

## KEVIN DANO

### CONTACT

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<https://kevindano.github.io>

### BUSINESS ADDRESS

Department of Economics  
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### FIELDS OF CONCENTRATION

**Primary:** Econometrics

**Secondary:** Economic Theory

**DISSERTATION TITLE:** "Essays in Panel Data and Network Econometrics"

|                              |                                 |
|------------------------------|---------------------------------|
| Expected Date of Completion: | May 2024                        |
| Principal Advisor:           | Bryan S. Graham                 |
| Other References:            | Stéphane Bonhomme, Demian Pouzo |

### EDUCATION

|                                                  | DEGREE              | DATE      | FIELD                    |
|--------------------------------------------------|---------------------|-----------|--------------------------|
| London School of Economics and Political Science | MSc                 | 2014-2015 | Economics                |
| ENSAE ParisTech                                  | Diplôme d'ingénieur | 2012-2015 | Economics and Statistics |

### WORKING PAPERS

- "Transition Probabilities and Moment Restrictions in Dynamic Fixed Effects Logit Models" (**Job Market Paper**)
- "Functional Differencing in Networks" (with Stéphane Bonhomme)
- "Coordination and Incumbency Advantage in Multi-Party Systems: Evidence from French Elections" (with Francesco Ferlenga, Vincenzo Galasso, Caroline Le Pennec and Vincent Pons), *Revise and resubmit, The Journal of the European Economic Association*

### PUBLICATIONS

- "Identification in a Binary Choice Panel Data Model with a Predetermined Covariate" (with Stéphane Bonhomme and Bryan S. Graham), *SERIEs - Journal of the Spanish Economic Association, forthcoming. Special issue in honor of Manuel Arellano*

### WORK IN PROGRESS

- "Relaxing Strict Exogeneity in Nonlinear Panel Data Models" (with Stéphane Bonhomme and Bryan S. Graham)
- "Identification and Estimation of Random Effects Linear Social Interaction Models with Endogenous Peer Selection"
- "Fixed Effects Estimation of Dynamic Network Formation Models"

### PROFESSIONAL EXPERIENCE

#### RESEARCH

Research Professional, University of Chicago Booth School of Business (2016-2018)

#### TEACHING

Teaching Assistant, Department of Economics, U.C. Berkeley (Fall 2019- Spring 2023)  
Graduate Econometrics, Graduate Microeconomic Theory, Advanced Econometrics, Intermediate Microeconomics

### FELLOWSHIPS AND AWARDS

|      |                                                                                                          |
|------|----------------------------------------------------------------------------------------------------------|
| 2023 | Best PhD Student Paper Award of the International Association for Applied Econometrics Annual Conference |
| 2023 | U.C. Berkeley Dissertation Completion Fellowship                                                         |
| 2021 | U.C. Berkeley Outstanding Graduate Student Instructor Award                                              |

### SELECT CONFERENCE PRESENTATIONS

|      |                                                                      |
|------|----------------------------------------------------------------------|
| 2023 | Stanford GSB Causal Panel Data Conference                            |
| 2023 | California Econometrics Seminar                                      |
| 2023 | International Association for Applied Econometrics Annual Conference |
| 2021 | Berkeley-Stanford Econometrics Jamboree                              |

**JOURNAL REFEREE SERVICE**

*Journal of Econometrics, SERIEs - Journal of the Spanish Economic Association*

**OTHER INFORMATION**

Languages: French (native), English (fluent)

Citizenship: France, Senegal

**SELECT PAPER ABSTRACT**

- “Transition Probabilities and Moment Restrictions in Dynamic Fixed Effects Logit Models” (**Job Market Paper**)

This paper introduces a new method to derive moment restrictions in dynamic logit models with strictly exogenous regressors and fixed effects. We exploit the common structure of logit-type transition probabilities and elementary properties of rational fractions, to formulate a systematic procedure that scales naturally with model complexity (e.g the lag order or the number of observed time periods). We detail the construction of moment restrictions in binary response models of arbitrary lag order as well as first-order panel vector autoregressions and dynamic multinomial logit models. Identification of common parameters and average marginal effects is also discussed for the binary response case. Finally, we illustrate our results by studying the dynamics of drug consumption amongst young people inspired by Deza (2015).

- “Identification in a Binary Choice Panel Data Model with a Predetermined Covariate” (with Stéphane Bonhomme and Bryan S. Graham)

We study identification in a binary choice panel data model with a single predetermined binary covariate (i.e., a covariate sequentially exogenous conditional on lagged outcomes and covariates). The choice model is indexed by a scalar parameter, whereas the distribution of unit-specific heterogeneity, as well as the feedback process that maps lagged outcomes into future covariate realizations, are left unrestricted. We provide a simple condition under which the model parameter is never point-identified, no matter the number of time periods available. At the same time, we show in simulations that its identified set can remain informative suggesting that meaningful learning is possible even in short panels with feedback.

- “Functional Differencing in Networks” (with Stéphane Bonhomme)

Economic interactions often occur in networks where heterogeneous agents (such as workers or firms) sort and produce. However, most existing estimation approaches either require the network to be dense, which is at odds with many empirical networks, or they require restricting the form of heterogeneity and the network formation process. We show how the functional differencing approach introduced by Bonhomme (2012) in the context of panel data, can be applied in network settings to derive moment restrictions on model parameters and average effects. Those restrictions are valid irrespective of the form of heterogeneity, and they hold in both dense and sparse networks. We illustrate the analysis with linear and nonlinear models of matched employer-employee data, in the spirit of the model introduced by Abowd, Kramarz, and Margolis (1999).