

Martin Bruns

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Free University Berlin

German Institute for Economic Research (DIW Berlin)

RESEARCH INTERESTS

Primary: Econometrics, Macroeconomics

Secondary: Multivariate Time Series Analysis, Bayesian Inference

EDUCATION

PhD Candidate

since 2014

[DIW Berlin, Free University Berlin, Germany](#)

Supervisor: [Prof. Helmut Lutkepohl](#)

M.Sc. in Economic Theory and Econometrics

2012-14

[Toulouse School of Economics, France](#)

Supervisor: [Prof. Pascal Lavergne](#)

B.Sc. in International Economics

2008-12

[University of Tübingen, Germany](#)

JOB MARKET PAPER

Combining Factor Models and External Instruments to Identify Uncertainty Shocks

Abstract: Structural VAR models require two ingredients: (i) Informational sufficiency, and (ii) a valid identification strategy. These conditions are unlikely to be met by small-scale recursively identified VAR models which are commonly used to explore the real and nominal effects of uncertainty shocks. I propose a Bayesian Proxy Factor-Augmented VAR (BP-FAVAR) to jointly address both issues. I find that real economic activity drops and rebounds following an identified uncertainty shock. The price reaction, while negative in the short run, is indistinguishable from zero after six months. Informational insufficiency issues, while detected by a statistical test, do not qualitatively alter these results. Recursive identification leads to biased responses independent of the information set of the model.

WORKING PAPERS

Bayesian Structural VAR Models: A new approach for prior beliefs on impulse responses (with [Michele Piffer](#))

Abstract: We provide an approach to derive the posterior distribution of SVAR models directly on the structural parameters. Our framework allows for restrictions not only on the contemporaneous relations among variables (as already in Sims and Zha (1998) and Baumeister and Hamilton (2015)), but also on impact impulse responses. In so doing, we enrich the tool available for the researchers who aim to set identify structural VAR models. Applying the methodology to simulated data on the New Keynesian model, we find that our approach recovers the true responses more tightly than the popular indirect orthogonal reduced form approach. We then apply our procedure to the identification of fiscal shocks.

Sign restrictions in smooth transition VAR models (with [Michele Piffer](#))

Abstract: We develop a way of identifying Smooth Transition Vector Autoregressive models using sign restrictions. In so doing, we offer an alternative to the recursive identification typically used for these models. What makes sign restrictions tractable despite the nonlinearities of the model is the use of a Bayesian approach. We then use the model and argue that monetary policy shocks have a smaller effect on output when the economy is experiencing relatively high levels of uncertainty. The results cannot be driven by the higher price flexibility documented by the literature in periods when uncertainty is high. In fact, we find that not only output but also prices display a limited response to monetary shocks when uncertainty is high. The results suggest that the effectiveness of monetary policy is driven by mechanisms that go beyond price stickiness.

JOURNAL PUBLICATIONS

Leading Indicators of Fiscal Distress: Evidence from Extreme Bounds Analysis (with [Tigran Poghosyan](#))

Applied Economics, Volume 50, 2018, Issue 13.

WORK IN PROGRESS

Forecasting imports - A VAR analysis with regime-changing informative priors on the steady-state (with [Björn van Roye](#))

WORK EXPERIENCE

Research Associate since Oct 2017

Forecasting Department

German Institute for Economic Research (DIW Berlin)

ECB PhD Traineeship Apr 2018 to Aug 2018

External Developments Division (DG-International)

European Central Bank (ECB)

Supervisor: Alistair Dieppe, PhD

Fund Internship Program Aug 2015 to Oct 2015

Fiscal Affairs Department

International Monetary Fund (IMF)

Supervisor: Tigran Poghosyan, PhD

Research Intern Jun 2012 to Jul 2012

Division of International Finance and Financial Management

Centre for European Economic Research (ZEW)

Supervisor: Dr. Gunnar Lang

Research Intern Mar 2012 to May 2012

Division of Financial Stability

German Central Bank (Bundesbank)

Supervisor: Dr. Till Foerstemann

CONFERENCE PARTICIPATION

2018

Theories and Methods in Macroeconomics (Paris), Royal Economics Society Annual Conference (Sussex), Spring Meeting of Young Economists (Palma), International Association for Applied Economics Annual Meeting (Montreal), European Economic Association Annual Meeting (Cologne), European Meeting of the Econometric Society (Cologne)

2017

Royal Economics Society Annual Conference (Bristol), Nordic Econometric Meeting (Tartu), European Economic Association Annual Meeting (Lisbon), Jahrestagung des Vereins für Socialpolitik (Vienna), 11th International Conference on Computational and Financial Econometrics (London)

2016

10th International Conference on Computational and Financial Econometrics (Sevilla)

AWARDS AND SCHOLARSHIPS

Scholarships

Travel Grant of the International Association for Applied Economics (IAAE) June 2018

Travel Grant of the German Academic Exchange Service (DAAD) June 2018

Conference Premium of the Verein für Socialpolitik 2017

Scholarship of the German Academic Scholarship Foundation (Studienstiftung) Nov 2016 to Jan 2019

Scholarship of the DIW Graduate Center
Exchange Scholarship of the German Academic Exchange Service (DAAD)
Exchange Scholarship for the Ontario/ Baden Württemberg exchange program

Sep 2014 to Oct 2016
Sep 2012 to Jun 2013
Sep 2010 to Dec 2010

Awards

Award for the second best result in the Master M1 Economics and Statistics
Award for the best Intermediary Examination

May 2013
Apr 2010

TEACHING EXPERIENCE

Teaching Assistant

International Economics and Exchange Rates
Instructor: Dr. Philipp Engler
Hertie School of Governance

Spring 2017

Teaching Assistant

Macroeconomics 1 and 2
Instructor: Prof. Dr. Maik Heinemann
Chair of Economic Growth, Integration and Sustainable Development
University of Potsdam

2016-17

Teaching Assistant

Mathématiques Rappels
Instructor: Mylène Latourelle
GREMAQ
Toulouse School of Economics

Fall 2013

Teaching Assistant

Mathematics for Economics and Business Administration
Instructor: Dr. Luis Huergo
Division of Econometrics and Statistics
University of Tübingen

Fall 2009

SOFTWARE SKILLS

Matlab, R, STATA, EViews, Microsoft Office and L^AT_EX

LANGUAGE SKILLS

German: Native speaker

English: Fluent, both written and oral, TOEFL certificate, GRE

French: Fluent, both written and oral, DELF certificate B+

Spanish: Basic knowledge

REFERENCES

Prof. Dr. Helmut Lütkepohl

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Prof. Dr. Dieter Nautz

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Prof. Dr. Maik Heinemann

University of Potsdam

Department of Economics and Social Sciences

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maik.heinemann@uni-potsdam.de

Alistair Dieppe, PhD

World Bank

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