Timothy R. McDade

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Website: https://trmcdade.github.io/ GitHub: https://github.com/trmcdade

Education	PhD: Duke University Political Science: Political Economy, Quantitative Methods	2022
	AM: Duke University Political Science: Political Economy, Quantitative Methods	2021
	BS, Honors: The College of William & Mary Mathematics, Chinese Language & Literature	2012
	Tsinghua University Coursework in Chinese Language and Culture	2010

Work Experience

BlackRock, New York, NY, USA

2022 -

2025 –

Director, Portfolio Manager

- Built asset allocations and portfolios to help clients meet retirement liabilities, with a special focus on LatAm, the UK, and EMEA.
- Presented to various public sector officials on the connections between finance, economics, policy, institutional design, and demographics.
- Researched and implemented new methods for providing stable cash flows in retirement.
- With other active investors, conducted portfolio research on macroeconomic and financial phenomenon ranging from valuation of asset managers to control systems.
- Authored articles, presentations, and other research on various economic and financial topics.

Director, Economics and Data Science

2022 - 2025

- Led research for the BlackRock Global Retirement Initiative, a team tasked with expanding BlackRock's retirement business, encompassing over half of the firm's AUM.
 Transitioned the body of work from its home in Corporate Strategy into the Multi-Asset Strategies & Solutions business in Fall 2024.
- Authored articles, presentations, and other research examining the management of risks related to retirement. Analyzed topics ranging from annuity pricing and index construction through macro and microeconomics down through the financial value chain to the political and social determinants of household financial decision making.
- Proposed investment theses and products derived from analyses on the effects of demographic pressures on economic output, growth, prices, and productivity.
- Spearheaded conception and construction of a prototype asset management solution to manage longevity risk.
- Analyzed macrofinancial considerations affecting suitability of retirement regime changes across geographical regions.

Duke University: Durham, NC, USA

2018 - 2022

Research Associate, DevLab@Duke, Machine Learning for Peace

2018 - 2021

- Scraped international media sources to construct an event data set as input to a natural language processing algorithm that predicts democratic backsliding, civil society closures, and authoritarian influence across the world.

- Constructed data set of economic indicators for inclusion in event prediction model.
- Managed a team of research assistants.

Microsoft: Beijing, China and Redmond, WA, USA 2012 - 2018Data Scientist, Microsoft Azure Business Analytics 2014 - 2018

- Led market analytics for China Azure.
- Connected Azure China reporting data pipeline to the global reporting system; built rhythm-of-business and special analysis off the integrated system.
- Relocated to Beijing in August 2016 to provide deeper in-country context, make specific recommendations based on the geopolitical climate, and improve the relationship between the Chinese and USA Azure teams.
- Built analytical tools to inform executive decisions in these key areas:
 - Strategy to improve market standing as a foreign company in China: advocated the improvement of B2C channel to capitalize on the scalability of cloud computing.
 - Price changes based on competitive analyses and price elasticity calculations.
 - Mitigating data center capacity constraints based upon customer usage analysis.
 - Marketing campaign effectiveness via analysis of lifetime value and cost-per-trial conversion.
 - Introduced machine learning models that reduced customer churn and identified top customers.
- These and other data-driven and market-based insights influenced business decisions leading to 731% growth in Microsoft Azure China's monthly revenue over 27 months.
- Led a team of four on-site and offshore contractors.

Program Manager, MACH IT Rotation Program Delivered four external consulting contracts for \$337,500 revenue.	2012 – 2014
The College of William & Mary: Williamsburg, VA, USA	2011 – 2012
Researcher, Computational Science in the Mathematical Sciences	2011 – 2012
Researcher, W&M Global Business Immersion	2011 - 2012

Skills Technical skills:

- Python, R, SQL, Stata, Matlab, Unix/Bash, Git, LaTeX, Microsoft Office, and more
- Familiar with many data sources, including Bloomberg, FactSet, Haver, and more
- Comfortable with a variety of databases including MongoDB and Azure SQLDB
- Strong knowledge of probability, statistics, and quantitative analysis, including time series analysis, advanced regression and statistics, financial analysis, forecasting, machine learning, factor analysis, natural language processing, and data management

Business skills:

- Synthesize, organize, and evaluate huge amounts of data and evidence both quantitative and qualitative, from academic, technical, business, and strategic sources, to recommend action to varied stakeholders.
- Firm grasp of how politics affects economics and finance (and vice versa) at the global, state, and firm level.
- Constructing evidence-based theories of change and advocating a position or strategy.
- Detail-oriented, but able to connect to the bigger picture.
- Project and people management.
- Synthesizing all these skills in the construction of a new business.

Mandarin Chinese (advanced)

Spanish (advanced reading, intermediate speaking)

Peer Reviewed Publications

Jacobs, M., McDade, T. R., Villamizar Chaparro, M., and Corea, M. (2022). The effect of covid-19 and economic stimulus on food security. *Journal of Racial and Ethnic Health Disparities* (link here).

Professional Publications

Boivin, J., Brazier, A., Fawcett, N., Fisher, P. R., Li, W., McDade, T. R., and Nikolic, F. (2024). Decoding demographic divergence. Technical report, BlackRock Investment Institute. (Link here.)

Working Papers

- Chinchilla, R., Rueter, T. D., McDade, T. R., Fisher, P. R., Kochenderfer, M., Candès, E., Hastie, T., and Boyd, S. (2025). Adaptive strategies for pension fund management. *Black-Rock Working Paper*. (Link here.)
- McDade, T. R. (2024). China's foreign investments: Hedges against policy uncertainty. *Aid-Data at William & Mary*, (132). Williamsburg, VA. (Link here.)
- McDade, T. R. and Scholtz, K. (2024). Demographics, capital efficiency, and the labor share of income. *Working Paper*. (Link here.)
- McDade, T. R. (2023). Structural demographic drivers of unit labor cost. *Working Paper*. (Link here.)
- McDade, T. R. (2022a). Dissertation: Economic channels for influence over governments. *ProQuest.* (Link here.)
 - McDade, T. R. (2022b). Dissertation, Part I: Economic Insurance and Protest Mobilization. (Link here.)
 - McDade, T. R. (2022c). Dissertation, Part II: The Effect of Ownership Concentration on Government Bond Yields. (Link here.)
 - McDade, T. R. (2022d). Dissertation, Part III: China's Financial Market Statecraft. (Link here.)
- McDade, T. R., Mosley, L., and Rosendorff, B. P. (2023). Political shocks and sovereign borrowing. *Working Paper*.
- McDade, T. R. (2022e). The effect of information and risk on the ownership structure of government bond markets. *Working Paper*. (Link here.)
- McDade, T. R. (2020c). On survey experiments. Working Paper. (Link here.)
- McDade, T. R. (2020a). Firm responses to shocks: Reallocation of capital contingent upon property rights. *Working Paper*. (Link here.)

McDade, T. R. (2020b). Multilateral constraints on chinese behavior in south china sea territorial disputes. *Duke Global Working Paper Series*, (19) (Link here.)

McDade, T. R. (2012). Analysis and simulation of an optimal control model of an oyster population displaying an allee effect. *Undergraduate Honors Theses, William & Mary*, (499) (Link here.)

Other Publications

McDade, T. R. (2021). Who's surprised by gamestop? not me! (Link here.)

Honors, Distinctions, and Awards

Duke University

- Walter T. Molano Research Grant (\$2,000): 2022.
- Bradley Foundation Grant Funding (\$7,000): 2021.
- Walter T. Molano Research Grant (\$3,000): 2021.
- Departmental Fellowship, Department of Political Science: 2018, 2019, 2020, 2021.
- Summer Research Fellowship, Duke Graduate School: 2019, 2020.
- Summer Research Fellowship, Department of Political Science: 2021.
- Russell Sage Foundation and Alfred P. Sloan Foundation: Summer Institute in Computational Social Science: 2019.

The College of William & Mary

- Monroe Scholar: ranked in the top 5% of Class of 2012 admitted students. Awarded summer research fellowship (\$3,000).
- Dean's List: Fall 2011 & Spring 2012.

Invited Presentations

February 2020: UT Austin, Restraint and National Security Conference

Consulting Experience

World Bank, Washington D.C., USA

Consultant

2022 2022

- Produced reports analyzing data from surveys conducted in Tajikistan, Kyrgyz Republic, and Uzbekistan.

Departmental Service

Duke University

Teaching Assistant, Professor Peter Feaver	2022
Teaching Assistant, Professor Alexander Rosenberg	2021
Teaching Assistant, Professor Michael Munger	2020 - 2021
Research Assistant, Professor Michael Munger	2021 - 2022
Research Assistant, Professor Erik Wibbels	2019 - 2021
Research Assistant, Professor Scott de Marchi	2018 - 2019

Teaching

Foreign Policy of the US (PS 365) Thesis Writing for MA Students (PS 791)

Spring 2022 Fall 2021

Introduction to Political Economy (PS 145)

Professional Affiliations	Council on Foreign Relations, Term Member
Professional Service	Reviewer, Economics & Politics