

# Research Newsletter

DeNederlandscheBank

EUROSYSTEEM

## Latest news

Economic Policy Panel 22 and 23 April 2016

On April 22-23, 2016 DNB hosted the Economic Policy Panel meeting. DNB governor Klaas Knot gave the opening speech, in which he talked about how research can contribute to policy making, taking the ECB's decision to introduce QE in January 2015 as a case in point. For this decision, the main considerations were its necessity (risk of deflation), its effectiveness (to realize the inflation objective) and its risks (adverse side-effects, financial stability risks, risks for the Eurosystem's balance sheet).

As to necessity, Knot pointed out that research indicates that there is a strong correlation between expected and realized inflation. Hence, inflation expectations are a key indicator for monetary policy. And at the time, inflation expectations were increasingly less well-anchored. Long-term inflation expectations in the euro

area have drifted away from 2% since 2014. Of course, this decline in inflation expectations is a global phenomenon and driven by factors such as plummeting oil prices and a moderated growth outlook.

Knot referred to recent DNB research (Galati et al. 2016) that has examined deflation risk in more detail. These authors investigate the impact of changes in oil prices on deflation risk, using a novel dataset on market participants' perceptions of short- to long-term deflation risk implied by year-on-year options on forward inflation swaps. The authors find that short-term deflation risk (2 years ahead) reacts significantly and most strongly to oil prices. Medium-term deflation risk (3, 5, and 7 years ahead) also reacts significantly to oil prices, but less strongly than at shorter horizons, while long-term deflation risk (10-years ahead) does not react to oil prices.

As to effectiveness, Knot argued that most research focuses on the effects of QE on financial markets, with an emphasis on the expectations channel (signaling). A good example is the study by Rogers et al. (2014) published in Economic Policy. These authors find that monetary policy shocks have substantial impacts on government bond yields, which, in turn, pass through to other asset prices, although to varying extents. Likewise, Haitsma et al (2016). find that unconventional ECB policies affect stock markets.

However, the impact of asset purchase programs may differ depending on economic settings, such as the steepness of the yield curve at the time when the program is announced. For instance, Krishnamurthy and Vissing-Jorgensen (2013) find that the first round of the Fed's LSAP reduced 10-year Treasury yields by more than 6 basis points per \$100 billion worth of purchases of MBS and Treasury securities. In contrast, they find that LSAP2 reduced 10-year Treasury yields by only 3 basis points. According to the IMF (2013) this trend of diminished impact of asset purchase program seems to have continued with later programs. When the ECB decided to introduce QE, the yield curve was already fairly flat, in response to previous ECB unconventional policies.

Knot argued that the effects of QE are foremost visible in financial markets. Since mid 2014 – the moment that the asset purchase program



was priced in by the market – bond yields have declined strongly. In anticipation of QE, the euro has depreciated substantially. The exchange rate effect indicates that investors expect higher returns outside the euro area. Related to that, mainly non-resident investors have sold their bonds to the Eurosystem; euro area banks have sold limited net amounts of government bonds.

But of course, what really matters is the impact of unconventional policy measures on (expected) inflation. There is less agreement in the literature on these effects. For instance, based on a DSGE model with segmented markets, Chen et al. (2012) report that asset purchase programs in the US had a very small impact on inflation (a rise of 0.03 percentage points). In contrast, Chung et al. (2012), using simulations of the Federal Reserve's FRBUS model, report that these programs raised inflation by 0.4-1.0 percentage points.

Ideally, these estimates require a counterfactual, that is, what would have happened absent policy action. Yet, "building an explicit counterfactual to be used in empirical work comes down to guess work" (IMF 2013, p. 11). Models are notoriously poor at capturing crises (such as boom and bust cycles, rational runs, and other large deviations and nonlinear responses).

In Knot's view, more research on the effect of unconventional policies on (inflation) expectations would be helpful for policymakers, hopefully reducing the uncertainty about the impact of unconventional policies on inflation (expectations).

Finally, Knot turned to the risks of QE; the unintended side effects that should be part of the monetary decision process. And here, he argued, definitely more research is needed.

QE stimulates risk-taking in financial markets. There is a risk that financial market developments are out of sync with real economic developments, creating imbalances. It is exemplary that financial asset values have risen

strongly, while investment and credit supply have shown limited growth. The willingness to take financial risk does not translate in willingness to take economic risk. There are several reasons for that: banks, households, and companies are still adjusting their balance sheets, while growth prospects are subdued.

The BIS has warned that very loose monetary conditions and prolonged low interest rates create risk of resource misallocation. The economy can end up in a debt trap, in which low interest rates stimulate borrowing and keep debt levels high. In such a situation, raising interest rates becomes increasingly difficult. In addition, an environment of ample liquidity supports the survival of zombie banks, which tend to evergreen loans to avoid recognizing losses (Group of Thirty 2015). The costs associated with QE could rise with the duration and size of further asset purchases, and at some point these costs may overturn the benefits.

Knot referred to research by Acharya et al. (2016), who examine the impact of the ECB's Outright Monetary Transactions (OMT) program – which ECB President Mario Draghi announced during his famous "whatever it takes" speech in July 2012 – suggests that these concerns are real. The authors argue that due to their significant holdings of GIIPS sovereign debt, the OMT announcement indirectly recapitalized banks in the periphery of the euro area by increasing the value of their sovereign bond holdings. They show that this backdoor recapitalization of European banks led to an increased supply of loans to private borrowers in Europe. However, loans were mostly targeted towards low-quality firms, while firms that received new loans used the newly available funding mainly to build up cash reserves. The authors also find that high-quality non-zombie firms are suffering from the presence of zombie firms in their industry. Investment and employment growth rates of non-zombie firms are significantly depressed if the fraction of zombie firms in their industry increases.

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## Publication: Journal of the European Economic Association

Title paper: [Former Foreign Affiliates: Cast Out and Outperformed?](#)

Authors: [Beata Javorcik](#) and [Steven Poelhekke](#)

The literature has documented a positive effect of foreign ownership on firm performance. But is this effect due to a one-time knowledge transfer or does it rely on continuous injections of knowledge? To shed light on this question

we focus on divestments, that is, foreign affiliates that are sold to local owners. To examine the effect of the ownership change we combine a difference-in-differences approach with propensity score matching. We use plant-level panel data from the Indonesian Census of Manufacturing covering the period 1990-2009. We consider 157 cases of divestment, where a large set of plant characteristics is available two years before and three years

after the ownership change and for which observationally similar control plants exist. The results indicate that divestment is associated with a drop in total factor productivity accompanied by a decline in output, markups as well as export and import intensity. The findings are consistent with the benefits of foreign ownership being driven by continuous supply of headquarter services from the foreign parent.

## Publication: International Journal of Forecasting

Title paper: [Forecasting and nowcasting economic growth in the euro area using factor models.](#)

Authors: [Irma Hindrayanto](#), [Siem Jan Koopman](#) and [Jasper de Winter](#).

Many empirical studies provide evidence that factor models, which use a large data set of economic variables, can contribute to the computation of more accurate forecasts. In this study we examine the performance of four different factor models in a pseudo real-time forecasting competition for the euro area and five of its largest countries. Our aim is to empirically identify the best factor model approach for the forecasting and nowcasting of the quarterly Gross Domestic Product growth rate. We also propose some modifications of existing factor model specifications with the aim of empirically improving their forecast performances. We conclude that factor models consistently outperform the benchmark autoregressive model, before and during the crisis. Moreover, we find that the highest forecast accuracy is mostly produced by the collapsed dynamic factor model.

## Conferences and workshops [Link](#)

Forthcoming:

**Inaugural lecture of Iman van Lelyveld**

On 10 June 2016 at the VU in Amsterdam, Iman Lelyveld will have his inaugural lecture. Attached you find the invitation [Invitation](#)

**9-10 June:**

DNB-CEPR Conference on Bank Equity over the Cycle [Link to CEPR](#)

**6-7-8 September:**

Adaptive Learning Conference

**2 September 2016:**

**Workshop - Estimating and Interpreting Financial Cycles**

On 2 September 2016, De Nederlandsche Bank will host a workshop on "Estimating and Interpreting Financial Cycles". The workshop will take place

in Amsterdam and will have an international audience from universities, central banks and international policy organizations. It will bring together experts directly involved in research on the financial cycle, with a view to discussing insights, challenges and concrete implications for policy. The focus will be on issues related to methodology, data and interpretation. The aim is to have active interactions among all workshop participants.

Confirmed speakers include David Aikman (Bank of England), Stijn Claessens (Board of Governors of the Federal Reserve System), Mathias Drehmann (Bank for International Settlements), Oscar Jorda (San Francisco Fed), Mikael Juselius (Bank of Finland), Siem Jan Koopman (Free University of Amsterdam), Gabriele Perez-Quiros (Bank of Spain), Gerhard Rünstler (ECB) and Marco Terrones (IMF).

## DNB working papers

Since the beginning of 2016 the following Working Papers have been published (no. 498-512), please use the following link: [DNB workingpapers 498-512](#)

• **No 498** - Effective macroprudential policy:

Cross-sector substitution from price and quantity measures Janko Cizel, Jon Frost, Aerd Houben and Peter Wierts - 1 February 2016

• **No 499** - Does Banknote Quality Affect Counterfeit Detection? Experimental evidence from Germany and the Netherlands Frank van der Horst, Martina Eschelbach, Susann Sieber and Jelle Miedema - 1 February 2016 [»»](#)

- **No 500** - A descriptive model of banking and aggregate demand Jochen Mierau and Mark Mink - 9 February 2016
  - **No 501** - On the differential impact of securitization on bank lending during the financial crisis Clemens Bonner, Daniel Streitz and Michael Wedow - 1 March 2016
  - **No 502** - The changing composition of the supervisory boards of the eight largest banks and insurers during 2008-2014 and the impact of the "4+4 suitability screenings" Mijntje Lückcrath-Rovers and Margriet Stavast-Groothuis - 1 March 2016
  - **No 503** - Pension funds' herding Dirk Broeders, Damiaan Chen, Peter Minderhoud and Willem Schudel - 1 March 2016
  - **No 504** - How to monitor the exit from the Eurosystem's unconventional monetary policy: Is EONIA dead and gone? Ronald Heijmans, Richard Heuver and Zion Gorgi - 7 March 2016
  - **No 505** - The invisible hand of the government: "Moral suasion" during the European sovereign debt crisis Steven Ongena, Alexander Popov and Neeltje van Horen - 7 March 2016
  - **No 506** - Measuring expectations of inflation: Effects of survey mode, wording, and opportunities to revise Wändi Bruine de Bruin, Wilbert van der Klaauw, Maarten van Rooij, Federica Teppa and Klaas de Vos - 7 March 2016
  - **No 507** - Improving model-based near-term GDP forecasts by subjective forecasts: A real-time exercise for the G7 countries Jos Jansen and Jasper de Winter - 10 March 2016
  - **No 508** - Individual inflation expectations in a declining-inflation environment: Evidence from survey data Malka de Castro Campos and Federica Teppa - 30 March 2016
  - **No 509** - Deflation risk in the euro area and central bank credibility Gabriele Galati, Zion Gorgi, Richhild Moessner and Chen Zhou - 5 April 2016
  - **No 510** - A comparative analysis of developments in central bank balance sheet composition Christiaan Pattipeilohy - 11 April 2016
  - **No 511** - Determinacy analysis in high order dynamic systems: The case of nominal rigidities and limited asset market participation Guido Ascari, Andrea Colciago and Lorenza Rossi - 21 April 2016
  - **No 512** - Communicating dissent on monetary policy: Evidence from central bank minutes David-Jan Jansen and Richhild Moessner - 17 May 2016
- ## DNB Occasional Studies

Since december 2015 the following Occasional Studies have been published (no. 7), please use the following link: [Occasional Studies](#)

**Nr. 7 (2015):** Shedding a clearer light on financial stability risks in the shadow banking system, December 2015, Koen van der Veer, Eric Klaaijzen en Ria Roerink
- **The impact of the ECB's conventional and unconventional monetary policies on stock markets**, Reinder Haitisma, Deren Unalmis and Jakob de Haan, *Journal of Macroeconomics*, 2016, 48, 101-116
  - **Quantitative easing tilts the balance between monetary and macroprudential policy**, Jan Willem van den End, *Applied Economics Letters*, 2016, 23(10), 743-746
  - **It hurts (stock prices) when your team is about to lose a soccer match**, Michael Ehrmann and David-Jan Jansen, *Review of Finance*, 2016, 20(3), 1215-1233
  - **The level effect of bank lending standards on business lending**, Koen van der Veer and Marco Hoeberichts, *Journal of Banking and Finance*, 2016, 66(1), 79-88
  - **Corporate governance of banks: A survey**, Jakob de Haan and Razvan Vlahu, *The Journal of Economic Surveys*, 2016, 30(2), 228-277
  - **Small firm internationalization, innovation, and growth**, Martijn Boermans and Hein Roelfsema, *International Economics & Economic Policy*, 2016, 13(2), 283-296
  - **Forecasting and nowcasting real GDP: Comparing statistical models and subjective forecasts**, Jos Jansen, Xiaowen Jin and Jasper de Winter, *International Journal of Forecasting*, 2016, 32(2), 411-436
  - **European bond markets: do illiquidity and concentration aggravate price shocks?**, Martijn Boermans, Jon Frost and Sophie Steins Bisschop, *Economics Letters*, 2016, 141, 143-146
  - **Performance of the life insurance industry under pressure: efficiency, competition and consolidation**, Jacob Bikker, *Risk Management & Insurance Review*, 2016, 19(1), 73-104

- **Market reactions to the ECB's Comprehensive Assessment**, Cenkhan Sahin and Jakob de Haan, *Economics Letters*, 2016, 140, 1-5
- **Macroprudential supervision: from theory to action**, Dirk Schoenmaker and Peter Wierts, *National Institute Economic Review*, 2016, 235(1), 50-62
- **Statistics of heteroscedastic extremes**, John Einmahl, Laurens de Haan and Chen Zhou, *Journal of the Royal Statistical Society, Series B*, 2016, 78(1), 31-51
- **The endogeneity of exchange rate pass-through: Some European evidence**, Ayako Saiki, *Open Economies Review*, 2015, 26(5), 893-909
- **Regulating the financial cycle: an integrated approach with a leverage ratio**, Dirk Schoenmaker and Peter Wierts, *Economics Letters*, 2015, 136, 70-72
- **Introduction: Understanding global banking**, Jakob de Haan, Galina Hale and Kathryn Russ, *IMF Economic Review*, 2015, 63(4), 693-697
- **The impact of the global financial crisis on banking globalization**, Stijn Claessens and Neeltje van Horen, *IMF Economic Review*, 2015, 63(4), 868-918
- **Shocks abroad, pain at home? Bank-firm level evidence on the international transmission of financial shocks**, Steven Ongena, José-Luis Peydró and Neeltje van Horen, *IMF Economic Review*, 2015, 63(4), 698-750
- **Financial stress indexes and financial crises**, Robert Vermeulen, Marco Hoeberichts, Bořek Vašíček, Diana Žigraiová, Kateřina Šmídková and Jakob de Haan, *Open Economies Review*, 2015, 26(3), 383-406
- **Regulating interchange fees of card payments**, Nicole Jonker, In: J. Górka (Ed.), *Transforming Payment Systems in Europe*, 2016, Palgrave Macmillan, 149-181
- **Communication about future policy rates in theory and practice: A survey**, Richhild Moessner, David-Jan Jansen and Jakob de Haan, *Journal of Economic Surveys*
- **Leading indicators of financial stress: New evidence**, Borek Vašíček, Diana Žigraiová, Marco Hoeberichts, Robert Vermeulen, Katerina Šmídková and Jakob de Haan, *Journal of Financial Stability*
- **Scale economies in pension fund investments: A dissection of investment costs across asset classes**, Dirk Broeders, Arco van Oord and David Rijsbergen, *Journal of International Money and Finance*
- **Mortgage risk, debt literacy and financial advice**, Raun van Ooijen and Maarten van Rooij, *Journal of Banking and Finance*
- **Size and support ratings of US banks**, Tigran Poghosyan, Charlotte Werger and Jakob de Haan, *North American Journal of Economics and Finance*
- **Forecasting and nowcasting economic growth in the euro area using factor models**, Irma Hindrayanto, Siem Jan Koopman and Jasper de Winter, *International Journal of Forecasting*
- **How financially literate are women? An overview and new insights**, Tabea Bucher-Koenen, Annemaria Lusardi, Rob Alessie and Maarten van Rooij, *Journal of Consumer Affairs*
- **Election cycles in natural resource rents: Empirical evidence**, Jeroen Klomp and Jakob de Haan, *Journal of Development Economics*
- **Entrepreneurship, risk perception and firm performance**, Martijn Boermans and Daan Willebrands, *International Journal of Entrepreneurship and Small Business*
- **Former foreign affiliates: Cast out and outperformed?**, Beata Javorcik and Steven Poelhekke, *Journal of the European Economic Association*
- **Cyclical changes in firm volatility**, Emmanuel de Veirman and Andrew Levin, *Journal of Money, Credit and Banking*

## Forthcoming articles and books

## Links

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