

Michael D. Bauer
mbauer@ucsd.edu

UNIVERSITY OF CALIFORNIA, SAN DIEGO

Placement Officer: James Andreoni (858) 534-3832 andreoni@ucsd.edu
Placement Assistant: Rebecca Franco (858) 534-1867 refranco@ucsd.edu

HOME ADDRESS AND TELEPHONE:

1061 Beryl Street
San Diego, CA 92109
(619) 857-9156
mbauer@ucsd.edu
<http://econ.ucsd.edu/~mbauer>

OFFICE ADDRESS AND TELEPHONE:

Department of Economics, 0508
University of California, San Diego
9500 Gilman Drive
La Jolla, CA 92093-0508
(619) 857-9156

DATE OF BIRTH: 06/16/1979 **SEX:** M **CITIZENSHIP:** Germany

LANGUAGES: English (fluent), French (proficient), German (native)

UNDERGRADUATE STUDIES:

M.A., Quantitative Economics and Finance, University of St. Gallen, Switzerland, 2005
B.A., Economics, University of St. Gallen, Switzerland, 2003

GRADUATE STUDIES: University of California, San Diego

DATES: August 2005 - present

THESIS TITLE: The Impact of News on Monetary Policy Expectations

EXPECTED COMPLETION DATE: June 2010

THESIS COMMITTEE AND REFERENCES:

James D. Hamilton (Chair)
Department of Economics
University of California,
San Diego
9500 Gilman Drive
La Jolla, CA 92093-0508
(858) 534-5986
jhamilton@ucsd.edu

Allan Timmermann
Rady School of Management
University of California,
San Diego
9500 Gilman Drive
La Jolla, CA 92093-0553
(858) 534-0894
atimmerm@ucsd.edu

Bruce Lehmann
School of International Relations
and Pacific Studies
University of California, San Diego
9500 Gilman Drive
La Jolla, CA 92093-0519
(858) 534-0945
blehmann@ucsd.edu

RESEARCH INTERESTS:

Primary Fields: Macroeconomics, Monetary Economics

Secondary Fields: Finance, Time Series Econometrics

TEACHING EXPERIENCE:

2009: Instructor, University of California, San Diego
(undergraduate level, Principles of Macroeconomics, Monetary Economics)

2005-2009: Teaching Assistant, University of California, San Diego
(graduate and undergraduate level, Econometrics, Macroeconomics, Microeconomics,
Public Economics)

2003-2005: Teaching Assistant, University of St. Gallen, Switzerland
(graduate and undergraduate level, Time Series Econometrics, Information Technology)

RELEVANT POSITIONS HELD:

Summer 2008: Ph.D. intern, Federal Reserve Board of Governors, Washington, D.C.
Summer 2007: Ph.D. intern, AXA, Group Risk Management, Winterthur, Switzerland
Summer 2006: Ph.D. intern, Yum Restaurants International, Finance Department, Geneva, Switzerland
Feb-Aug 2005: Quantitative Financial Analyst, Wegelin Private Bankers, St. Gallen, Switzerland
2003-2005: Research Assistant, Prof. Gebhard Kirchgaessner, Swiss Institute for International Economics and Applied Economic Research, University of St. Gallen, Switzerland
2000-2003: Junior Research Assistant, Prof. Hubert Oesterle, Institute of Information Management, University of St. Gallen, Switzerland

HONORS, SCHOLARSHIPS, AND FELLOWSHIPS:

2009: Summer Graduate Teaching Fellowship, UCSD
2009: Graduate Student Research Grant, UCSD, Department of Economics
2009: Research Fellowship, UCSD, Department of Economics
2008: Graduate Student Research Grant, UCSD, Department of Economics
2005-present: Tuition Scholarship, UCSD, Department of Economics
2003: Appointed as Research Assistant and Teaching Assistant despite non-doctoral status, University of St. Gallen, Switzerland
1999: High-school diploma (Abitur) with highest honors

COMPUTER SKILLS:

Programming in Matlab, C/C++, Fortran, Java, Basic; statistical modeling in R, Stata, SPSS, Excel; database design and programming in MS Access, MS SQL Server

RESEARCH PAPERS:

Term Premia and the News (Job Market Paper)

How do short rate expectations and term premia respond to news? Dynamic term structure models typically imply that the term premium accounts for most of the procyclical response of long-term interest rates, which is at odds with the conventional wisdom about bond risk premia. Bias and lack of precision in the estimated short rate dynamics make it difficult to interpret this evidence. This paper solves these problems by imposing plausible zero restrictions on the market prices of risk. The no-arbitrage assumption becomes useful for estimation, because information in the cross section helps to pin down the dynamics of the short rate. Inference about term premia is performed in a Bayesian framework based on Markov Chain Monte Carlo methods. This allows the researcher to select plausible restrictions and to correctly quantify statistical uncertainty. The main empirical result is that under the restrictions favored by the data the expectations component, and not the term premium, accounts for the majority of high-frequency movements of long rates and for essentially all of their procyclical response to macroeconomic news.

Revisions to Short Rate Expectations: Policy Surprises and Macroeconomic News

How do interest rates react to monetary policy actions and macroeconomic news? The conventional event study approach has several shortcomings, and this paper presents an alternative framework to answer this question, based on a dynamic term structure model that recognizes the heterogeneity of news events. My approach imposes no-arbitrage, parsimoniously captures the revisions to the entire expected short rate path, and integrates the analysis of different types of news. Policy actions are found to affect the entire yield curve, and the impact does not decline with maturity as suggested by previous studies. The impact of macroeconomic announcements reflects the fact that policy inertia plays an important role in how markets form expectations. Policy news lead to more varied effects than macro news, indicating that markets are surprised along more than one dimension by actions of the Fed.

WORK IN PROGRESS:

Restrictions on the Market Prices of Risk in Macro-Finance Term Structure Models

A key challenge for macro-finance dynamic term structure models (DTSMs) is to put structure on the market prices of risk, since otherwise the number of free parameters is too large and the data is overfitted. I estimate a simple macro-finance DTSM involving latent term structure factors as well as observable macro variables, and impose plausible restrictions on the risk sensitivity parameters by applying methods of Bayesian model selection. In addition to leading to a more parsimonious and more reliably estimated model, this approach allows me to rigorously test restrictions on the prices of risk. In this way I can provide answers to the two key questions of macro-finance, namely which macroeconomic variables drive variation in risk premia, and which macroeconomic shocks carry risk.

No-Arbitrage Restrictions and Interest Rate Forecasting

Assuming absence of arbitrage does not automatically lead to better forecasts of interest rates, a fact which has been pointed out recently by several studies. However, since market prices of risk are usually unrestricted, conventional DTSMs do not make use of the no-arbitrage assumption for estimating the dynamic properties of interest rates. This paper presents a parsimonious forecasting model, in which the dynamic system is estimated more precisely and without the typical small-sample bias. This is achieved by imposing sensible zero restrictions on risk sensitivity parameters. Forecasts produced by the restricted DTSM are more accurate than those based on unrestricted DTSMs or alternative methods that do not impose no-arbitrage.

Calendar Effects in the Federal Funds Market: Evidence and Some Theory

The deviations of the effective federal funds rate from the target set by the FOMC show interesting calendar patterns in their first and second moments. This paper documents these calendar patterns and shows economically significant variations in the size of the target rate deviations over the course of the settlement period, as well as over the course of the calendar month, quarter and year. Of particular importance is a structural break due to the introduction of lagged reserve accounting in June 1998. An economic explanation of the empirical results is attempted, based on a theoretical model of bank reserves management.

MASTER THESIS:

Testing for Endogenous Growth

(2004, published by VDM Publishing, Germany, ISBN 978-3-639-20683-8)

Models of endogenous growth have strong empirical predictions about the determinants of technological progress. This thesis details the implications of alternative R&D-based endogenous growth models, and then surveys the empirical literature that tests different aspects of this New Growth Theory. Numerous studies attempt to test the validity of endogenous growth models but come to very different conclusions, since varying hypotheses are considered. There are few rigorous and plausible empirical assessments of whether the determinants of technological progress conform to the predictions of the theory. I provide new evidence on the relevance of R&D intensity for economic growth, using dynamic panel data methods, thereby contributing to the empirical literature that finds support for R&D-based endogenous growth models.

CONFERENCE PRESENTATIONS AND INVITED TALKS:

Term Premia and the News

Research Seminar, Federal Reserve Bank of San Francisco, CA, Dec 2009
XXXIV Simposio de la Asociación Española de Economía, Valencia, Spain, Dec 2009
Research Seminar, University of South Carolina, Columbia, SC, Sep 2009

Revisions to Short Rate Expectations: Policy Shocks and Macroeconomic News

Northern Finance Association 2009 Conference, Niagara-on-the-Lake, ON, Canada, Sep 2009
9th Annual Missouri Economics Conference, Columbia, MI, Mar 2009
Seminar, Federal Reserve Board of Governors, Washington, DC, Sep 2008