber
Economic Journal, 2022, 132 (641), 37-57.

The dynamics of liquidity in commercial property markets: Revisiting supply and demand indexes in real estate
Dorinth van Dijk, David Geltner and Alex van de Minne
Journal of Real Estate Finance and Economics, 2022, 64, 327-360.

The anchoring of long-term inflation expectations of consumers: insights from a new survey
Gabriele Galati, Richhild Moessner and Maarten van Rooij
Oxford Economic Papers, 2022, gpac005, 1-21

Sensitive intervention points in China's coal phaseout
Bas Heerma van Voss and Ryan Rafaty
Energy Policy, 2022, 163, 112797

European banks straddling borders: Risky or rewarding?
Patty Duijm and Dirk Schoenmaker
Finance Research Letters, 2021, 38, 101525.

Forthcoming journal articles

Foreign funded credit: Funding the credit cycle?
Patty Duijm
International Finance

The unbearable lightness of equilibria in a low interest rate environment
Guido Ascari and Sophocles Mavroeidis
Journal of Monetary Economics

Does monetary policy affect income inequality in the euro area?
Anna Samarina and Anh Nguyen
Journal of Money, Credit and Banking

Have scale effects on cost margins of pension fund investment portfolios disappeared?
Jacob Bikker and Jeroen Meringa
Applied Economics

Risk assessment of banknotes as a fomite of SARS-CoV-2 in cash payment transactions
Jack Schijven, Mark Wind, Daniel Todt, John Howes, Barbora Tamele and Eike Steinmann
Risk Analysis

Other publications

Aanwakkerende gevoelsinflatie remt consumptiegroei in Europa
Ad Stokman
Economisch Statistische Berichten

Klimaatverandering en transitiebeleid maken inflatie volatieler
Jan Willem van den End, Marco Hoeberichts and Kostas Mavromatis
Economisch Statistische Berichten

Inflatie sinds augustus hoger over een breed front
Minke van der Heijden, Marco Hoeberichts, Wisse Rutgers and Guido Ascari
Economisch Statistische Berichten

Bouwen voor ouderen kan gehele woningmarkt toegankelijker maken
Dorinth van Dijk and Maarten van Rooij
Economisch Statistische Berichten

Money market funds in the euro area: vulnerabilities and the role of macroprudential policy
Tom Hudepohl, Annelie Petersen and Jeroen Huiting
SUERF Policy Brief 253

Essays on institutional investors, portfolio choice, and asset prices
Kristy Jansen
Netspar Academic Series, PhD 01/2022-001

Groene obligaties nemen vooral toe door buitenlandse holdings
Martijn Boermans and Tim Punt
Economisch Statistische Berichten

For a complete list of publications see our website.

Events

Research seminars

Past

01 Feb 2022: Motivating Banks to Lend? Credit Spillover Effects of the Main Street Lending Program
Camelia Minoiu (FED Board)

15 Feb 2022: The Effect of Macroeconomic Uncertainty on Household Spending
Olivier Coibion (University of Texas at Austin)

22 Feb 2022: Baby Booms and Asset Booms: Demographic Change and the Housing Market
Matthijs Korevaar (Erasmus University Rotterdam)

01 March 2022: The Business Cycle Dynamics of the Wealth Distribution
Jesse Bricker (FED Board)

Forthcoming

26 April 2022: Tba
Karl Walentin (Sveriges Riksbank)
10 May 2022: Tba
Laura Hospido Quintana (Bank of Spain)
17 May 2022: Tba
Emanuele Tarantino (LUISS)
24 May 2022: Tba
Felicia Ionescu (Fed Board)
31 May 2022: - Deal or no Deal? The Effect of Time-to-Close on Residential Transaction Prices
Marc Francke (University of Amsterdam)
7 June 2022: Tba
Eleonora Granziera (Norges Bank)
14 June 2022: Tba
Supriya Kapoor (Technological University Dublin)
21 June 2022: Tba

David Martinez-Miera (Universidad Carlos III de Madrid)

Workshops and conferences

Forthcoming

12 – 13 May 2022: Central bankers go data driven: applications of AI and ML for policy and prudential supervision

20-21 June 2022: De Nederlandsche Bank - Sveriges Riksbank - Deutsche Bundesbank, 6th Annual Macroprudential Conference (Participation is by invitation only)

Other news

On March 9, Dorinth van Dijk was an invited speaker in a session on housing affordability organized by Economisch Statistische Berichten. See Project Toegankelijke Woningmarkt.

Research highlights, details

1. Does monetary policy affect income inequality in the euro area?

Why should we care about inequality?

Recent decades witnessed rising wealth and income inequality in advanced countries with serious repercussions. Greater inequality worsens the efficiency of resource allocation, constrains aggregate demand and output growth, depresses consumption and investment. More uneven income distribution may also lead to higher household indebtedness, fuel asset market bubbles, and increase the risk of financial instability.

Impact of monetary policy on income inequality – framework

Monetary policy may affect income inequality via direct and indirect effects. Direct effects operate through partial-equilibrium consequences of a policy rate change on households' incentives to save and borrow as well as their net financial income and debt. Indirect effects arise as a result of the general equilibrium responses of prices, wages, output, and employment to a change in monetary policy and can be heterogeneous across households depending on income sources and earnings status.

We distinguish two channels capturing the indirect effect – labor-market and financial. The labor-market channel arises from the impact of monetary policy on labor earnings and employment. An interest rate cut reduces the real value of debt and costs of financing, which stimulates consumption of durables, aggregate demand, and productive investment. Higher goods prices and lower capital costs encourage firms to increase production and employment and put upward pressure on wages. As a result, monetary policy easing can raise labor earnings and lower income inequality. This equalizing effect may be counteracted by the financial channel. Higher asset prices lead to larger capital gains, increasing bonuses and dividend payments, which benefits high-income households relatively more and may thereby raise income inequality.

The way forward

This paper adds to our understanding of factors that drive income inequality. It shows that monetary policy has distributional effects in the euro area. Other policies and economic forces could be also considered responsible for the observed rise in inequality, such as fiscal austerity measures, technological change, globalization, financial development, and a decline in a labor share, among others. The interactions of these factors with monetary policy or state-dependent effects of monetary policy are promising avenues for future research. Moreover, the future work may consider the long-run evolution of income inequality after a change in monetary policy stance using a different empirical approach and a well-specified theoretical model.

Read more?
See the publication Does monetary policy affect income inequality in the euro area?, forthcoming in the Journal of Money, Credit, and Banking, by Anna Samarina and Anh D.M. Nguyen.

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2. Inflation dynamics and the Phillips curve: new evidence from DNB research

The international component …

Guido Ascari and Luca Fosso (2021) study the implications of globalization on inflation dynamics. Trend and cyclical inflation components are modeled in a Bayesian VAR, which is estimated with U.S. data. The paper finds evidence of an "inflation rate disconnect puzzle", whereby inflation becomes disconnected from the domestic labor market due to a significant decline in the wage pass-through. The results support the globalization of inflation hypothesis – meaning that international factors are replacing domestic factors as globalization increases.

… and firms' price setting behavior

Manu De Veirman (2022) considers the relationship between inflation dynamics and the frequency with which firms adjust their prices. In sticky price models, the short-run Phillips curve is steeper when firms reprice more frequently. The study finds that this relationship can also be established empirically. Since there was a trend decline in the price adjustment frequency, this is consistent with a flattening of the Phillips curve.

Implications for monetary policy

Both papers have important policy implications. The international component of inflation dynamics is an external factor that is beyond the central bank's direct control. This could complicate or even undermine central banks' mandate to pursue price stability. Another implication of the flattening of the Phillips curve is that, in the short run, monetary policy has smaller effects on inflation and larger effects on economic growth. However, if the price adjustment frequency were to rise again at any point of time, inflation could be more sensitive to monetary policy again.
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3. The macroeconomic effects of uncertainty shocks

What are the uncertainty shocks?

Uncertainty shocks are second-moment perturbations that can be formally defined as increases in the standard deviation of the common (first-moment) shocks that hit the economy. The interest in the role of uncertainty and its time-variation in driving business cycles has been gaining momentum in both academic and policy circles. Yet, significantly less attention has been paid to identifying the origin and nature of various uncertainty shocks and how different economic policies should adequately respond to them. In this paper, we study the effects of various uncertainty shocks — of supply-side, demand-side, or financial sector origin — in a New Keynesian model with nominal price rigidities, borrowing constraints, and a monetary-macroprudential policy mix.

Financial markets and uncertainty

Our analysis reveals that when financial uncertainty shocks hit the economy, the effects are significantly larger, with output responding about ten times stronger compared to both productivity and preference uncertainty shocks. This result substantiates the significant nexus between financial markets and uncertainty. A simulated financial turmoil scenario illustrates that heightened financial uncertainty exacerbates the adverse macroeconomic effects of a typical financial shock. This constellation of disturbances pushes firms against their financing constraints and generates a broad-based collapse in economic activity.

The stabilizing role of the monetary-macroprudential policy mix

In response to financial uncertainty shocks, the interest rate and the macroprudential instrument are relaxed to stimulate aggregate demand. This complementarity reverses in the case of productivity and preference uncertainty shocks, when the two policy instruments pull in opposite directions. We show that in a crisis scenario, monetary and macroprudential policies complement each other, and given their timely response the economy is gradually stabilized. However, given that each uncertainty shock is unique, there is no "one-size-fits-all" type of policy framework that could be universally adequate in dealing with uncertainty shocks.

Read more?
See the DNB Working Paper Uncertainty shocks and the monetary-macroprudential policy mix by Valeriu Nalban and andra Smadu.

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4. Real estate and climate transition risk: A financial stability perspective

Call to action

For a substantial part of the real estate exposure, transition risk may already materialize before 2030. The authors conclude that a large part of the real estate exposure of Dutch financial institutions is exposed to transition risk, meaning that the energy transition will have an impact on the value and riskiness of these exposures. For more than 40% of the exposures, this risk could materialize already before 2030.

Financing difficulties

In order to limit the transition risks retrofitting of buildings would be required. However, a significant share of Dutch homeowners may face difficulties in financing these costs. The calculations suggest that, in a high-cost scenario, 50% of Dutch homeowners would currently not be able to pay the required investment from their own funds. In addition, around 20% of homeowners would be credit constrained and may not be able to finance the required investment.

(Dis)orderly transition

A way to push for transition would be to impose stricter standards on buildings. These standards may, however, impair asset values, which would mean significant financial losses for investors. Such climate financial risks underline the importance of an orderly and, therefore, timely transition to carbon neutrality. Clarity on policy is one important factor in minimizing transition risks. Moreover, it is important for financial institutions to take account of certain pockets of risk relating to geographic locations or transition paths in their own risk management.

Read more?

See the DNB occasional study Real estate and climate transition risk: A financial stability perspective by Francesco Caloia, David-Jan Jansen, Helga Koo, Remco van der Molen and Lu Zhang.

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