

June 2024

DNB Research Newsletter

Research highlights

### **1. The Bank of Amsterdam and the limits of fiat money**

In a recent BIS working paper (forthcoming in the Journal of Political Economy) Wilko Bolt, Jon Frost, Hyun Song Shin and Peter Wierts analyse the limits to maintaining the value of fiat money in a strategic model that is driven by the portfolio decisions of private holders of money. The paper draws on the failure of the Bank of Amsterdam (1609-1820) - an early precursor to modern central banks - and argues that a central bank that loses public trust can push its luck too far. While network effects will preserve support from private financial entities, erosion of trust could shift the economy closer to potential "tipping points" when holders abandon domestic fiat money in favour of alternatives. [Read more ...](#)

### **2. The great layoff, great retirement and post-pandemic inflation**

In a recent DNB working paper, Guido Ascari, Jakob Grazzini and Dominico Massaro analyse the impact of the Covid-19 pandemic on the supply side of the labour market. The Covid-19 shock caused a dramatic spike in the number of retirees and a prolonged contraction in the labor force, putting upward pressure on wages. The contribution of this 'Great Retirement' to inflation from Q1 2020 up to Q2 2023 is estimated to be roughly 3.7 cumulative percentage points. [Read more ...](#)

### **3. Preferred habitat investors in the green bond market**

In a recent DNB working paper, Boris Chafwehe, Andrea Colciago and Romanos Priftis present a framework to study the short- to medium-term impact of a persistent increase in fossil resource prices on sector sizes, labor productivity, and competitiveness. The analysis suggests a reallocation of activity from energy-intensive sectors to greener sectors and an increase in aggregate productivity, which results from both selection and cleansing processes. [Read more ...](#)

#### **4. Central bank capital and shareholder relationship**

In a recent DNB working paper, Matteo Bonetti, Dirk Broeders, Damiaan Chen, and Daniel Dimitrov investigate central bank capital as a mechanism for risk-sharing with its shareholder. The central bank's capital policy can be seen as a financial contract with its shareholder, typically the government, which runs through agreements on dividend payments and recapitalization. The study finds that the obtained equilibrium between the shareholder and the central bank is essential for safeguarding the independence and credibility of the central bank in executing monetary policy effectively. [Read more ...](#)

#### **5. PhD Interview with Lennart Dekker**

Lennart recently defended his PhD thesis titled 'Essays on Asset Liquidity and Investment Funds' at Tilburg University. Below is a short interview. [Read more ...](#)

Publications (since March 2024)

See our [website](#) for older publications.

#### **Working Papers**

[812 - Great layoff, great retirement and post-pandemic inflation](#)

Guido Ascari, Jakob Grazzini and Dominico Massaro

[811 - Reallocation, productivity, and monetary policy in an energy crisis](#)

Boris Chafwehe, Andrea Colciago and Romanos Priftis

[810 - The effect of information on consumer inflation expectations](#)

Daria Minina, Gabriele Galati, Richhild Moessner and Maarten van Rooij

[809 - Central bank capital and shareholder relationship](#)

Matteo Bonetti, Dirk Broeders, Damiaan Chen and Daniel Dimitrov

[808 - Detecting turning points in the inflation cycle](#)

Marco Hoeberichts and Jan Willem van den End

[Literature review on financial technology and competition for banking](#)

[services](#)

Nicole Jonker, Federica Teppa et al.  
BIS Working Paper 43, June 2024.

### **DNB Analyses**

[Drivers of Dutch inflation during the pandemic era](#)  
Dennis Bonam, Gerbert Hebbink and Beer Pruijt

### **Published journal articles**

[Central bank communication with the general public: Promise or false hope?](#)  
Alan S. Blinder, Michael Ehrmann, Jakob de Haan and David-Jan Jansen.  
Journal of Economic Literature, 2024, 62(2), 425–57

[Flood risk and climate change: A disconnect between homeowners' awareness and mitigating actions?](#)  
David-Jan Jansen  
*Climate Risk Management*, 2024, 44, 100616

[The volatility of capital flows in emerging markets: Measures and determinants](#)  
Maria Sole Pagliari and Swarnali Ahmed Hannan  
Journal of International Money and Finance, 2024, 103095

[The international impact of a fragile EMU](#)  
Demosthenes Ioannou, Maria Sole Pagliari and Livio Stracca  
European Economic Review, 2024, 161, 104647

[Uncovering the digital payment divide: Understanding the importance of cash for groups at risk](#)  
Carin van der Cruijssen and Jelmer Reijerink  
Journal of Consumer Affairs, 2024, 58(2), 486-505

[Spillover effects of sovereign bond purchases in the euro area](#)  
Yvo Mudde, Anna Samarina and Robert Vermeulen, 2024, 20(2), 343-389  
International Journal of Central Banking

[Paying in a blink of an eye: it hurts less, but you spend more](#)

Marie-Claire Broekhoff and Carin van der Cruijssen

Journal of Economic Behavior and Organization, 2024, 221, 110-133

### **Forthcoming journal articles**

[Euro area monetary policy effects. Does the shape of the yield curve matter?](#)

Florens Odendahl, Maria Sole Pagliari, Adrian Penalver, Barbara Rossi and Giulia Sestieri

Journal of Monetary Economics

[Does one \(unconventional\) size fit all? Effects of the ECB's unconventional monetary policies on the euro area economies](#)

Maria Sole Pagliari

European Economic Review

[Should developed economies manage international capital flows? An empirical and welfare analysis](#)

Dennis Bonam, Emmanuel De Veirman and Gavin Goy

Oxford Bulletin of Economics and Statistics

[Lessons from low interest rate policy: how did euro area banks respond?](#)

Jorien Freriks and Jan Kakes

Journal of International Money and Finance

[Consumer participation in the credit market during the COVID-19 pandemic and beyond](#)

Evangelos Charalampakis, Federica Teppa and Athanasios Tsiortas

Oxford Economic Papers

### **Other publications**

[Nowcasten van CBS-huizenprijzen met NVM-huizenprijzen](#)

Dorinth van Dijk

Real Estate Research Quarterly, 2024|7

[Bij financiële apps weegt de gebruiker de voordelen en risico's wel degelijk af](#)

Hans Brits and Nicole Jonker

Economisch Statistische Berichten, 14 mei 2024.

[Market arbitrage and spillovers of sovereign bond purchases in the euro area](#)

Yvo Mudde, Anna Samarina and Robert Vermeulen

SUERF Policy Brief No. 852

[Funding the fittest? How investors respond to climate transition risk in the corporate bond market](#)

Martijn Boermans, Maurice Bun and Yasmine van der Straten

SUERF Policy Brief No. 882

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

## Events

### Research seminars

#### Past

**9 April 2024:** Interest Rate Uncertainty and Firm Decisions

Klodiana Istrefi (European Central Bank)

**11 April 2024:** Trouble Every Day Monetary Policy in an Open Emerging Market

Giovanni Ricco (University of Warwick)

**23 April 2024:** Adapting to Brexit: How British Firms Establish Footholds in the EU

Elisa Faraglia (Cambridge University)

**25 April 2024:** Economics Coauthorships in the Aftermath of MeToo

Chryssi Giannitsarou (Cambridge University)

**7 May 2024:** Monetary policy frameworks away from the ELB

Fiorella di Fiore (Bank for International Settlements)

**21 May 2024:** The dynamic nature of macroeconomic risks

Sarah Mouabbi (Banque de France)

**18 June 2024:** Endogenous Persistence at the Effective Lower Bound

Jordan Roulleau – Padeloup (University of Singapore)

**25 June 2024:** Target Date Funds and International Capital Flows

Aleksandar Andonov (University of Amsterdam)

**27 June 2024:** Nonlinearities with de-anchored inflation expectations

Lorenza Rossi (Lancaster University)

## **Forthcoming**

**9 July 2024:** Bank Specialization in Lending to New Firms

Diana Bonfim (European Central Bank)

### Research highlights, details

#### **1. The Bank of Amsterdam and the limits of fiat money**

Rising interest rates and losses on central bank balance sheets draw back attention to “old” questions about the relevance of central bank capital. It is well-known that central banks can operate with negative equity for a time, and many have done so in recent history. Yet there are limits, beyond which trust in fiat money disappears. By examining what it takes for an issuer of fiat money to fail, we may draw lessons on the central bank underpinnings of the institution of money.

To better understand the demise of the Bank of Amsterdam (1609-1820) we build a global game. At the heart of our model is the portfolio decision of merchants who decide on their holdings of bank money and coins. In the face of a negative shock to the economy that triggers a decrease in bank money demand, the network effects further amplify the decline in the value to the holders of bank money. We solve for the unique break point where negative equity and asset illiquidity render bank money worthless. Our analysis indicates that the break point comes closer when central bank equity is more negative and when economic fundamentals are weaker. We conclude that independent central banks with clear mandates, and solid fiscal backing, remain the best bet for a stable monetary system.

#### **Read more?**

See the BIS working paper no 1065 [The bank of Amsterdam and the limits of fiat money](#) by Wilko Bolt, Jon Frost, Hyun Song Shin, and Peter Wierts.

[Go to the top ..](#)

#### **2. The great layoff, great retirement and post-pandemic inflation**

The Covid-19 shock caused a dramatic spike in the number of retirees, a phenomenon dubbed the ‘Great Retirement’. This paper investigates the

impact of the Great Retirement on the post-pandemic surge of inflation, via the labor market.

First, retirement is generally countercyclical, and the peculiarity of the pandemic shock was just in its size: the 'Great Layoff' in March and April 2020 triggered the Great Retirement. Hence, a transitory labor demand shock generated a persistent decrease in the labor force.

In turn the Great Retirement contributed to post-pandemic inflation by increasing labor market tightness and putting upward pressure on wages. An estimated model with endogenous labor market participation quantitatively assesses the overall contribution of the Great Retirement to inflation from Q1 2020 up to Q2 2023, finding it to be roughly 3.7 cumulative percentage points.

#### **Read more?**

See the DNB working paper no 812 [Great Layoff, Great Retirement and Post-Pandemic Inflation](#) by Guido Ascari, Jakob Grazzini, and Dominico Massaro.

[Go to the top ..](#)

### **3. Preferred habitat investors in the green bond market**

In the aftermath of an increase in fossil resource prices, such as that observed following Russia's invasion of Ukraine, our analysis suggests a reallocation of activity from energy-intensive sectors to greener sectors and an increase in aggregate productivity. This productivity increase results from selection and cleansing processes: less productive firms cannot cope with higher production costs and exit the market, while new firms must be more productive to enter the market.

Monetary policy faces a new trade-off. By curbing the rise in marginal costs, a strong anti-inflationary stance limits the increase in production costs in response to the shock. This policy supports the survival of firms and promotes competition but comes with a significant output cost.

#### **Read more?**

See the DNB working paper no 811 [Reallocation, productivity, and monetary policy in an energy crisis](#) by Boris Chafwehe, Andrea Colciago, and Romanos Priftis

[Go to the top ..](#)

#### **4. Central bank capital and shareholder relationship**

Using an option pricing framework, we introduce an economic definition of central bank equity, which adds the values of a dividend-payment option and a recapitalization option to a central bank's accounting capital. The dynamics of accounting capital and the economic value of its equity are different. The dividend and recapitalization options smooth the impact that changes in the asset value have on the central bank's equity.

We demonstrate that the capital policy has implications for the risk-appetite of central banks, depending on the institutional setting. For example, a well-capitalized central bank without strong fiscal backing may exhibit hesitancy in engaging in unconventional monetary policy, as it fears that doing so could deplete its capital position, while any surpluses would flow to the shareholder in the form of dividends.

We then demonstrate that the capital policy in equilibrium depends on how decision rights are allocated between the shareholder and the central bank. A negotiation, for instance, in which the central bank sets the recapitalization conditions, and the shareholder sets the dividend conditions, will result in a relatively high protection against capital shortfalls, as recapitalization is more likely to be triggered.

#### **Read more?**

See DNB Working Paper no 809 [Central bank capital and shareholder relationship](#) by Matteo Bonetti, Dirk Broeders, Damiaan Chen, and Daniel Dimitrov

[Go to the top ..](#)

#### **5. PhD defense – Interview with Lennart Dekker (Financial Stability division)**



### **What were the main findings of your research?**

My research focuses on the role of liquidity in financial markets, which refers to the ease, the speed, and costs associated with trading financial assets. First, I find that passive investment funds do not replicate their benchmark index one-to-one but concentrate their holdings in the largest, most liquid benchmark securities. This reflects the tradeoff between minimizing deviations from the benchmark index versus minimizing replication costs. Second, I find that euro area corporate bond funds with smaller liquidity buffers engaged in significantly more procyclical asset selling during the COVID-19 pandemic. Third, funds holding relatively illiquid corporate bonds significantly underperform compared to those holding more liquid corporate bond during times when market liquidity drops. This questions the ability of open-ended fund structures to benefit from illiquidity premia in less liquid markets. Overall, my findings highlight that asset liquidity significantly affects decision making by financial intermediaries and market participants, which in turn impacts equilibrium asset prices.

### **You did part of your research at the ECB, and the last part while working at DNB. How did you experience this?**

Personally, I liked the combination between academic research and being in a central bank environment a lot. Since my research focused on the interaction between illiquidity in financial markets and investment funds, there was a close link between my research and the ongoing debate on macroprudential policy for non-bank financial intermediaries. It has proven extremely valuable to gain practical insights from policy experts on these topics, my work benefited a lot from these conversations. Moreover, I think the topics policymakers focus on provide excellent inspiration for new and relevant research ideas. In fact, the inspiration for the final chapter of my thesis directly resulted from the work I did at the ECB. This also works the other way: I liked the part where I could use the insights from academic research as input for the policy work I was involved in.

### **Do you intend to proceed with research, while working as policy economist at the Financial Stability department of DNB?**

After my PhD defense, I continued presenting my research in academic conferences and I am still revising my papers to take on board all

feedback I received. The ultimate goal is namely to submit my PhD papers to academic finance journals, so presenting my research and incorporating feedback will obviously increase the odds of getting accepted by a journal. After my PhD papers have been submitted, I would still be open to proceed with research on topics that relate to the policy work I am involved in, but for now the priority is to finalize my PhD papers first.

**Read more?** See Lennart's research: [Essays on asset liquidity and investment funds – Tilburg University Research Portal](#)

[Go to the top ..](#)

Contact: [office.ebo@dnb.nl](mailto:office.ebo@dnb.nl)

