

Kevin D. Duncan

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Education

2020	Ph.D.	Economics	Iowa State University
2015	M.Sc.	Economics	Iowa State University
2011	B.Sc.	Economics & Political Science	The George Washington University

Professional Experience

Senior Economist, Credit & Collateral Risk Modeling Branch, Federal Housing Finance Agency, Sep. 2021 - current

Led examination of FHLBank collateral and securities valuation and haircut models, unsecured counterparty models, and member credit risk models, including credit union, bank, and insurance company probability of default models.

Issued technical findings for improvement in FHLBank credit and collateral models, model risk management, and policies and procedures.

Conducted research into Value-at-Risk (VaR) estimation techniques. Issued report on technical issues in time series and panel data estimation of VaR and estimation method comparisons and issues with simulation code in R. Carried out simulated portfolios in polypaths subject to market risk and HPI shocks against reduced form estimates of VaR.

Spearheaded the overhaul of a quarterly member credit report requiring SQL and Stata integration.

Ongoing research into the use of state-space methods to estimate VaR and Expected Shortfall using Bayesian methods in Stan.

Economist, Credit & Collateral Risk Modeling Branch, Federal Housing Finance Agency, July 2020 - Aug. 2021

Research

Journal Articles

"How Relative Marginal Tax Rates Affect Establishment Entry at State Borders" *with Yulong Chen, Liyuan Ma, and Peter Orazem*, Forthcoming at Small Business Economics. (Previously circulated as "Impact of Taxes on Firm Location Along State Borders," *with Georgeanne Artz (†) and Peter Orazem*)

"Do State Business Climate Indicators Explain Relative Economic Growth at State Borders?" *with Georgeanne Artz, Peter Orazem, and Arthur Hall*, Journal of Regional Science, Vol. 56, No. 3, 2016, pp. 395-419

Working Papers

"Do Nudges Induce Safe Driving? Evidence from Dynamic Message Signs" *with Sher Afghan Asad*

"The Capital Purchase Program's Effect on Firm Entry over the Business Cycle"

"Linear Hypothesis Tests over Fixed Effects with Serially Correlated Panels"

Work in Progress

"Conditional Value at Risk Models with Mixed Frequency Data: A State Space Approach" *with Brice Green*

"FHLBank System in Perspective"

Grants & Awards

2015 Wayne W. Gross Graduate Fellowship

2015 *with Oleksandr Zhylyevskyy, Christopher Jorgensen, and Michael Long*, "Graduate Student Server Upgrades in Heady Hall," Iowa State University College of Liberal Arts and Sciences Computation Advisory Committee Grant (\$25,908.92)

Conference Presentations & Invited Talks

2022 Urban Economics Association North American Meetings

2021 ITEA Annual Conference and School on Transportation Economics

2020 North American Meetings of the Regional Science Association, Federal Housing Finance Agency, Census Bureau's Center for Economic Studies, Southern Regional Science Association (canceled due to COVID)

2014-2019 Midwest Economics Association x3, Southern Economics Association, Missouri Valley Economics Association

University and Department Service

2014 - 2017 (non continuously) Graduate Student Seminar Coordinator, ISU Graduate College Peer Mentor, Economics Department Computer Committee

Teaching Experience

2018	Adjunct Instructor	Des Moines Area Community College	Ankeny IA
2012-2015	Teaching Assistant	Iowa State University	Ames IA