Seungmin (Min) Lee

Cornell University
Applied Economics and Management
410 Warren Hall
Ithaca, NY 14853-7801

Email: sl3235@cornell.edu
Homepage: Link

Fields

Food and Agricultural Economics, Development Economics, Public Policy and Applied Microeconometrics

Education

Ph.D. Applied Economics and Management, Cornell University, 2018–2024 (expected).

Dissertation Committee: Christopher B. Barrett (Chairperson), John Hoddinott, Nicolas L. Bottan

B.S. Mathematics and Economics (Double Major), University of Michigan in Ann Arbor, 2014.

Employment

Graduate Research Assistant, Cornell University, 2019-

Food Security Dynamics in the United States: analyzed household-level food security dynamics by constructing a new complementary food security measurement which tracks households for 20 years (Supervisor: Christopher B. Barrett and John Hoddinott, Cornell University)

Consultant, Development Impact Evaluation, World Bank 2016–2018

Targeting Ultra-Poor in Afghanistan: analyzed the gap between ultra-poor households and non-ultra-poor households in Afghanistan by constructing and analyzing socioeconomic variables from the baseline survey conducted in the field (Supervisor: Aidan Coville and Guadalupe Bedoya, World Bank)

The Kenya Patient Safety Impact Evaluation (KePSIE): validated online monitoring system, which monitors health facilities in Kenya and provides feedback in real-time, whether the system properly generates the inspection scores and displays the results (Supervisor: Aidan Coville and Guadalupe Bedoya, World Bank)

Research Analyst, Innovations for Poverty Action 2015–2016

Encouraging Seasonal Migration in Rural Bangladesh: analyzed the effectiveness of seasonal migration in reducing poverty and evaluated the best migration treatment among multiple treatments conducted in randomized control trial (Supervisor: Mushfiq Mobarak, Yale University)

Increasing Demand for Hygienic Latrines in Bangladesh: Conducted econometric analyses with different regression models, explaining how different treatments and social network affect households' hygienic latrine investment decisions in Bangladesh (Supervisor: Mushfiq Mobarak, Yale University)

Publications

Seungmin Lee, Christopher B. Barrett, John F. Hoddinott, "Food Security Dynamics in the United States: 2001-2017" January 2023. (*Conditionally Accepted* at the American Journal of Agricultural Economics)

> This paper studies household food security dynamics in the U.S. from 2001 to 2017. We introduce a new measure, the probability of food security (PFS), the estimated probability that a household's food expenditures equal or exceed the minimum cost of a healthful diet. We find that a little more than half of households that become newly food insecure resume food security within two years. We also find that households headed by female, non-White, or less educated individuals disproportionately suffer persistent, chronic food insecurity.

Working Papers

Ndèye Fatou Faye, Amy Faye, Mouhammed Rassoul Sy, Seungmin Lee, John McPeak, "Domestic or Imported: An Analysis of Rice Demand in Senegal" January 2022.

> Rice is among the most important cereals for African countries which absorb more than half of worldwide exports. West African countries depend particularly on rice imports in order to achieve food security. For this reason, many policy measures are implemented by governments to regulate the market and reduce the import dependency. This paper contributes to the rice policy debate by analyzing the demand side using the case study of Senegal in West Africa. We analyzed detailed data on rice consumption using a large primary survey of 6,328 rural and urban households in Senegal, with the QUAIDS model. Qualitative data were also collected and analyzed to better interpret results. We found that rural households consume far less local rice than their urban counterparts, meaning that location is a determinant of local rice consumption. We also show that types of rice consumed differ between rural and urban consumers. Urban households consume relatively more whole grain local rice while rural households consume more broken imported rice. Thus, to increase consumption of local rice, efforts should thus be made on the availability of broken local rice for both urban and rural consumers. Our results indicate no substitutability between domestic rice and imported rice in urban households and weak substitutability in rural households. In addition, results show that rice demand is price inelastic. Thus, price policies like subsidies or taxes may not be good shifters of domestic rice consumption.

Work in Progress

Poverty Dynamics in Peru - a Data-Driven Approach Using Synthetic Panel

> Understanding individual and household-level welfare dynamics is very important, and it can help economics and policymakers to study and design policies to help households trapped in long-term poverty. However, long-term household-level panel data to study the poverty dynamics are often unavailable. The synthetic panel method has been used recently to estimate poverty transition using cross-sectional data. Bounded estimates are generated where the true poverty transition is laying in between. Policymakers are more interested in poverty transition point estimates, while true point estimates are very sensitive to how cohorts (e.g. birth cohort, village, or district) are defined in the data. This paper suggests a data-driven way to define cohorts in estimating synthetic panel point estimates of poverty dynamics, using the Peru National Household Survey on Living Conditions and Poverty (ENAHO) from 2007 to 2019. In addition to point estimates using two years of data only, which is a common practice, the paper estimates long-term poverty dynamics for up to six years to test the robustness of the estimates in the long run.

Estimating Multidimensional Development Resilience - with Kibrom A. Abay and Chris B. Barrett

> Resilience measurement has received substantial attention over the past decade or so. Existing measures, however, relate resilience to a single well-being indicator. This may be problematic in contexts where households face deprivations in multiple dimensions. We explore how sensitive estimates of household-level resilience are to the specific well-being indicator used and show that measures are only weakly correlated across different, reasonable indicators based on expenditure-based poverty, dietary diversity, and livestock asset holdings. We then introduce a multidimensional resilience measure, integrating the probabilistic moment-based resilience measurement approach. Applying the new method to household panel data, we show that univariate and multidimensional resilience measures can yield varied inferences on the development

The Effects of SNAP on Food Security Dynamics

Estimates of US Food Insecurity Dynamics: Measuring Food Insecurity Across the US with a New Synthetic Panel Approach - with Senan Hogan-Hennessy and Chris B. Barrett

Awards

George F. Warren Award (First Place), Dyson School, Cornell University (2022)

Teaching Experience

Cornell University

Teaching Assistant

> Managerial Economics (AEM 2600) - Fall 2019 (Instructor: Benjamin Leyden)
> International Trade and Finance (AEM 2300) - Spring 2020 (Instructor: David Lee)
> Applied Econometrics (AEM 6120) - Fall 2022 (Instructor: Brian Dillon)
> Master's Math Camp - Summer 2023

Mentorship

> Structural Transformation of African Agriculture and Rural Spaces+ (STAARS+) - 2020–2021
>> Co-mentored program fellows in writing a paper "Domestic or imported? An analysis of rice demand in Senegal"

Conference Presentations, Invited Talks

2023: USDA ERS (Jan 2023), Agricultural and Applied Economics Association (AAEA) Annual Meeting (July 2023), Association for Public Policy Analysis and Management (APPAM) Fall Conference (Nov 2023, expected)

2022: Agricultural and Applied Economics Association (AAEA) Annual Meeting (August 2022), The Panel Study of Income Dynamics Annual User Conference (September 2022), Southern Economic Association (SEA) 92nd Annual Meeting (November 2022)

2021: International Conference of Agricultural Economists, Center for Poverty Research Workshop at the University of Kentucky

Last updated: August 10, 2023