Tengda Gong

Email: tdgong@ucdavis.edu
Department of Agricultural and Resource Economics

University of California, Davis

Personal website: https://tengdagong.com
One Shields Avenue, Davis, CA 95616

EDUCATION

Ph.D., Economics, University of California, Davis, expected June 2023

Dissertation: The Impacts of Securing Land Ownership on Land, Capital, and Labor Allocations

Committee: Michael Carter (Chair), Stephen Boucher, and Dalia Ghanem

M.A., Economics, Xiamen University (China), 2014-2017

B.S., Finance, University of Science and Technology of China, 2010-2014

RESEARCH & TEACHING INTERESTS

Development Economics, Agricultural Economics, Environmental Economics, Applied Econometrics

PUBLICATIONS

Gafarov, Bulat, Tengda Gong, and Jens Hilscher. 2022. "What Price is Right? Cigarette Demand Has Become More Responsive to Prices." ARE Update 25(4): 9-11. University of California Giannini Foundation of Agricultural Economics.

Gong, Tengda. 2014. "The Mechanization of Farming on *Tiliu Tian* Boosts Transfers of *Chengbao Tian*: Economic Analysis and Descriptive Evidence from Chizhou, Anhui Province, China." *Journal of Translation from Foreign Literature of Economics (Chinese)*. 2(2014): 71-84.

JOB MARKET PAPER

"The Contemporaneous Interaction between the Investment and Rental-supply Effects of Higher Land Ownership Security and its Welfare Implications."

Securing land ownership is supposed to bring about significant gains in both agricultural output and poverty reduction for an unequal agrarian economy like many rural areas in Latin America and the Caribbean (LAC). It can generate these win-win gains by boosting land-attached investments and increasing land rental supply to facilitate land access for the poor who have relatively abundant family labor that is more efficient than hired labor due to the agency cost. However, this paper shows that the moral hazard of tenants not taking care of landlords' land-attached capital, resulting from non-security barriers to long-term land rental contracts, can notably downsize these win-win gains, especially the latter.

To demonstrate these findings, I establish a novel agricultural household model that allows the contemporaneous interaction between the investment and rental-supply effects of higher land ownership security. The model predicts that higher land ownership security will induce large landowners who have access to credit to increase attached capital investments on the land to be self-cultivated more relative to that on the land to be rented out as they are concerned about tenants not taking care of their land-attached capital. This bias of the investment effect favors self-cultivation and thus attenuates the concurrent rental-supply effect, which will limit not only the improvement in labor efficiency but also the size of the investment effect through the complementarity between attached capital and labor inputs in farm production. In equilibrium, the gains in agricultural output and wage rate (the primary income of the poor) will become sizably smaller than that in the case when the moral hazard of tenants not taking care of landlords' land-attached capital is not present, especially the latter, as evidenced by simulation results. The new theory also helps explain the "puzzling" empirical findings in Nicaragua, one of the poorest countries in LAC, that land in rental expanded mildly while attached capital investments increased substantially after salient improvements in land ownership security in the 1990s.

WORK IN PROGRESS

"The Risk of Tenants Squatting Landlords' Land and Aggregate Labor Productivity: Theory and Evidence from the Dominican Republic."

This paper studies the impact of securing land ownership on the labor allocation between the agriculture and non-agriculture sectors and its implication for aggregate labor productivity in countries like the Dominican Republic, where tenants can successfully squat the rented land from landlords. Theoretical and simulation analyses suggest that removing the ownership risk from tenants will eliminate the sectoral labor misallocation and thus increase aggregate labor productivity. The economic mechanism behind it is that workers will choose sectoral occupations following their comparative advantages without fear of losing the land to be rented out or hope for squatting the land to be rented in.

"Cyclical and Trend Variations in Demand Elasticity: Scanner Data Evidence from US Grocery Stores." Coauthored with <u>Bulat Gafarov</u> and <u>Jens Hilscher</u>.

Based on the IRI and Nielsen retail scanner data, we document common cyclical and trend variations in store-residual demand elasticities for groceries across the U.S. in the last two decades. We identify supply shocks of a specific product sold by a specific store in a market of interest by using the volume-weighted average weekly prices of the same product sold in a geographically neighboring market as the price IV. We control demand shocks using multi-way fixed effects of product, store, and week. Our IV estimates of annual residual demand elasticities exhibit a downward trend of 0.04 per year and a cyclical variation of 0.08 per year in magnitude. The former echoes rising markups in the U.S. retail sector. The latter reflects the dynamics of consumers' purchasing power over business cycles.

RESEARCH EXPERIENCE

Research Assistant, Department of Agricultural and Resource Economics, University of California, Davis
Project 1. Use scanner data to test the rational inattention of store managers in pricing groceries.

Assistant Professor Bulat Gafarov, Professor Jens Hilscher and James Chalfant; 2019 & 2021.

I cleaned data, conducted regression analyses using STATA, and wrote technical reports.

Project 2. Apply the Local Projection to the Impulse Response Function for valid inference.

Assistant Professor Bulat Gafarov; 2020. I conducted numerical simulations using MATLAB to show that the Local Projection approach always delivers the asymptotic normality while the conventional Delta method does not work for non-stationary time series data.

Project 3. Employ a new pricing model to evaluate coupon bonds.

Professor Jens Hilscher; 2020-2023. I have been using MATLAB to estimate pricing models and assess their relative performances in predicting bond prices.

Project 4. Overview of the spot and futures markets of water in California.

Associate Professor Katrina Jessoe, Professor Colin Carter and Jens Hilscher, and Assistant Professor Bulat Gafarov; 2021. I collected and summarized water allocation and trading data and policy reports.

PRESENTATIONS

2022 Agricultural & Applied Economics Association Annual Meeting, Anaheim, California, August 2022 Western Economic Association International 97th Annual Meeting, Portland, Oregon, July 2022 Midwest Economics Association 86th Annual Meeting, Minneapolis, Minnesota, March 2022 Development Workshop, The Department of Agricultural and Resource Economics, University of California, Davis, California, May 2021

TEACHING EXPERIENCE

Associate Instructor, Department of Agricultural and Resource Economics, University of California, Davis *Econometric Theory and Applications*: undergraduate; Summer 2022; 35 students

Students' evaluations of overall teaching effectiveness: 4.8/5 (response rate 71%)

Teaching Assistant, Department of Agricultural and Resource Economics, University of California, Davis <u>Undergraduate courses</u>:

Econometric Theory and Applications: Winter & Spring 2022; 48 students on average Students' evaluations of overall teaching effectiveness: $4.0/5 \rightarrow 4.4/5$

Financial Management of Firm: Winter & Spring 2019; 45 students on average Students' evaluations of overall teaching effectiveness: $4.1/5 \rightarrow 4.5/5$

Intermediate Microeconomics: Fall 2018; 60 students

Students' evaluations of overall teaching effectiveness: NA*

*they did not do the student evaluations.

Managerial Economics: Winter 2018; 43 students

Students' evaluations of overall teaching effectiveness: 3.9/5

Graduate course:

Time Series Econometrics: Fall 2020 & Winter 2021; 13 students on average Students' evaluations of overall teaching effectiveness: $4.6/5 \rightarrow 4.9/5$

REFEREE

American Journal of Agricultural Economics Agricultural Economics European Review of Agricultural Economics China Economic Studies (Chinese)

HONORS AND AWARDS

The Best Teaching Assistant, Xiamen University (China), 2017

The Best Master Thesis, Xiamen University (China), 2017

The Outstanding Undergraduate Student, University of Science and Technology of China, 2014

CONTACTS

Dissertation Committee

| Michael Carter (Chair) | mrcarter@ucdavis.edu | 530-752-4672 |
|------------------------|-----------------------|--------------|
| Steve Boucher | srboucher@ucdavis.edu | 530-752-1527 |
| Dalia Ghanem | dghanem@ucdavis.edu | 530-752-7079 |

Coauthors

| Bulat Gafarov | bgafarov@ucdavis.edu | 530-752-9638 |
|---------------|-----------------------|--------------|
| Jens Hilscher | jhilscher@ucdavis.edu | 530-752-4081 |

Journal Editors

| Travis Lybbert (past) | tlybbert@ucdavis.edu | American Journal of Agricultural Economics |
|-----------------------|----------------------------|--|
| Jacob Ricker-Gilbert | jrickerg@purdue.edu | Agricultural Economics |
| Salvatore Di Falco | Salvatore.DiFalco@unige.ch | European Review of Agricultural Economics |
| Yinggang Zhou | yinggang.zhou@gmail.com | China Economic Studies |