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## Education

2017            Ph.D. in Economics, University of Wisconsin-Madison  
2013            M.S. in Economics, University of Wisconsin-Madison  
2010            M.S. in Economics, Peking University  
2007            B.S. in Computer Science, Peking University  
                  B.S. in Economics (double major), Peking University

## Honor & Awards

2016            Christensen Fellowship in Empirical Economics, University of Wisconsin-Madison  
                  University Fellowship, University of Wisconsin-Madison  
                  Vilas Conference Presentation Funds Award, University of Wisconsin-Madison  
2015            Vilas Travel Award, University of Wisconsin-Madison  
                  Department of Economics Travel Funds Award, University of Wisconsin-Madison  
2010            University Fellowship, University of Wisconsin-Madison  
                  Walter A. Morton Memorial Fellowship, University of Wisconsin-Madison  
                  Vilas Welcome Award, University of Wisconsin-Madison  
2009            Scholarship for Graduate Students, Peking University  
2008            University Award for Academic Achievement, Peking University  
                  Guanghua Fellowship, Peking University  
                  Scholarship for Graduate Students, Peking University  
2007            Scholarship for Graduate Students, Peking University  
2006            China Economic Research Fellowship, Peking University

## Research Interests

Monetary Policy, International Finance, Open Economy Macroeconomics, Applied Time Series Econometrics

## Research Experience

2014 - 2016    Project Assistant for Prof. Menzie D. Chinn, University of Wisconsin-Madison  
2012 - 2014    Project Assistant for Prof. Kenneth D. West, University of Wisconsin-Madison  
                  National Science Foundation #1127527  
2007 - 2011    Research Assistant for Prof. Qiang Gong, Peking University  
2006 - 2007    Research Assistant for Prof. Xinqiao Ping, Peking University

## Teaching Experience

Spring 2017    Guest Lecturer, “*Trade, Competition, and Governance in a Global Economy*” (Graduate),  
University of Wisconsin-Madison

Spring 2017	Guest Lecturer, “ <i>Macroeconomic Policy</i> ”, University of Wisconsin-Madison
Fall 2016	Guest Lecturer, “ <i>Macroeconomic Policy and International Financial Regulation</i> ” (Graduate), University of Wisconsin-Madison
Spring 2015	Guest Lecturer, “ <i>Macroeconomic Policy</i> ”, University of Wisconsin-Madison
Fall 2011	Teaching Assistant, “ <i>Principle of Macroeconomics</i> ”, University of Wisconsin-Madison
Fall 2009	Teaching Assistant, “ <i>Industrial Organization</i> ”, Peking University
Fall 2008	Teaching Assistant, “ <i>Advanced Microeconomics</i> ” (Graduate), Peking University

## Research Papers

“*Shadow Rates, Forward Guidance, and Unconventional Monetary Policy*” (Job Market Paper)

Media Coverage: [Econbrowser](#)

A shadow rate is often used to measure the overall stance of unconventional monetary policy. However, this paper shows that, by extracting the short end only, the shadow rate omits rest of the information contained in the term structure, which, as a whole, has a large impact on the economy. Hence the shadow rate is not a sufficiently informative measure of unconventional monetary policy. To better trace out unconventional monetary policy innovations and measure their corresponding macroeconomic impact, I develop a Forward-Guidance-Corrected Factor-Augmented Vector Auto-Regression (FGC-FAVAR) model which employs forward guidance information contained in survey data on expected lift-off dates. I use this forward guidance data as a proxy for omitted term structure information. After controlling for expectations about lift-off, I find that post-crisis expansionary monetary policy is much more aggressive and effective than that estimated by a standard FAVAR model (Wu and Xia (2016)). I estimate that the efforts by the Federal Reserve to stimulate the economy since July 2009 succeeded in making the unemployment rate in December 2013 3.8 percentage points lower, and the real output 15.6% higher, both of which are larger than the estimates reported in the literature.

“*Exchange Rate Prediction Redux: New Models, New Data, New Currencies*”, with Yin-Wong Cheung, Menzie D. Chinn, and Antonio Garcia Pascual, *ECB Working Paper 2018, submitted to Journal of International Money and Finance*

Media Coverage: [VoxEU](#), [Econbrowser](#), [Econbrowser](#)

Previous assessments of nominal exchange rate determination, following Meese and Rogoff (1983) have focused upon a narrow set of models. Cheung et al. (2005) augmented the usual suspects with productivity based models, and “behavioral equilibrium exchange rate” models, and assessed performance at horizons of up to 5 years. In this paper, we further expand the set of models to include Taylor rule fundamentals, yield curve factors, and incorporate shadow rates and risk and liquidity factors. The performance of these models is compared against the random walk benchmark. The models are estimated in error correction and first-difference specifications. We examine model performance at various forecast horizons (1 quarter, 4 quarters, 20 quarters) using differing metrics (mean squared error, direction of change), as well as the “consistency” test of Cheung and Chinn (1998). No model consistently outperforms a random walk, by a mean squared error measure, although purchasing power parity does fairly well. Moreover, along a direction-of-change dimension, certain structural models do outperform a random walk with statistical significance. While one finds that these forecasts are cointegrated with the actual values of exchange rates, in most cases, the elasticity of the forecasts with respect to the actual values is different from unity. Overall, model/specification/currency combinations that work well in one period will not necessarily work well in another period.

“*The Effects of Unconventional and Conventional U.S. Monetary Policy: The Role of Expected Inflation*”

*Media Coverage: [Econbrowser](#)*

This paper converts unconventional monetary policy measures into equivalent conventional monetary policy measures — federal funds rate surprises and expected inflation surprises — and compares the effects of unconventional and conventional monetary policy announcements on the value of the dollar through these two channels. I find that the impact of the federal funds rate surprises on the dollar value has not changed much since the crisis began, although this channel has become irrelevant because the zero lower bound (ZLB) has eliminated all federal funds rate surprises. The impact of the expected inflation surprises on the dollar value, however, has weakened dramatically compared to the pre-crisis period.

“*Uncovered Interest Parity and Monetary Policy Near and Far from the Zero Lower Bound*”, with Menzie D. Chinn, *NBER Working Paper 21159*, submitted to *Journal of Money, Credit and Banking*

*Media Coverage: [Econbrowser](#)*

Relying upon a standard New Keynesian DSGE, we propose an explanation for two empirical findings in the international finance literature. First, the unbiasedness hypothesis — the proposition that ex post exchange rate depreciation matches interest differentials — is rejected much more strongly at short horizons than at long. Second, even at long horizons, the unbiasedness hypothesis tends to be rejected when one of the currencies has experienced a long period of low interest rates, such as in Japan and Switzerland. Using a calibrated New Keynesian dynamic stochastic general equilibrium model, we show how a monetary policy rule can induce the negative (positive) correlation between depreciation and interest differentials at short (long) horizons. The tendency to reject unbiasedness for Japan and Switzerland even at long horizons we attribute to the interaction of the monetary reaction function and the zero lower bound.

“*Interest Tax on Capital Inflows and Exchange Rate Stability*”

This paper analyzes the effect of an interest tax on capital inflows in a small open economy in a New Keynesian framework. We calibrate the model for Brazil, and we find that an interest tax on capital inflows generally cannot stabilize the real exchange rate and output as expected, unless this interest tax policy is endogenous. That is, unless this interest tax policy can be adjusted in time according to changes of economic shocks, it cannot reduce the real exchange rate and output volatility. Results are robust to various sets of parameter values.

“*Great Moderation in Europe: Impulse or Propagation?*”

Stock and Watson (2002) analyze the great moderation of U.S. They identify the break date around 1984, and conclude that the variance reduction is attributable to a smaller error variance, not to changes in the autoregressive coefficients. In this paper, we find a similar great moderation in European economic time series. We identify the break dates for main European countries around 1983. We show that although both France and U.K were experiencing a similar volatility reduction in 1980s, however, the causes for this variance break are completely different. In France, most of the reductions in the variance of inflation and GDP growth are attributable to changes in the variance matrix of the structural shocks (the impulses), while in U.K, most of the reductions are attributable to changes in the structural VAR lag coefficients (propagation).

## Publications

“*Optimal Product Differentiation in a Circular Model*”, with Qiang Gong and Qihong Liu, *Journal of Economics*, 2016, 118(1): 1-34.

“*The Optimal Product Position Choice*”, with Qiang Gong, *China Economic Quarterly* (in Chinese), January 2011, 10(2): 619-634.

## Seminar and Conference Presentations

05.2017 International Conference on Exchange Rate Models for a New Era, Hong Kong  
10.2016 Juli Plant Grainger Macroeconomics Workshop, University of Wisconsin-Madison  
05.2016 Robert E. Baldwin International Workshop, University of Wisconsin-Madison  
01.2016 North American Winter Meeting of the Econometric Society, San Francisco  
03.2015 Midwest Economics Association Annual Conference, Minneapolis  
02.2015 Eastern Economic Association Annual Conference, New York  
06.2010 The Chinese Economists Society Conference, Xiamen University  
06.2010 CCER International Symposium, Peking University  
12.2009 China Economics Annual Conference, Zhejiang University

## Referee Activities

*Journal of International Money and Finance* (1); *Journal of Money, Credit and Banking* (4); *Review of International Economics* (1); *China Economic Quarterly* (in Chinese) (2)

## Computer Skills

MATLAB, RATS, EViews, DYNARE, STATA, C/C++, Bloomberg, L<sup>A</sup>T<sub>E</sub>X, Microsoft Office

## Language

English (fluent), Mandarin (native), Cantonese (fluent), Japanese (beginner)

## References

Kenneth D. West (primary advisor)  
Professor of Economics  
University of Wisconsin-Madison  
Phone: 608-262-0033  
Email: kdwest@wisc.edu

Charles Engel  
Professor of Economics  
University of Wisconsin-Madison  
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Menzie D. Chinn  
Professor of Public Affairs and Economics  
University of Wisconsin-Madison  
Phone: 608-262-7397  
Email: mchinn@lafollette.wisc.edu