

# MARIUS JURGILAS

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**DATE OF BIRTH:** 1979    **SEX:** Male  
**CITIZENSHIP:** Lithuania, US permanent resident

## PRE-DOCTORAL STUDIES:

1997-2001            B.A. in Economics, Vilnius University, Lithuania  
                          *Major:*        Finance  
                          *Minor:*        Mathematical economics

2001-2003            M.A. in Economics, University of Connecticut, Storrs, CT USA  
*Major advisor:*    Dennis R. Heffley, Professor and Department Head

## DOCTORAL STUDIES:            UNIVERSITY OF CONNECTICUT

2002-2007            Ph.D. Economics  
**THESIS TITLE:**    Interbank Markets under Currency Boards

## RESEARCH AND TEACHING FIELDS:

Primary Fields: Macroeconomics, Monetary Economics, Payment Economics  
Secondary:        Mathematical Economics, Computational Macroeconomics

## RELEVANT POSITIONS HELD:

2010-2011            *Norges Bank, Oslo, Norway*  
                          Advisor, Financial Stability Research Department

2010-2011            *Bank of England, London, UK*  
                          Economist, International Finance Division, Financial Stability

2008-2010            *Bank of England, London, UK*  
                          Economist, Payments and Infrastructure Division, Financial Stability

2010/11 Summer    *International School of Management, Vilnius Lithuania*  
                          Visiting professor, International Finance (masters)

2007-2008            *Elon University, North Carolina, USA*  
                          Assistant professor, Economics Department, Martha and Spencer Love  
                          School of Business

Summer 2006        *European Central Bank, Frankfurt, Germany*  
                          Summer intern; Project: Determinants of foreign currency lending

Summer 2004        *Center for Real Estate and Urban Economic Studies, School of Business*  
                          Administration, University of Connecticut  
                          Research assistant; Project: Shared appreciation mortgages

2001-2007            *Department of Economics, University of Connecticut*  
                          Teaching/research assistant

1999-2000            *Eurofaculty, Vilnius University, Lithuania*

	Researcher; Projects: Stock market valuation of Lithuanian firms, Private education in Lithuania
2000-2001	SEB Vilniaus Bankas, SEB Group Corporate Clients and Financial Institutions Department Client executive
Summer 1999	Lithuanian Savings Bank, Lithuania Summer intern; Foreign exchange trading

**TEACHING EXPERIENCE:**

*Instructor for:*

- Principles of Macroeconomics (undergraduate) summer and fall of 2004
- Intermediate Macroeconomics (undergraduate) spring/fall of 2005, 2006
- Mathematical Economics (undergraduate) summer of 2005
- Money and Banking fall of 2007
- Business Statistics fall of 2007, spring 2008
- International Finance (masters), 2010, 2011

*Teaching assistant for:*

- Principles of Microeconomics (undergraduate) 2002, 2003, 2004
- Principles of Macroeconomics (undergraduate) 2001, 2003
- Mathematical Economics (Master) 2002, 2003
- Advanced Macroeconomics III (PhD) 2004

**HONORS SCHOLARSHIPS AND FELLOWSHIPS:**

2001-current	Graduate teaching/research assistantship at University of Connecticut
2005	Doctoral Dissertation Fellowship Award, Graduate School of University of Connecticut

**LANGUAGES:**

English, Lithuanian, Russian, German

**PUBLICATIONS:**

*"Financial Dollarization: The Role of Banks and Interest Rates"* (with Henrique Basso and Oscar Calvo-Gonzalez), *Journal of Banking and Finance*, *forthcoming*

*"Liquidity-saving mechanisms in collateral-based RTGS Payment Systems"* (with Antoine Martin), *Annals of Finance*, *forthcoming*

*"Corruption and Growth Under Weak Identification"* (with Philip Shaw and Marina-Selini Katsaiti), *Economic Inquiry*, *forthcoming*

*"The effect of monetary policy on real house price growth in South Africa: A factor-augmented vector autoregression (FAVAR) approach,"* (with Rangan Gupta and Alain Kabundi). *Economic Modelling*, vol. 27(1), pages 315-323, January, 2010.

*"Interbank Market Under the Currency Board: Case of Lithuania"* *FindEcon Monograph Series: Advances in Financial Market Analysis, Volume 1*, 2005

**PRESENTATIONS:**

*The Economics of Payments IV, FRB NY, New York, USA April 1-2, 2010*

*Financial stability: specialist topics, CCBS, Bank of England, UK, 22 - 26 February 2010*

*Bank of Canada, Ottawa, Canada, invited seminar August 19, 2009*

*2009 Money and Payments Workshop: Payment Systems in a Changing Financial Environment, FRB NY, New York, October 2, 2009*

*Money Macro and Finance Research Group 40th Annual Conference, 10 - 12 September 2008  
Birkbeck, University of London, London, UK*

*European meeting of the European Economic Association and the Econometric Society (EEA-ESEM)  
in Milan, Italy, 27 - 31 August 2008*

*8th Annual Missouri Economics Conference, Federal Reserve Bank of St. Louis and University of  
Missouri, March 28-29, 2008, Columbia, USA*

*Latin American and Caribbean Economic Association (LACEA), Latin American Meeting of the  
Econometric Society (LAMES) 2007 Parallel Meetings, 4 - 6 October 2007, Bogotá, Colombia*

*13th International Conference on Computing in Economics and Finance, June 14 - 16, 2007, Montréal,  
Quebec, Canada*

*Seminar presentations at Cardiff University, CERGE-IE, Bundesbank, SITE, SSE Riga, Elon  
University, February, 2007*

*11th International Conference on Computing in Economics and Finance, June 23-25, 2005,  
Washington, D.C., USA*

*4th Annual International Conference "Forecasting Financial Markets and Economic Decision-  
making", May 12-14, 2005, Lodz, Poland*

## FINISHED PAPERS

### **“Implicit intraday interest rate”** (with Filip Zikes)

This paper estimates the intraday value of money implicit in the UK unsecured overnight money market. Using transactions data on overnight loans advanced through the UK payments system CHAPS Sterling, we find positive and economically significant intraday interest rate in the 2006-2009 period. Importantly, the intraday value of money increases more than tenfold during the financial crisis of 2007-2009 and is positively correlated with the cost of collateral. We obtain qualitatively similar estimates of the intraday interest rate by using quoted intraday bid and offer rates and show that our results are not driven by the intraday variation in the bid-ask spread.

### **“Financial Dollarization: The Role of Banks and Interest Rates”**

(with Henrique Basso and Oscar Calvo-Gonzalez), *Journal of Banking and Finance*, forthcoming

This paper develops a model exploring the determinants of financial dollarization. Expanding on the existing literature, our framework allows interest rate differentials to play a role in explaining financial dollarization. It also accounts for the increasing presence of foreign banks in the local financial sector. Using a newly compiled data set on transition economies we find that increasing access to foreign funds leads to higher credit dollarization, while it decreases deposit dollarization. Interest rate differentials matter for the dollarization of both loans and deposits. Overall, the empirical results lend support to the predictions of our theoretical model.

### **“Liquidity-Saving Mechanisms in Collateral-Based RTGS Payment Systems”, 2010** (with Antoine Martin) *Annals of Finance*, forthcoming

This paper studies banks' incentives regarding the timing of payment submissions in a collateral-based RTGS payment system and how these incentives change with the introduction of a liquidity-saving mechanism (LSM). We show that an LSM allows banks to economize on collateral while also providing incentives to submit payments earlier. This is because in our model an LSM allows payments to be matched and offset, helping to settle payment cycles in which each bank receives a payment that provides enough funds for its own payment to be effected. In contrast to fee-based systems, for which Martin and McAndrews (2008) show that introducing an LSM can lead to lower welfare, in our model welfare is always higher with an LSM in a collateral-based system.

### **“Collateral Pool Payment System”, working paper 2010** (with Tomohiro Ota)

This paper investigates a collateral pool settlement (CPS) payment system – a system that provides intra-day liquidity against a collateral pool. First, we show that participants of CPS do not have incentives to delay payments once they have committed to participate. This is in striking contrast to a Real Time Gross Settlement (RTGS) system where banks have strong incentives to free-ride on liquidity provided by incoming payments. Second, we establish conditions under which banks prefer to participate in a collateral pool instead of settling payments in RTGS. Third, we show that a late payment equilibrium may arise in RTGS in the presence of a possible intra-day failure of a participant if the cost of intra-day liquidity is sufficiently high.

### **“Corruption and Growth under Weak Identification”** (with Philip Shaw and Marina-Selini Katsaiti) *Economic Inquiry*, forthcoming

The goal of this paper is to revisit the influential work of Mauro (1995) focusing on the strength of his results under weak identification. He finds a negative impact of corruption on investment and economic growth that appears to be robust to endogeneity when using twostage least squares (2SLS). Since the inception of Mauro (1995), much literature has focused on 2SLS methods revealing the dangers of estimation and thus inference under weak identification. We reproduce the original results of Mauro (1995) with a high level of confidence and show that the instrument used in the original work is in fact 'weak' as defined

by Staiger and Stock (1997). Thus we update the analysis using a test statistic robust to weak instruments. Our results suggest that under Mauro's original model there is a high probability that the parameters of interest are locally almost unidentified in multivariate specifications. To address this problem, we also investigate other instruments commonly used in the corruption literature and obtain similar results.

**"The effect of monetary policy on real house price growth in South Africa: A factor-augmented vector autoregression (FAVAR) approach"**, (with Rangan Gupta and Alain Kabundi) *Economic Modelling*, vol. 27(1), January 2010

This paper assesses the impact of monetary policy on real house price growth in South Africa using a factor-augmented vector autoregression (FAVAR), estimated using a large data set comprising of 246 quarterly series over the period 1980:01 to 2006:04. The results based on the impulse response functions indicate that, in general, house price inflation responds negatively to monetary policy shock, but the responses are heterogeneous across the middle-, luxury- and affordable-segments of the housing market. The luxury-, large-middle- and medium-middle-segments are found to respond much more than the small-middle- and the affordable-segments of the housing market. More importantly, we find no evidence of the home price puzzle, observed previously by other studies that analyzed house prices using small-scale models. We put this down to the benefit gained from using a large information set.

**"Monetary Policy and Housing Sector Dynamics in a Large-Scale Bayesian Vector Autoregressive Model"**, *working paper 2009* (with Rangan Gupta, Alain Kabundi and Stephen Miller)

Our paper considers this channel whereby monetary policy, a Federal funds rate shock, affects the dynamics of the US housing sector. The analysis uses impulse response functions obtained from a large-scale Bayesian Vector Autoregression (LBVAR) model that incorporates 143 monthly macroeconomic variables over the period of 1986:01 to 2003:12, including 21 variables relating to the housing sector at the national and four census regions. We find at the national level that housing starts, housing permits, and housing sales fall in response to the tightening of monetary policy. Housing sales reacts more quickly and sharply than starts and permits and exhibits more duration. Housing prices show the weakest response to the monetary policy shock. At the regional level, we conclude that the housing sector in the South drives the national data. The responses in the West differ the most from the other regions, especially for the impulse responses of housing starts and permits.

**"Monetary Policy Under a Currency Board"**, *working paper 2007*

The consensus view is that central banks under currency boards do not have tools for active monetary policy. In this paper, we analyze the foreign exchange fee as a monetary policy instrument that can be used by a central bank under a currency board. We develop a general equilibrium model showing that changes in this fee may have the same effects as a change in the monetary policy stance. Thus central banks under the currency board are shown to have an avenue to implement active monetary policy.

**"Interbank Markets Under Currency Boards"**, *working paper 2006*

This paper analyzes interbank markets under currency boards. Under such an environment, problematic endogeneity issues common to other monetary regimes do not arise. Using daily data from the interbank markets in Bulgaria and Lithuania we show, that contrary to the existing literature, overnight interest rates tend to decrease towards the end of the reserve holding period. Empirical results are supported by a finite horizon heterogeneous agents model showing that interest rates tend to decrease in the case of excess aggregate reserves in the banking system. Results contrast with Quirós and Mendizábal (2006) who find that interest rates should be increasing regardless of the outstanding aggregate liquidity in the market. We also show that responsiveness of banks to interest rate changes diminishes as the end of reserve holding period approaches. Under certain circumstances this could lead to multiple equilibria with increasing or decreasing interest rates.

**“Interbank Market Under the Currency Board: Case of Lithuania” FindEcon Monograph Series: Advances in Financial Market Analysis, Volume 1, 2005**

This paper studies the liquidity effect in the environment of a currency board. Under such an environment, the endogeneity issue common to other monetary regimes does not arise, thereby allowing for a straightforward analysis. Using daily data from the interbank market in Lithuania, we estimate the liquidity effect and show that, contrary to the existing literature, overnight interest rates tend to fall at the end of the reserve holding period while being higher at the beginning. Thus, the martingale hypothesis of the interest rates is rejected indicating inefficiency in the interbank market. It is also shown that banks do not utilize aggregate liquidity information provided by the Bank of Lithuania due to the structural impediments of the market. Contrary to the findings in the literature we do not find significant impact of the treasury account holdings to the interbank market interest rates.

THESIS ADVISOR AND REFERENCES:

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