

Report on DNB Research programme 2018

In line with the DNB Research Agenda, the DNB Research programme 2018 had seven themes:

1. *Effects of unconventional monetary policies*
2. *The new normal for monetary policy*
3. *Dynamics of inflation*
4. *Credit supply*
5. *Financial stability and financial regulation*
6. *Sustainability*
7. *Payments and market infrastructures*

All projects are available at:

https://www.dnb.nl/en/binaries/Research%20Program%202018_tcm47-378086.pdf.

Appendix 1 provides an overview of the status of the projects included in the 2018 DNB research programme.

Table 1 summarizes the progress made on individual projects. In 2018 5 (out of 80) projects were stopped for various reasons, mostly due to lack of sufficient results or the fact that some researchers have left DNB. In 2019, 43 projects of the research programme 2018 will be continued. This rather high number reflects that the 2018 programme was finalized last year at a very late stage in view of the new procedure to determine the DNB annual research programmes (see below).

Table 1. Overview of the status of the projects in 2018 DNB research programme

Theme:	Total number of projects:	Published as WP or under review:	Will soon be published:	Will be continued in 2019:	Stopped:
1.	8	1	1	6	0
2.	9	2	0	7	0
3.	8	2	0	6	0
4.	6	3	1	1	1
5.	26	9	6	11	0
6.	14	4	1	8	1
7.	9	2	0	4	3
Total	80	23	9	43	5

For forecasting purposes, extensive use has been made of DELFI – our macro model of the Dutch economy (see <https://www.dnb.nl/en/news/dnb-publications/economische-ramingen/index.jsp>). In 2018 a new, extended version – DELFI 2.0 – has been put into use. DELFI 2.0 includes detailed sub-models of both the banking and pension sectors, offering an elaborate framework for analysing the linkages between the financial sector and the real economy (see <https://www.dnb.nl/en/onderzoek-2/econometric-models-of-dnb/delfi-a-model-of-the-dutch-economy/index.jsp>).

DELFI has also been used extensively in 2018 for other policy purposes than forecasting:

- DELFI has been used to gauge the possible impact of Brexit on the Dutch economy.
- The model has been used to quantitatively investigate the possible impact on the Dutch economy of the new Basel accord (updated assessment).

- The model has been utilized to assess the impact of adjustments to the pension system on the Dutch economy.
- DELFI has been employed to assess the impact of raising the loan-to-income ratio on the housing market.
- DELFI has been used to investigate whether the impact of changes in interest rates on the Dutch economy in a low interest rate environment differs from that in a high interest rate environment.
- DELFI has been employed to quantify the possible impact of higher house prices or lower government spending on the outlook for the Dutch economy.
- The model has been used to gauge the impact of a CO2-tax on the Dutch economy.

In 2018 38 DNB working papers have been published, compared to 27 in 2017. Working papers can be downloaded at:

<http://www.dnb.nl/en/onderzoek-2/publications/dnb-working-paper-series/index.jsp>.

Appendix 2 provides an overview. DNB Working papers are available in REPEC and are also included in SSRN, which has increased the number of downloads substantially; see:

http://papers.ssrn.com/sol3/JELJOUR_Results.cfm?form_name=journalbrowse&journal_id=193427
1.

Table 2 provides an overview of publications in international journals, while table 3 summarizes the number of books and contributions to books. All published and forthcoming articles in journals and books and book contributions can be found at the DNB website:

<http://www.dnb.nl/en/onderzoek-2/publications/dnb-published-articles/index.jsp>.

Table 2. Journal publications by DNB staff in 2009-2018

	A journals	B journals	C journals	Others
2009	3	15	4	4
2010	3	19	2	11
2011	4	16	9	3
2012	3 (2)	19 (12)	9 (8)	11 (8)
2013	6 (4)	27 (19)	10 (5)	16 (11)
2014	5 (4)	17 (14)	8 (5)	7 (6)
2015	3 (3)	18 (17)	9 (8)	6 (5)
2016	5 (4)	20 (14)	7 (7)	9 (3)
2017	3 (3)	22 (15)	3 (2)	4 (3)
2018	4 (4)	18 (12)	11 (7)	5 (4)
Forthcoming ¹	6 (6)	27 (17)	1 (1)	6 (4)

In parentheses the number of publications by staff of Economic Policy and Research is shown. Forthcoming papers have been accepted for publication but have not yet been published. As it

¹ Measured at the beginning of January 2018 (includes papers already published in 2019).

sometimes takes very long before papers are published, acceptances in a particular year and publications in that same year do not coincide. The number of acceptances in A-rated journal in 2018 is 6. Papers written by DNB staff have been accepted in the *American Economic Review*, the *Economic Journal*, the *Review of Economics and Statistics*, and the *Journal of Money, Credit and Banking* (3). Also, the number of papers that have been accepted in B-rated journals is very promising.

Table 3. Books and contributions in books by DNB staff in 2010-2018

	Books (monographs and edited volumes) by publishers on DNB list	Other books	Contributions in books by publishers on DNB list	Other contributions
2010	1	--	7	1
2011	1	--	2	2
2012	2 (2)	--	4 (4)	6 (2)
2013	1 (1)	--	3 (3)	1 (1)
2014	1 (0)	--	1 (1)	--
2015	1 (1)	1 (0)	4 (4)	7 (0)
2016	--	--	1 (0)	--
2017	1 (0)	--	1 (1)	3 (1)
2018	2 (1)	--	5 (3)	3 (2)
Forthcoming	--	--	2 (2)	1 (1)

In parentheses the number of publications by staff of Economic Policy and Research is shown.

In 2018 the following Occasional Studies have been published:

- Nr. 1: *From cash to cards: how debit card payments overtook cash in the Netherlands* by Nicole Jonker, Lola Hernandez, Renate de Vree and Patricia Zwaan
- Nr. 2: *An urgent call to get better prepared for unexpected events* by Jurgen Spaanderman
- Nr. 3: *The natural rate of interest from a monetary and financial perspective* by Dennis Bonam, Peter van Els, Jan Willem van den End, Leo de Haan and Irma Hindrayanto
- Nr. 4: *Revisiting the central bank's lender of last resort function* by Joost Bats, Jan Willem van den End and John Thoolen
- Nr. 5: *DELFI 2.0, DNB's Macroeconomic Policy Model of the Netherlands* by Robert-Paul Berben, Ide Kearney and Robert Vermeulen
- Nr. 6: *Size of the banking sector: implications for financial stability* by Jan Kakes and Rob Nijskens
- Nr. 7: *An energy transition risk stress test for the financial system of the Netherlands* by Robert Vermeulen, Edo Schets, Melanie Lohuis, Barbara Kölbl, David-Jan Jansen and Willem Heeringa
- Nr. 8: *The price of transition: an analysis of the economic implications of carbon taxing* by Gerbert Hebbink, Laurien Berkvens, Maurice Bun, Henk van Kerckhoff, Juho Koistinen, Guido Schotten and Ad Stokman

In 2018 the DNB Visiting Scholar Programme was able to attract several excellent scholars who gave seminars and/or policy lectures and interacted with DNB staff. Table 4 gives an overview of the visiting scholars who visited DNB in 2018.

Table 4. Visiting scholars 2018

Edward Glaeser	Harvard University
Bill English	Yale School of Management
Bart Hobijn	Arizona State University
Alan Taylor	University of California, Davis
Andrew C. Harvey	University of Cambridge (UK)

In 2018 the following conferences and workshops have been organized or hosted:

- 24-25 May 2018: The housing market in major cities
- 25-26 June 2018: Annual International Journal of Central Banking Research Conference (hosted by De Nederlandsche Bank)
- 5-6 July 2018: 6th International Conference: Corporate Governance in Emerging Markets (hosted by De Nederlandsche Bank)
- 12-13 November 2018: 21th Annual DNB Research Conference “Unclogging the credit channel”
- 07 December 2018: EMU Expert Meeting

Details about these conferences are available at:

<http://www.dnb.nl/en/onderzoek-2/test-conferences/index.jsp>.

In 2018 there were 29 seminars by external speakers (see Appendix 3) and about 30 seminars by internal speakers. All seminars are announced at the website of DNB and are frequently attended by DNB policy makers and external visitors.

An important ambition is to increase the interaction and synergy of research and policy. Several initiatives have been taken. First, each quarter the management team (MT) of the Division Economic Policy and Research assesses the policy relevance of DNB Working Papers (on a scale of one to five) and the extent to which policy notes have incorporated insights of (DNB) research. Working Papers should at least score 3.5. This objective is also included in the annual performance review targets for researchers. Second, in 2018 several project teams of policymakers and researchers worked on important topics, such as income distribution, energy transition, and monetary policy (inflation dynamics, low interest environment, and the future of asset purchase programs). Third, the “Regiegroep Onderzoek”, consisting of several directors of policy divisions, approved the so-called research agenda, which outlines the main issues for research in the near future. This research agenda will form the basis for the annual research programmes for the next years. The annual research programmes also need approval by the regiegroep.

Appendix 1. Research projects 2018

1. Effects of unconventional monetary policies

1. QE and stock market bubbles Tom Hudepohl, Ryan van Lamoen and Nander de Vette
Status: will be continued in 2019.

2. Forward guidance, bounded rationality and expectation formation Maarten van Rooij, Olivier Coibion (University of Texas Austin), Dimitris Georgarakos (ECB) and Yuriy Gorodnicbenko (University of California Berkeley)
Status: will be continued in 2019.

3. Country-specific risk premium shocks and central bank policies
Emmanuel De Veirman, Dennis Bonam and Gavin Goy (University of Amsterdam (UvA)) and Tinbergen Institute (TI)
Status: will be continued in 2019.

4. The response of tail risk perceptions to unconventional monetary policy: An analysis for the euro-area
Annelie Petersen, Nander de Vette and Sweder van Wijnbergen
Status: will soon be published.

5. Banks' net interest income in a low interest rate environment
Leo de Haan, Raymond Chaudron and Marco Hoeberichts
Status: will be continued in 2019.

6. QE and portfolio rebalancing in a monetary union
Kostas Mavromatis, Renske Maas and Serdar Kabaca (Bank of Canada)
Status: will be continued in 2019.

7. Forward guidance and the role of central bank credibility under heterogeneous beliefs
Kostas Mavromatis, Cars Hommes (University of Amsterdam (UvA)) and Gavin Goy (UvA and TI)
Status: published as DNB WP 614.

8. Cross-border spillover effects of Quantitative Easing in the Euro area
Anna Samarina, Christina Bräuning, Yvo Mudde and Robert Vermeulen
Status: will be continued in 2019.

2. The new normal for monetary policy

1. Revisiting the central bank's lender of last resort function
Joost Bats, Jan Willem van den End and John Thoolen
Status: published as DNB Occasional Study 4.16.

2. Fear of secular stagnation and the natural interest rate
Paolo Bonomolo and Valentina Gavazza (Stockholm University)
Status: will be continued in 2019.

3. Detecting liquidity traps
Paolo Bonomolo, Yildiz Akkaya (Konjunkturinstitutet) and Ingvar Strid (Sveriges Riksbank)
Status: will be continued in 2019.

4. Re-assessing monetary policy shocks
Paolo Bonomolo, Björn van Roye (ECB) and Alistair Dieppe (ECB)

Status: will be continued in 2019.

5. Now-casting under structural change

Maurice Bun, Jos Jansen (Ministry of Finance) and Jasper de Winter

Status: will be continued in 2019.

6. Look for the stars: estimating the natural rate of interest

Irma Hindrayanto, Mengheng Li and Siem Jan Koopman (Free University Amsterdam (VU))

Status: will be continued in 2019.

7. Estimating behavioral learning equilibria

Kostas Mavromatis, Cars Hommes (UvA) and Ozden Tolga (UvA)

Status: will be continued in 2019.

8. Fiscal consolidations and finite horizons

Kostas Mavromatis and Joep Lustenhouwer (University of Bamberg)

Status: submitted to journal.

9. Forecasting with large panel data sets

Andreas Pick

Status: will be continued in 2019

3. Dynamics of inflation

1. Time varying expectation formation process

Paolo Bonomolo, Guido Ascari (University of Oxford and University of Pavia), Hedibert F. Lopes (INSPER) and Leonardo Melosi (Federal Reserve Bank of Chicago)

Status: will be continued in 2019.

2. Non-linearity in the long-run Phillips Curve

Paolo Bonomolo and Guido Ascari (University of Oxford and University of Pavia)

Status: will be continued in 2019.

3. On the sources of business cycle fluctuations in small open economies

Paolo Bonomolo, Vesna Corbo (Sveriges Riksbank) and Jesper Lindé (Sveriges Riksbank)

Status: will be continued in 2019.

4. The Phillips curve through the lens of the unobserved components model

Irma Hindrayanto and Irina Stanga

Status: published in journal.

5. Heterogeneity in inflation forecasts

Kostas Mavromatis, Jakob de Haan, Cars Hommes (UvA), Domenico Massaro (Catholic University of Milan) and Adriana Cornea Madeira (University of York)

Status: will be continued in 2019.

6. Does it matter how you target? Performance of point, band, and range targets for inflation

Anna Samarina and Nikola Mirkov (Swiss National Bank)

Status: will be continued in 2019.

7. Expectations formation and anchoring: new evidence from a high frequency survey

Federica Teppa, Gabriele Galati and Richhild Moessner (BIS)

Status: will be continued in 2019.

8. Finite horizons and the monetary/fiscal policy mix

Kostas Mavromatis
Status: under review with journal.

4. Credit supply

1. Does public money creation crowds out private money creation in the euro area?
Gracjan Bachurewicz (University of Groningen), Jakob de Haan, Mark Mink and Sebastiaan Pool
Status: stopped.

2. Bank bailouts, debt-overhang and macroeconomic fluctuations
Mark Mink and Sebastiaan Pool
Status: published as DNB WP 616.

3. Bank lending to SMEs in the Netherlands
Jasper de Winter, Mark Mink, Bahar Öztürk and Jakob de Haan
Status: will be continued in 2019.

4. Monetary spillovers across borders: international lending of Dutch banks, insurers and pension funds
Leo de Haan, Jon Frost, Patty Duijm, Clemens Bonner and Jakob de Haan
Status: published as DNB WP 609.

5. The transmission of an interest rate shock, standard mitigants and individual behaviour: An empirical investigation using loan level data for the Netherlands
Mauro Mastrogiacommo
Status: published as DNB WP 615.

6. Heterogeneity and asymmetric macroeconomic effects of changes in loan-to-value limits
Emmanuel De Veirman and Jasper de Jong
Status: will soon be published.

5. Financial stability and financial regulation

1. Bank-based versus market-based financing: implications for systemic risk
Joost Bats and Aerd Houben
Status: published as DNB WP 577.

2. Cyclical relationships in banks' regulatory capital for the banking system in the Netherlands
Laurence Deborgies Sanches and Marno Verbeek (Erasmus University of Rotterdam (EUR))
Status: published as DNB WP 593.

3. Demand and supply reservation price indices for the housing market
Dorinth van Dijk and Marc Francke (UvA)
Status: will be continued in 2019.

4. Does housing vintage matter? Exploring the historic city center of Amsterdam
Dorinth van Dijk, Lyndsey Rolheiser (Harvard) and Alex van de Minne (MIT)
Status: published as DNB WP 617.

5. European banks after the global financial crisis: Peak accumulated losses, twin crises and business models
Leo de Haan and Jan Kakes
Status: published as DNB WP 600.

6. Asset allocation, investment beliefs and portfolio performance

Leo de Haan and Dirk Broeders

Status: published as DNB WP 603.

7. Loan to value ratio, loan guarantees, and mortgage defaults: evidence from Dutch banks' loan level data

Leo de Haan and Mauro Mastrogiacomio

Status: will be continued in 2019.

8. Being in good hands: Deposit insurance and peers' financial sophistication

Mauro Mastrogiacomio, Francesco Caloia (University of Venice) and Giacomo Pasini (University of Venice)

Status: will be continued in 2019.

9. Tax-exempted inter-generational transfers: do they reduce household mortgage debt?

Mauro Mastrogiacomio and Yue Li (VU)

Status: will soon be published.

10. Till debt do us part: divorces, economic outcomes and a test of moral hazard

Mauro Mastrogiacomio, Yeorim Kim (FUA and Netspar), Stefan Hochguertel (FUA and Netspar) and Hans Bloemen (VU and Netspar)

Status: published as Netspar WP.

11. Consumer reaction to booms and busts in the housing market

Maarten van Rooij (DNB), Dimitris Christelis (University of Naples), Dimitris Georganakos (ECB), Tullio Jappelli (University of Naples) and Luigi Pistaferri (Stanford University)

Status: will be continued in 2019.

12. Disclosure, interbank linkages, and bank instability

Razvan Vlahu, Christian König-Kersting (University of Heidelberg) and Stefan T. Trautmann (University of Heidelberg)

Status: will soon be published.

13. Value-at-Risk prediction using forward-looking risk measures

Chen Zhou and Kai Schindelhauer (EUR)

Status: published as DNB WP 613.

14. Systemic risk and bank regulation

Chen Zhou and Jakob de Haan

Status: will soon be published.

15. European CoCo issuances: What choices do banks face?

Martijn Boermans, Tomislav Ladika (UvA), Ioana Neamtu (UvA), Natalya Martynova (Bundesbank) and Sweder van Wijnbergen (UvA)

Status: published as DNB WP 543.

16. Creating constant quality liquidity indices in thin markets

Dorinth van Dijk

Status: will soon be published.

17. Challenges of macro-prudential policy

Gabriele Galati and Richhild Moessner (BIS)

Status: will be continued in 2019.

18. The impact of sovereign debt ratings on euro area cross-border holdings of euro area sovereign debt

Leo de Haan and Robert Vermeulen
Status: will soon be published.

19. Identifying risks in Central Counterparties

Ronald Heijmans, Alinda Heemskerk, Tatu Laine (Bank of Finland) and Kasper Korpinen (Bank of Finland).

Status: finished but only internal document.

20. Networks of Financial Market Infrastructures: Fire walls or fire lighters?

Ronald Heijmans, Froukelien Wendt (IMF) and Dieter Wang

Status: will be continued in 2019.

21. Outlier detecting in FMI risk indicators

Ronald Heijmans and Chen Zhou

Status: will soon be published.

22. Liquidity Coverage Ratio in a payments network: Uncovering contagion paths

Richard Heuver and Ron Bernsen (University of Tilburg (UvT))

Status: will be continued in 2019.

23. Bank run detection using machine learning

Richard Heuver and Ron Triepels (UvT)

Status: will be continued in 2019.

24. Do shocks to financial intermediary capital move financial markets?

Mark Mink, Iman van Lelyveld and Rodney Ramcharan (USC, Price School of Public Policy)

Status: will be continued in 2019.

25. Regulation, supranational bank supervision, and the corporate structure of foreign affiliates

Razvan Vlahu and Natalya Martynova (Deutsche Bundesbank)

Status: will be continued in 2019.

26. Bank relationships after foreign takeover

Razvan Vlahu, Steven Poelhekke and Vadym Volosovych (EUR)

Status: will be continued in 2019.

6. Sustainability

1. Misallocation in Dutch firms

Maurice Bun and Jasper de Winter

Status: will soon be published.

2. Competition and income and wealth distribution

Andrea Colciago and Rajssa Mechelli (Milano Bicocca)

Status: will be continued in 2019.

3. Market concentration and the labor share of income

Andrea Colciago and Rajssa Mechelli (Milano Bicocca)

Status: will be continued in 2019.

4. Central bank policies and inequality

Andrea Colciago, Anna Samarina and Jakob de Haan

Status: published as DNB WP 594.

5. Trust in other people and the usage of online peer-to-peer markets

Carin van der Crujisen, Maurice Doll and Frank van Hoenselaar
Status: published as DNB WP 608.

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

Anna Samarina and Anh D.M. Nguyen (Bank of Lithuania)

Status: will be continued in 2019.

7. Asymmetric shocks in EMU: private or public risk sharing?

Patrick Kosterink, Dennis Bonam, Matthijs Zaal and Jakob de Haan

Status: will be continued in 2019.

8. Understanding the pension expectation gap in the Netherlands: a micro analysis

Federica Teppa and Maurice Doll

Status: stopped.

9. Carbon footprints and pension funds' portfolio investment trade-off

Martijn Boermans and Rients Galema (Utrecht University)

Status: will be continued in 2019.

10. The employment effects of corporate income tax shocks: New evidence and some theory

Andrea Colciago, Vivien Lewis (Bundesbank) and Branka Matyska (Leuven University)

Status: will be continued in 2019.

11. The effectiveness of the Stability and Growth Pact: Testing adherence to fiscal recommendations

Jasper de Jong and Niels Gilbert

Status: published as DNB WP 607.

12. Sustainable cash payment system

Nicole Jonker, Randall Hanegraaf (Utrecht University), Steven Mandley (Utrecht University) and Jelle Miedema

Status: published as DNB WP 610.

13. Impact of financial inclusion and financial literacy on financial stability

Anneke Kosse, Nicole Jonker and Lisa van Winden

Status: will be continued in 2019.

14. Financial literacy and pension expectations

Maarten van Rooij, Rob Alessie (University of Groningen) and Remko Struik

Status: will be continued in 2019.

7. Payments and market infrastructures

1. Trust in payment instruments and payment service providers

Carin van der Crujisen and Nicole Jonker

Status: will be continued in 2019.

2. International comparison of liquidity efficiency of LVPS

Anneke Kosse, Ronald Heijmans, Bank of Canada, Danmarks Nationalbank, ECB, Banque de France, Bundesbank, Reserve Bank of India, Central Bank of the Russian Federation, Bank of England, FED Board, Fed New York, University of California, BIS

Status: will be continued in 2019.

3. FinTech and regulation: impact on retail payments

Wilko Bolt

Status: stopped.

4. E-commerce: use, growth and pricing

Wilko Bolt and Bas Butler

Status: will be continued in 2019.

5. Virtual currencies: dynamics and monetary aspects

Wilko Bolt and Maarten van Oordt (Bank of Canada)

Status: will be continued in 2019.

6. Ctrl+C Ctrl+pay: Do people mirror payment behaviour of their peers?

Carin van der Crujisen and Joris Knobens (Radboud University)

Status: published as DNB WP 611.

7. Dutch retailers and their acceptance of cash and cards, is there a turning point?

Nicole Jonker, Nicole Engel and Esther van den Kommer

Status: stopped (internal report finished; DNBulletin published).

8. What drives bitcoin adoption by retailers?

Nicole Jonker

Status: published as DNB WP 585.

9. The influence of contactless payments on consumers' payment behaviour

Nicole Jonker and Codruta Rusu (Austrian Central Bank)

Status: stopped.

Appendix 2 DNB Working Papers in 2018

- No. 583 **Dorinth van Dijk, David Geltner and Alex van de Minne**, Revisiting supply and demand indexes in real estate
- No. 584 **Jasper de Jong**, The effect of fiscal announcements on interest spreads: Evidence from the Netherlands
- No. 585 **Nicole Jonker**, What drives bitcoin adoption by retailers?
- No. 586 **Martijn Boermans and Robert Vermeulen**, Quantitative easing and preferred habitat investors in the euro area bond market
- No. 587 **Dennis Bonam, Jakob de Haan and Duncan van Limbergen**, Time-varying wage Phillips curves in the euro area with a new measure for labor market slack
- No. 588 **Sebastiaan Pool**, Mortgage debt and shadow banks
- No. 589 **David-Jan Jansen**, The international spillovers of the 2010 U.S. flash crash
- No. 590 **Martijn Boermans and Viacheslav Keshkov**, The impact of the ECB asset purchases on the European bond market structure: Granular evidence on ownership concentration
- No. 591 **Katalin Bodnár, Ludmila Fadejeva, Marco Hoeberichts, Mario Izquierdo Peinado, Christophe Jadeau and Eliana Viviano**, Credit shocks and the European labour market
- No. 592 **Anouk Levels, René de Sousa van Stralen, Sînziana Kroon Petrescu and Iman van Lelyveld**, CDS market structure and risk flows: the Dutch case
- No. 593 **Laurence Deborgies Sanches and Marno Verbeek**, Basel methodological heterogeneity and banking system stability: The case of the Netherlands
- No. 594 **Andrea Colciago, Anna Samarina and Jakob de Haan**, Central bank policies and income and wealth inequality: A survey
- No. 595 **Ilja Boelaars and Roel Mehlkopf**, Optimal risk-sharing in pension funds when stock and labor markets are co-integrated
- No. 596 **Julia K rding and Beatrice Scheubel**, Liquidity regulation, the central bank and the money market
- No. 597 **Guido Ascari, Paolo Bonomolo and Hedibert Lopes**, Walk on the wild side: Multiplicative sunspots and temporarily unstable paths
- No. 598 **Jon Frost and René van Stralen**, Macroprudential policy and income inequality
- No. 599 **Sinziana Kroon and Iman van Lelyveld**, Counterparty credit risk and the effectiveness of banking regulation
- No. 600 **Leo de Haan and Jan Kakes**, European banks after the global financial crisis: Peak accumulated losses, twin crises and business models
- No. 601 **Bahar  zt rk, Dorinth van Dijk, Frank van Hoenselaar and Sander Burgers**, The relation between supply constraints and house price dynamics in the Netherlands
- No. 602 **Ian Koetsier and Jacob Bikker**, Herding behavior of Dutch pension funds in asset class investments
- No. 603 **Dirk Broeders and Leo de Haan**, Benchmark selection and performance
- No. 604 **Melanie de Waal, Floor Rink, Janka Stoker and Dennis Veltrop**, How internal and external supervision impact the dynamics between boards and Top Management Teams and TMT reflexivity
- No. 605 **Clemens Bonner, Eward Brouwer and Iman van Lelyveld**, Drivers of market liquidity - Regulation, monetary policy or new players?
- No. 606 **Tanja Artiga Gonzalez, Iman van Lelyveld and Katarina Lucivjanska**, Pension fund equity performance: Patience, activity or both?
- No. 607 **Jasper de Jong en Niels Gilbert**, Fiscal discipline in EMU? Testing the effectiveness of the Excessive Deficit Procedure
- No. 608 **Carin van der Crujjsen, Maurice Doll and Frank van Hoenselaar**, Trust in other people and the usage of peer platform markets
- No. 609 **Jon Frost, Patty Duijm, Clemens Bonner, Leo de Haan and Jakob de Haan**, Spillovers of monetary policy across borders: International lending of Dutch banks, insurers and pension funds
- No. 610 **Randall Hanegraaf, Nicole Jonker, Steven Mandley and Jelle Miedema**, Life cycle assessment of cash payments
- No. 611 **Carin van der Crujjsen and Joris Knobens**, Ctrl+C Ctrl+pay: Do people mirror payment behavior of their peers
- No. 612 **Rob Bauer, Matteo Bonetti and Dirk Broeder**, Pension funds interconnections and herd behavior

- No. 613 **Kai Schindelhauer and Chen Zhou**, Value-at-Risk prediction using option-implied risk measures
- No. 614 **Gavin Goy, Cars Hommes and Kostas Mavromatis**, Forward Guidance and the Role of Central Bank Credibility under Heterogeneous Beliefs
- No. 615 **Mauro Mastrogiacomo**, The Transmission of an Interest Rate Shock, Standard Mitigants and Household Behavior
- No. 616 **Mark Mink and Sebastiaan Pool**, Bank Recapitalizations, Credit Supply, and the Transmission of Monetary Policy
- No. 617 **Lyndsey Rolheiser, Dorinth van Dijk and Alex van de Minne**, Does Housing Vintage Matter? Exploring the Historic City Center of Amsterdam
- No. 618 **Dirk Broeders, Roel Mehlkopf and Annick van Ool**, The economics of sharing macro-longevity risk
- No. 619 **Dieter Wang, Iman van Lelyveld and Julia Schaumburg**, Do information contagion and business model similarities explain bank credit risk commonalities?
- No. 620 **Leo de Haan and Robert Vermeulden**, The impact of sovereign debt ratings on euro area cross-border holdings of euro area sovereign debt
- No. 621 **Iryna Okolelova and Jacob Bikker**, The Single Supervisory Mechanism: competitive implications for the banking sectors in the euro area

Appendix 3. Overview of seminars in 2018

1	09 January	The effect of land lease on house prices	Pieter Gautier, VU Amsterdam
2	23 January	The Macroeconomic Effects of Bank Bail-ins	Christiaan van der Kwaak, University of Groningen
3	6 February	Macroeconomic Effects of Disruption in Global Food Commodity Markets: Evidence for the United States	Gert Peersman, Gent University
4	13 February	GMM Estimation of Non-Gaussian Structural Vector Autoregression	Markku Lanne, University of Helsinki
5	20 February	Monetary Policy and Inequality under Labor Market Frictions and Capital-Skill Complementarity	Evi Pappa, European University Institute
6	27 February	Corporate Debt Structure and Unconventional Monetary Policy in the United States	Urszula Szczerbowicz, Banque de France
7	06 March	Identification Robust Predictive Ability Testing	Andrea Naghi, Erasmus University
8	13 March	Strategic Sovereign Default in a Monetary Union	Sergio de Ferra, University of Stockholm
9	20 March	The Long-Run Information Effect of Central Bank Text	Michael McMahon, University of Oxford
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