

DAVID MICHAEL ROTHSCHILD

David@ResearchDMR.com

www.ResearchDMR.com & www.PredictWise.com

New York City

CURRENT POSITIONS

Microsoft Research, New York, NY (May 2012 – Present) Economist

Columbia University, (May 2012 – Present) Fellow, Applied Statistics Center

University of Pennsylvania, (2014-Present) Fellow, Penn Program on Opinion Research and Election Studies

PAST POSITIONS

Yahoo! Research, New York, NY (May 2011 – May 2012) Post-Doctoral Economist

New York University, (2015-2017), Member, Social Media and Political Participation

EDUCATION

University of Pennsylvania's Wharton School of Business, Philadelphia, PA (July 2006 – May 2011)

Ph.D. in Applied Economics (Business and Public Policy concentration)

Advisor: Justin Wolfers, *Secondary Advisor*: Sunshine Hillygus

Brown University, Providence, RI (September 1998 – May 2002)

Sc.B. in Civil Engineering and B.A. in History

Cumulative GPA 3.9/4.0

Honors: *Magna Cum Laude* (highest as Brown bestows), *Phi Beta Kappa*, *Tau Beta Pi*, *Sigma Xi*

RESEARCH FIELDS

My work pushes the boundaries on varying data and methods: polling, prediction markets, social media and online data, and large behavioral and administrative data. My work focuses on solving practical and interesting questions including: mapping and updating public opinion (political science), the market for news (general interest/communications), effect of advertising (marketing), judgement and decision making (behavioral finance/economics), and an economist take on public policy (economics).

MAJOR RESEARCH PROJECTS

Project Ratio: all articles for 7,500+ news publishers, closed captioning for all television markets in US; mobile, desktop, and television panels. Most comprehensive dataset to examine media production and consumption.

PredictWise: weekly surveys on over 200 questions modeled and poststratified to the voter file for a unique examination of public opinion.

Adminer: comprehensive data on both production and consumption of advertisements on linear and addressable television to study advertisement effectiveness.

RESEARCH FUNDING

Current Data Share Agreements: Target Smart, Catalist, Pollfish, 605, Nielsen, TVEyes

Current Funding: Harmony Labs

Carlos and Rosa de la Cruz PhD Fellowship: 2009-2010 and 2010-2011

Russell Ackoff Doctoral Student Fellowship Award: 2010

ACADEMIC PUBLICATIONS

Behavioral Finance/Economics

8. [Understanding Market Functionality and Trading Success](#)

With James Schmitz

PlosOne. 2019.

7. [A Sharp Test of the Portability of Expertise](#)

with Etan Green and Justin Rao

Management Science. 2019.

6. [Manipulation in conditional decision markets](#)

With Florian Teschner and Henner Gimpel

Group Decision and Negotiation. 2017. Vol. 26, No. 5, pp. 953-971.

5. [Trading Strategies and Market Microstructure: Evidence from a Prediction Market](#)

With Rajiv Sethi

Journal of Prediction Markets. 2016. Vol. 10, No. 1.

4. [Lay understanding of probability distributions](#)

With Daniel G. Goldstein

Judgment and Decision Making. 2014. Vol. 9, No. 1, pp. 1-14.

3. [A comparison of forecasting methods: fundamentals, polling, prediction markets, and experts](#)

With Deepak Pathak and Miroslav Dudik

The Journal of Prediction Markets. 2015. Vol. 9, No. 2, pp. 1-31.

2. [The Extent of Price Misalignment in Prediction Markets](#)

With David Pennock

Algorithmic Finance. 2014. Vol. 3, pp. 3-20.

1. [Simplifying Market Access: a New Confidence-Based Interface](#)

With Florian Teschner

The Journal of Prediction Markets. 2012. Vol. 6, No. 3, pp. 27-41.

Political Science

18. [One Person, One Vote: Estimating the Prevalence of Double Voting in U.S. Presidential Elections](#)

with Sharad Goel, Marc Meredith, Michael Morse, and Houshmand Shirani-Mehr

American Political Science Review (APSR). 2020. Forthcoming.

17. [President Trump Stress Disorder: Partisanship, Ethnicity, and Expressive Reporting of Mental Distress after the 2016 Election](#)

with Masha Krupenkin, Shawndra Hill, and Elad Yom-Tov

Sage Open. 2019. Vol. 9, No. 1.

16. [Disentangling Total Error, Bias, and Variance in Election Polls](#)

with Houshmand Shirani-Mehr, Sharad Goel, and Andrew Gelman

Journal of the American Statistical Association (JASA). 2018. Vol. 113, No. 522, pp 607-614.

15. [Using big data and algorithms to determine the effect of geographically targeted advertising on vote intention: Evidence form the 2012 US presidential election](#)

with Tobias Konitzer, Shawndra Hill, and Kenneth Wilbur

Political Communications. 2018. Vol. 36, No. 1, pp. 1-16.

14. [Economic Expectations, Voting, and Economic Decisions around Elections](#)

With Gur Huberman, Tobias Konitzer, Masha Krupenkin, and Shawndra Hill

AEA Papers and Proceedings. 2018. Vol. 108, pp. 597-602.

13. [High-Frequency Polling with Non-Representative Data](#)

With Andrew Gelman, Sharad Goel, and Wei Wang

Political Communication in Real Time. 2017.

12. [Mobile as Survey Mode](#)

With Tobias Konitzer and Stephanie Eckman

Proceedings of the Survey Research Methods Section, ASA. 2016.

11. [Online and social media data as an imperfect continuous panel survey](#)

With Fernando Diaz, Michael Gamon, Jake Hofman, and Emre Kiciman

PlosOne. 2016. 10.1371/journal.pone.0145406.

10. [The Mythical Swing Voter](#)

With Andrew Gelman, Sharad Goel, and Doug Rivers

Quarterly Journal of Political Science. 2016. Vol. 11, No. 1, pp 103-130.

9. [Forecasting elections with non-representative polls](#)

With Wei Wang, Andrew Gelman, and Sharad Goel

International Journal of Forecasting. 2015. Vol. 31, pp. 980-991.

8. [Combining forecasts for elections: Accurate, relevant, and timely](#)

International Journal of Forecasting. 2015. Vol. 31, pp. 952-964.

7. [Xbox Polling and the Future of Election Prediction](#)

Harvard Business Review. September 30, 2014 **Not Peer-Reviewed, but regularly cited**

6. [Are Polls and Probabilities Self-Fulfilling Prophecies?](#)

With Neil Malhotra

Research and Politics. 2014. July-September, pp. 1-10.

5. [Fundamental models for forecasting elections at the state level](#)

With Patrick Hummel

Electoral Studies. 2014. Vol. 35, pp. 123-139.

4. [A Combinatorial Prediction Market for the U.S. Elections](#)

With Miroslav Dudik, Sebastien Lahaie, and David Pennock

Economics and Computation. 2013.

3. [Forecasting Elections: Voter Intentions versus Expectations](#)

With Justin Wolfers. 2013. **Not Peer-Reviewed, but regularly cited**

2. Debiased Aggregated Polls and Prediction Market Prices

Chance. 2010. Vol. 23, No. 3, pp. 6-7. **Not Peer-Reviewed, but regularly cited**

1. Forecasting Elections: Comparing Prediction Markets, Polls, and their Biases

Public Opinion Quarterly. 2009. Vol. 73, No. 5, pp. 895-916.

Marketing

2) Post Purchase Search Engine Marketing

with Quianyuan Zhang and Shawndra Hill
WWW Conference. 2018.

1) Geolocated Panel to study impacts of events on Twitter

with Han Zhang and Shawndra Hill
Journal of Data and Information Quality (JDIQ). 2018.

General Interest/Communications

3) The Science of Fake News

With David M. J. Lazer, Matthew A. Baum, Yochai Benkler, Adam J. Berinsky, Kelly M. Greenhill, Filippo Menczer, Miriam J. Metzger, Brendan Nyhan, Gordon Pennycook, Michael Schudson, Steven A. Sloman, Cass R. Sunstein, Emily A. Thorson, Duncan J. Watts, and Jonathan L. Zittrain
Science. 2018. Vol. 359, No. 6380, pp. 1094-1096.

2) Don't blame the election on fake news. Blame it on the media.

with Duncan Watts
Columbia Journalism Review, December 5, 2017 **Not Peer-Reviewed, but regularly cited**

1) Rebuilding legitimacy in a post-truth age.

with Duncan Watts
Medium, January 17, 2017 **Not Peer-Reviewed, but regularly cited**

KEY WORKING PAPERS

Political Science

1) Decoupling and Contrasting Turnout and Sentiment in Electoral Change: Evidence from recent Congressional Elections

with Tobias Konitzer, Sharad Goel, and Houshmand Shirani-Mehr

2) Non-Representative Surveys: Fast, Cheap, and Mostly Accurate

With Sharad Goel and Adam Obeng. This Draft: November 1, 2015.

3) Non-Representative Surveys: Modes, Dynamics, Party, and Likely Voter Space

With Sam Corbett-Davies and Tobias Konitzer. This Draft: December 5, 2017

4) Polls and Prediction Markets: forecasting presidential primaries

With Giorgio Ravalli

5) Do campaign ads matter?

With Shawndra Hill and Masha Krupenkin

6) Do Partisans Make Riskier Financial Decisions When their Party is in Power?

With Shawndra Hill and Masha Krupenkin

7) **Why Political Polling is not Dead – a Plea for Non-Probability Polling, Algorithms, and Big Data**

With Tobias Konitzer

Behavioral Finance/Economics

1) **A new way to think about confidence ranges**

With Daniel G. Goldstein and Florian Teschner

2) **Irrational expectations and anchoring**

With Etan Green and Justin Rao

3) **Parallax and Tax**

With Etan Green and Haksoo Lee. This Draft: May 15, 2019

4) **Log-time Prediction Markets for Interval Securities**

With Miro Dudik, David Pennock, Xintong Wang. This Draft: January, 2019

5) **An Expressive and Liquid Financial Options Market via Linear Programming and Automated Market Making**

With David Pennock, Xintong Wang. This Draft: January, 2019

General Interest/Communications

1) **Unique news over time**

With Ling Dong, Duncan Watts, Markus Mobius,

2) **Towards an automated clustering for online news events: A method proposal and data set for further development**

With Marcel Wittich, Duncan Watts, Markus Mobius

3) **Evaluating the fake news problem at the scale of the information ecosystem**

With Jennifer Allen, Baird Howland, Duncan Watts, Markus Mobius

4) **Where survey data fails: Measuring the size of the FoxHole**

With Jennifer Allen, Baird Howland, Duncan Watts, Markus Mobius

5) **Project Ratio**

With Duncan Watts, Markus Mobius

POPULAR WRITING

Blogger for *PredictWise* 2010-Present

Other Regular Writing: *Huffington Post*, *Washington Post*, *MSNBC*, *Yahoo!*, *Wall Street Journal*, *NYT*

REFEREE

American Economic Review (AER), Proceedings of the National Academy of Science (PNAS), American Political Science Review (APSR), Public Opinion Quarterly (POQ), Quarterly Journal of Political Science (QJPS), Nature Human Behavior, Social Science Quarterly, Management Science, Economics and Computation, Economic Inquiry, Journal of Economic Analysis & Policy, Policy and Internet, PC for MAGG, AAPOR Posters, SJDM Posters, PC for IJCAI, PC for QPOL, Southern Economic Journal, Mercatus Center, etc.

SEMINAR PRESENTATIONS

University of Pennsylvania's Wharton School, Nov 2010 • University of Kansas's Business School, Jan 2011 • Santa Clara University's Business School, Jan 2011 • eBay Research Lab, Jan 2011 • Queens College, Feb 2011 • Yahoo! Research, Feb 2011 • Drexel University's LeBow College of Business, Apr 2011 • University of Colorado's Leeds School of Business, Feb 2013 • Duke University, April 2013 • Fordham, Oct 2014 • Stanford's GSB, Oct 2014 • Santa Clara's Business School, Oct 2014 • University of Pennsylvania's Wharton School, Feb 2014 • University of Pennsylvania's Wharton School, Oct 2014 • New York University, Dec 2014 • New York Federal Reserve, 2015 • University of Pennsylvania's Wharton School, 2015 • Columbia Business School, 2016 • Stanford's MS&E, 2016 • Cornell Roper Center, 2017 • University of Pennsylvania's Wharton School, 2017 • New York University, 2018 • Cal Poly, 2019 • Google, 2019 • Nielsen, 2019 • National Academy of Science, 2019

CONFERENCE PRESENTATIONS (regular attendance)

Political Science: APSA (American Political Science Association) • MPSA (Midwestern Political Science) • AAPOR (American Association for Public Opinion Research)

Behavioral Finance/Economics: SJDM (Judgment and Decision Making) • BDRM (Behavioral Decision Research in Management)/SPUDM (Subjective Probability, Utility, and Decision Making) • ACR (Association for Consumer Research)

Economics: NBER Political Economy or Market Design Workshops • AEA (American Economic Association)

Computer Science: EC (Economics and Computation)

QUOTED IN POPULAR PRESS

New York Times, New York Magazine, NPR, Wall Street Journal, Time, PBS (NewsHour), Yahoo!, Huffington Post, Boston Globe, Bloomberg, Forbes, Wall Street Journal Radio, National Journal, CBS Radio, DCist, Tomorrow Magazine, CNET, GigaOM, IEEE Spectrum, Daily Beast, Daily Caller, The Verge, New Scientist, MIT Technology Review, Scientific American, ING, Boston Herald, Business Week, Reuters, Daily Kos, Fox News.com, Washington Times, G4TV, Popular Science, Techweek Europe, Xconomy, Daily News, etc.

PROFESSIONAL EXPERIENCE

President – DemStore – Washington, DC (January 2003 – June 2006)

Largest political materials consulting firm in USA: design, production, inventory, distribution and direct sales of materials – merchandizing for all major Democratic presidential campaigns in 2004

Materials Director – Tony Sanchez for Governor – Austin, TX (June 2002 – December 2002)

Civil Engineering Intern – Consolidated Edison – New York, NY (Summer 2001)

Opposition Research Intern – New York State Democratic Committee - New York City (Summer 2000)

White House Intern – White House - Washington D.C. (Summer 1999)