# Michael G. Zdinak

Contact Department of Economics

Washington University in St. Louis

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EDUCATION

## Washington University in St. Louis

St. Louis, MO

Doctor of Philosophy

2020

- Ph.D. Economics expected May 2020.
- M.A. Economics awarded 2016.
- Committee: Werner Ploberger (Chair), George-Levi Gayle, Siddhartha Chib
- Dissertation: "Essays in Financial Econometrics"

## University of Cincinnati

Cincinnati, OH

Bachelor of Arts

2010

• B.A. Economics, B.A. International Affairs & B.A. Political Science.

Interests

Econometrics, Finance, Information Theory, Statistics & Machine Learning.

Research

"Information Arrival in Financial Markets" **Job Market Paper**.

2020

Here I introduce a new high-frequency analysis of options written on the S&P 500, and quantify in real-time the information contained in the probability measure implied by option prices. I find the intraday flow of information summarizing the expected future price of the index is not continuous, and often increases in discrete intervals. This fact is used to identify large-information events over the six years in the sample.

"Information in Risk-Neutral Probabilites" with W. Ploberger.

2019

We propose a simple nonparametric estimator of the probability implied by option prices, and use information theory to quantify the uncertainty regarding the future price of the index. We find the majority of the daily information in our approximate risk-neutral measure accrues near maturity according to a logarithmic or power law. No existing theoretical model describes this process.

Publications

"Are Long-Term Inflation Expectations Well Anchored in Brazil, Chile, & Mexico?", with M. De Pooter, P. Robitaille & I. Walker. *International Journal of Central Banking*, vol. 10.2, June 2014.

### EXPERIENCE

### Federal Reserve Board of Governors

Washington, DC

Project Coordinator

2013-2014

Facilitated Federal Reserve System's participation in the Financial Stability Board's review of LIBOR, co-chaired by Governor Jerome Powell & Martin Wheatley of the UK's Financial Conduct Authority.

Experience	Federal	Reserve	Roard	$\alpha$ f	Governors
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Washington, DC

Senior Research Assistant

2011-2014

Developed software to analyze the economic impact of developments in international financial markets. Collaborated with staff economists to produce regular memos, special briefings, & original research.

### Federal Reserve Discussion Papers

"The Effects of Unconventional Monetary Policies on Emerging Markets"	2014
with M. De Pooter & P. Robitaille.	

"Using Systemic Risk Measures to Understand Financial Vulnerabilities" 2012 with C. Vega & J.M. Londono-Yarce.

# Presentations Midwest Econometrics Group Meeting Columbus OH

Midwest Econometrics Group Meeting. Columbus, OH.		
Asian Meeting of the Econometric Society. Xiamen, China <sup>†</sup> .		
Midwest Econometrics Group Meeting. Madison, WI.	2018	
AEA Annual Meeting Poster Session. Philadelphia, PA <sup>†</sup> .		
International Journal of Central Banking Conference. Warsaw, Poland $^{\dagger}$ .	2013	
European Debt Crisis Conference. Washington, DC <sup>†</sup> .	2012	

 $<sup>^{\</sup>dagger}$ co-author presented.

#### Washington University in St. Louis Teaching

St. Louis, MO

Instructor & Course Designer

2016-2019

- Econ 494 Introduction to Statistical Data Analysis in Stata.
- Econ 4941 Economic Analysis with Excel.

Median Evals: Learning 4.5/5 Organization 4.5/5 Enthusiasm 5/5 Rappaport 5/5.

2015-2016 Teaching Assistant

• Econ 413 Introduction to Econometrics.

#### Dissertation Fellowship, Washington University in St. Louis 2018 AWARDS

University Fellowship, Washington University in St. Louis	2014
Charles Phelps Taft Senior Research Fellowship	2010
Hewett-Kautz Fellowship Scholarship	2010
Joseph A. Steger Presidential Cincinnatus Scholarship	2008

Joseph A. Steger Presidential Cincinnatus Scholarship

#### **BMW** Group Internships

Spartanburg, SC

Intern, Finance & Controlling

2010-2011

Audited policies and recording procedures for \$5 billion in company fixed assets for international suppliers and built a headcount database to improve payroll efficiency.

### Internships Securities & Exchange Commission

Washington, DC

Intern, Honors College Program

2010

Analyzed liquidity withdrawals, order book depth, & option market volatility for joint SEC/CFTC report, "Findings Regarding the Market Events of May 6, 2010".

SERVICE

Webmaster, Economics Graduate Student Association & Conference

Representative, Economics Graduate Student Association Peer Mentor, Center for High-Performance Computing Member, Fortran Microeconometric Computing Group

SKILLS

Languages Python, Ruby, R, Matlab, SAS, Stata, VBA, PHP, Fortran, C/C++

**Protocols** FTP, SSH, XML, OpenMP, Bloomberg, Thomson Reuters.

Databases HDF5, SQLite, TSDB, FAME, Microsoft Access.

Tools Git, SVN, Emacs, Shell Scripting, PuTTY, Bash, LATEX.

REFERENCES

### Werner Ploberger

Thomas H. Eliot Distinguished Professor in Arts & Science Department of Economics Washington University in St. Louis St. Louis, MO 63130 wploberger@wustl.edu

## George-Levi Gayle

Associate Professor Department of Economics Washington University in St. Louis St. Louis, MO 63130 ggayle@wustl.edu

### Siddhartha Chib

Harry C. Hartkopf Professor of Econometrics & Statistics Olin Business School Washington University in St. Louis St. Louis, MO 63130 chib@wustl.edu

### David Bowman

Special Adviser to the Board Division of International Finance Federal Reserve Board of Governors Washington, DC 20551 david.h.bowman@frb.gov