

FRANCIS ANNAN

420 West 118TH Street
New York, NY 10027

+1 (917) 971-8455

fa2316@columbia.edu

<https://sites.google.com/site/fannan2316/>

COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

Affiliations

2017 –: Fellow, Center for Development Economics and Policy

2016 –: Economist Consultant, Poverty and Equity Global Practice, World Bank

Doctoral Studies

Ph.D., Sustainable Development, Columbia University (Expected 2018)

Fields: Development Economics; Environment; Public Economics

References:

Professor Bernard Salanié

Columbia Department of Economics & Chair

+1 (212) 854-0472

bs2237@columbia.edu

Professor Cristian Pop-Eleches

Columbia SIPA; Center for Dev Econ & Policy

+1 (212) 854-4476

cp2124@columbia.edu

Professor Wojciech Kopczuk

Columbia Department of Economics & SIPA

+1 (212) 854-2519

wojciech.kopczuk@columbia.edu

Professor Wolfram Schlenker

Columbia SIPA & The NBER

+ (212) 854-1806

wolfram.schlenker@columbia.edu

Prior Education

M.S., Agricultural and Applied Economics, Mississippi State University, 2012

B.S., *Specialize:* Economics & Agribusiness, University of Cape Coast, 2008

Job Market Paper: “Credit-Induced Moral Hazard in Insurance: Theory & Evidence from Ghana”*

Abstract: Standard insurance contract requires upfront payments by consumers to protect against potential future losses. However, consumers in developing countries often buy insurance on credit. While this may allow consumers facing credit constraints to acquire more coverage, it might amplify moral hazard. I evaluate the effect of this moral hazard by exploiting an unexpected regulatory reform in Ghana that made it illegal to buy car insurance on credit; creating an exogenous variation in contract choice: the vast majority (99.5%) of consumers who used to buy comprehensive insurance on credit switch to buying legally-required but cheaper liability insurance with less than 1.6% dropping out of insurance after the reform. Prices are set by the government and cannot be adjusted by insurance companies in response to the reform. I formulate a model that allows for selection and moral hazard, and show that if contracts with higher coverage only increase claims, a simple difference estimator gives a lower bound on the effect of moral hazard. I combine this result with unique administrative data on contracts to document three additional sets of findings. First, there is evidence of moral hazard in the market which was averted by the regulatory reform. Second, moral hazard is responsible for the reduction in average size of claims and the number of claims by 46% and 22% respectively, leading to a 12% increase in insurance

company profits. Finally, I show that abstracting from selection while learning about moral hazard over estimates its effect substantially. Back-of-the-envelope calculations assuming risk aversion and limited enforcement of credit arrangements suggest that the loss in consumer welfare attributable to the regulatory reform do not outweigh the gains in producer welfare. These results have wider applicability, both to interlinking credit with insurance markets and to the study of credit constraints.

Publications

“Disease and Gender Gaps in Human Capital Investment: Evidence from Niger’s 1986 Meningitis Epidemic” (joint with Belinda Archibong) *American Economic Review* *paper*, **2017**, 107(5): 530-35.

“Federal Crop Insurance and the Disincentive to Adapt to Extreme Heat” (joint with Wolfram Schlenker), *American Economic Review* *paper*, **2015**, 105(5): 262-66.

“Spatial Pattern of Yield Distributions: Implications for Crop Insurance.” In Award Winning Papers (Abstract), *American Journal of Agricultural Economics*, **2014**, 96(2): 609.

“Spatial Pattern of Yield Distributions: Implications for Crop Insurance.” (joint with Jesse Tack, Ardian Harri & Keith Coble), *American Journal of Agricultural Economics*, **2014**, 96(1): 253-68.

Working papers

“Informal Risk Sharing and Weather Index Insurance” (joint with Bikramaditya Datta)*

“Harmattan Winds, Disease & Gender Gaps in Human Capital Investment” (joint with Belinda Archibong)*

“Fraud on Mobile Financial Markets: Evidence from A Pilot Audit Study”*

Work in progress

“Fraud Monitors”

“Can Bundling Induce Adverse Selection?: Evidence and Welfare Implications from Ghana”

“The Effect of Automobile Insurance Policy on Air Quality in Ghana”

“Climate Policy & Industry Composition: Evidence from A Carbon Tax Experiment”

“Air Pollution, Carbon Leakage & Gas flaring Policy” (joint with Belinda Archibong)

“Social Protection in Niger: What Has Shocks and Time Got To Say?” (joint with Aly Sanoh)*

Teaching Experience (Columbia University)

2015: MA Level, Microeconomics & Public Policy II, *Teaching Fellow* for Jan Svejnar

2014: MA Level, Microeconomics & Public Policy I, *Teaching Fellow* for Geoffrey Jehle

2014, 2015 & 2016: MA Level, Micro- & Macro-econometrics *Teaching Fellow* for Noha Emara

2013: MA Level, Energy Economics, *Teaching Fellow* for Gernot Wagner

2008-2010: *Teaching Assistant* at University of Cape Coast (undergrad): Metrics, Microeconomics

Professional & Research Experience

2014 & 2015: Graduate Fellow at the Empirical Reasoning Center, Barnard College

2014 & 2015: MA Level, Research and Modelling, Research Tutor for PEPM

2013 & 2014: Climate Economics, Research Assistant for the NBER & Wolfram Schlenker

Professional Memberships/Referee

Econometric Society (ES); American Economic Association (AEA); Agricultural & Applied Economics Association (AAEA); Canadian Economic Association (CEA)

Awards and Honors

CORE-Teagle Fellow, 2017
Center for Development Economics and Policy CDEP Research Grant, 2016 & 2017
NET Institute Research Grant 2017
Dean's Fellow, Columbia University, 2012-2017
National Outstanding Master's Thesis Award, Ag & Applied Economics Association, 2013
Lane and Virginia Holdcroft Fellowship, Michigan State University (I Declined It), 2012
Phi Kappa Phi Honorary, 2011-Present

Conferences and Presentations

NEUDC 2017 (Tufts University)
Association for Public Policy Analysis & Management APPAM Conference 2017
Econometric Society, Africa Meetings 2017
University of Oxford, CSAE 2017: Poverty & Inequality
University of Ghana Economics 2015/2016/2017
Harvard Economics 2015: Networks
American Economic Association AEA 2015/2017: Climate Economics, Gender & Development
Columbia Economics 2014/2015/2016: Econometrics, Applied Micro & Development Seminars
Columbia SIPA 2014/2015: Sustainable Development Seminar
Eastern & Southwestern Economics Association 2012/2017

* Draft versions available