

# Christopher Busch – Curriculum Vitae – November 2016

---

University of Cologne  
Center for Macroeconomic Research  
Email: [busch@wiso.uni-koeln.de](mailto:busch@wiso.uni-koeln.de)  
Phone: +49 221 470 8654 (office)  
Homepage: <http://chrisbusch.eu>

## Education

---

2011 – 2017 (exp.) Ph.D. in Economics, University of Cologne, Germany  
2013 – 2014 Visiting Ph.D. Student, University of Minnesota  
2006 – 2011 Diplom in Social Sciences (Sociology and Economics), University of Cologne, Germany: with distinction  
2009 Visiting Student, Stockholm School of Economics, Sweden (Fall term)  
2008 Visiting Student (Sociology), University of Utrecht, Netherlands (Sep-Oct)

## References

---

Prof. Fatih Guvenen, PhD  
University of Minnesota  
Department of Economics  
[guvenen@umn.edu](mailto:guvenen@umn.edu)  
+1 312 758 6479

Prof. Dr. Alexander Ludwig  
Goethe University Frankfurt  
House of Finance  
[ludwig@safe.uni-frankfurt.de](mailto:ludwig@safe.uni-frankfurt.de)  
+49 69 798 30036

Prof. David Domeij, PhD  
Stockholm School of Economics  
Department of Economics  
[David.Domeij@hhs.se](mailto:David.Domeij@hhs.se)  
+46 8 736 9215

Prof. Michael Krause, PhD  
University of Cologne  
Center for Macroeconomic Research  
[michael.krause@wiso.uni-koeln.de](mailto:michael.krause@wiso.uni-koeln.de)  
+49 221 470 2624

## Field of Specialization

---

Primary: Macroeconomics; Secondary: Labor Economics, Computational Economics

## Working Papers

---

1. “Occupational Switching and Wage Risk” (Job Market Paper)
2. “Asymmetric Business Cycle Risk and Government Insurance” (with David Domeij, Fatih Guvenen, and Rocio Madera)
3. “Labor Income Risk in Germany Over the Business Cycle” (with Alexander Ludwig)

## Work in Progress

---

4. “Higher-Order Wage and Hours Dynamics over the Life Cycle: Evidence from France and Germany” (with Priscilla Fialho and Fatih Guvenen)
5. “The Macroeconomic and Distributional Effects of the 2015-? German Immigration Wave” (with Daniel Harenberg, Dirk Krueger, and Alexander Ludwig)

6. “Labor Market Transitions in a Sectoral Business Cycle Model” (with Helge Braun and Peter Funk)

---

**Academic Visits**

2016 St. Louis FED (Sep – invited by David Wiczer)  
University of Minnesota (Sep – invited by Fatih Guvenen)  
University of Edinburgh (Nov – invited by Ludo Visschers)

---

**Seminar and Conference Presentations**

2016 University of Edinburgh; CMR-BGSE Rhineland-Workshop, Cologne;  
University of Cologne; XXI Workshop on Dynamic Macroeconomics, Vigo;  
IZA-CMR PhD Workshop, Bonn; SED, Toulouse (poster)

2015 Goethe University Frankfurt; NBER Summer Institute, Cambridge  
(participant); 9<sup>th</sup> Nordic Summer Symposium in Macroeconomics, Smögen;  
EEA Annual Congress, Mannheim; Econometric Society World Congress  
2015, Montréal; CESifo Conference on Macroeconomics and Survey Data,  
München

2014 Cologne Workshop on Macroeconomics (discussant); CESifo Conference on  
Macroeconomics and Survey Data, München; University of Cologne

2012 Cologne Workshop on Macroeconomics (poster); 2<sup>nd</sup> Rhineland-Workshop,  
Cologne

---

**Teaching Experience**

Principles of Macroeconomics (Undergraduate) (TA for Prof. Peter Funk, and Helge Braun, PhD)  
Macroeconomics for Business Students (Undergraduate) (TA for Helge Braun, PhD, and Dr. Andreas Schmidt)  
Labor Economics (Undergraduate) (TA for Prof. Marcus Hagedorn, and Dmytro Hryshko, PhD)  
Field Seminar in Macroeconomics on Income Dynamics (Graduate) (TA for Prof. Alexander Ludwig)  
Informal advisor for several B.Sc. theses in economics

---

**Other Academic Work Experience**

2010 - 2011 Student teaching assistant at the CMR, University of Cologne, Germany  
2008 - 2009 Student teaching assistant at the Chair of Economics at the University of  
Cologne (for Helge Braun, PhD)

---

**Scholarships and Fellowships**

Mac CaLM Visiting Fellow (University of Edinburgh), November 2016  
Junior Fellow of SAFE (House of Finance, Goethe University Frankfurt), since October 2015  
Erasmus for exchange semester, 2009

---

**Miscellaneous**

Language Skills German (native), English (fluent), French (basic)  
IT Skills Fortran, Stata, MATLAB, SPSS, Latex, Microsoft Office  
Summer schools Barcelona Macroeconomics Summer School and Barcelona Labor Economics  
Summer School: *courses by Prof. Robert Shimer and Prof. Jordi Galí*

## Abstracts

---

1. “Occupational Switching and Wage Risk” (Job Market Paper):

The literature on labor income risk treats the wage process as exogenous to workers, with few exceptions. However, observed wage dynamics are the result of both exogenous factors, such as productivity shocks, and workers' choices. Using data from administrative German social security records, I document that the extent of occupational switching upon changing establishments is high, and that the decision to change occupations is of major relevance for realized wage changes. I develop a structural model in which workers optimally choose occupations in response to productivity shocks. This choice then also affects their accumulation of human capital, which is imperfectly transferable across occupations. The observed productivity changes of workers differ from the underlying productivity shocks. This distinction allows me to use the model to (i) identify the role of occupational switching choices for productivity changes and (ii) to quantify the utility gain from the option of occupational switching. The model is calibrated to be consistent with the documented facts. In the calibrated model, the endogenous choice of occupations accounts for 43% of the dispersion of idiosyncratic productivity changes after controlling for human capital changes. The utility gain from the availability of switching occupations corresponds to about 1.5% of per-period consumption for the average worker.

2. “Asymmetric Business Cycle Risk and Government Insurance” (with David Domeij, Fatih Guvenen, and Rocio Madera):

This paper studies the business cycle variation in higher-order income risk-i.e., risks that are captured by moments higher than the variance. A key focus of our analysis is the extent to which such risks can be smoothed within households or with government social insurance policies. To provide a broad perspective on these questions, we study panel data on individuals and households from the United States, Germany, and Sweden, covering more than three decades of data for each country. We find that the underlying variation in higher-order risk is remarkably similar across these countries that differ in many details of their labor markets. In particular, in all three countries, the variance of earnings changes is almost entirely constant over the business cycle, whereas the skewness of these shocks becomes much more negative in recessions. Government provided insurance, in the form of unemployment insurance, welfare benefits, aid to low income households, and the like, plays a more important role reducing downside risk in all three countries; the effectiveness is weakest in the United States, and most pronounced in Germany. Using a model with partial insurance against income shocks, we calculate that the welfare benefits of stabilizing higher-order income risk over the business cycle through the existing tax and transfer system range from 4% of annual consumption for Germany to 7% for Sweden, when assuming log utility and a modest degree of partial insurance beyond taxes and transfers.

3. “Labor Income Risk in Germany Over the Business Cycle” (with Alexander Ludwig):

We develop a novel parametric approach to estimate the relationship between idiosyncratic and aggregate labor income risk. We derive closed form expressions for the variance and skewness of shocks, and achieve identification in a Generalized Method of Moments (GMM) framework. Applying our method to German data, we find that the variance of permanent shocks to gross labor earnings of males increases in recessions because negative log earnings realizations become more likely than positive ones. For household gross labor earnings we find insurance against transitory but not against permanent shocks. Finally, the German tax and transfer system provides insurance against both shocks; after taxes and transfers the cyclical of household labor earnings risk is gone.