

Tengda Gong

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Department of Agricultural and Resource Economics
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EDUCATION

Ph.D., Agricultural & Development Economics, University of California, Davis, *Winter 2024 or earlier*

Dissertation: Demand dynamics in US grocery markets & impacts of securing land ownership in Latin America and the Caribbean.

Committee: [Michael Carter](#) (Chair), [Stephen Boucher](#), [Bulat Gafarov](#), 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

Agricultural Economics, Development Economics, Environmental Economics, and 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. The 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

Secular rise and pro-cyclical variation in markups: Evidence from US grocery stores.

The production-side evidence suggests that the markup of price over marginal cost has been rising across US sectors, especially in the retail sector. However, the extent to which retail stores can charge consumers higher prices fundamentally depends on the own-price elasticities of demand facing them. This paper documents substantial time variation in these elasticities and their implied markups. We propose a two-step procedure to uncover time-varying markups. Using the retail scanner data of US grocery stores from 2001 to 2020, we first estimate elasticities at the market-good-year level. We then efficiently aggregate these elasticities by year to estimate a common trend and cyclical variation and impute annual markups from there. We find (i) a secular increase in markups of 3.9% per year and (ii) an average cyclical decline of 13.6% at years of aggregate demand contractions. These findings suggest that grocery stores may have become more able to charge American households higher prices, although their market power may be constrained by the fluctuations of consumers' purchasing power over business cycles. Across markets, elasticities vary with market-wide economic and demographic factors that we expect to influence consumers' budgets, while our market concentration measure has no significant impact on elasticities.

OTHER DISSERTATION CHAPTERS

The contemporaneous interaction between the investment and rental-supply effects of higher land ownership security and its welfare implications.

Securing land ownership is hypothesized to bring about significant gains in both agricultural output and poverty reduction for an agrarian economy endowed with unequal land ownership distribution. These win-win economic gains hinge on the premise that the security improvement can simultaneously boost land-attached capital investments and increase land rental supply to facilitate land access for the poor who have relatively abundant labor endowment. However, this paper argues that non-security barriers to long-term land rental contracts, which causes capital depreciation risk for landlords, can downsize these economic gains through the countervailing interaction between the investment and rental-supply effects.

I show that in theory the capital depreciation risk will induce large landowners, who have access to credit, to increase attached capital investments on the land to be self-cultivated more than that on the land to be rented out at higher land ownership security. This bias of the investment effect favors self-cultivation and thus attenuates the concurrent rental-supply effect that also faces large landowners. As a result, the poor will witness limited land access improvement and still hire out their endowed labor that would otherwise be more efficiently used on their own farms as family labor given the agency cost of hired labor. This will in turn downsize the investment effect through the complementarity between attached capital and labor in farm production. In equilibrium, agricultural output and wage rate will witness smaller gains than expected, especially the latter or the welfare of the poor, as evidenced by numerical results.

ONGOING RESEARCH PROJECTS

- *Do organic products have higher markups?* Coauthored with [Bulat Gafarov](#) and [Jens Hilscher](#).
- *The unintended effect of Brazil's environment-oriented credit policy on the drought-induced deforestation in the Amazon Biome.* Coauthored with [Nilesh Shinde](#).

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.
- Using the IRI scanner data, we find that grocery stores change prices more frequently for products that have higher demand elasticities, larger revenue contributions, or higher probabilities of having cost changes.

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

- Assistant Professor Bulat Gafarov; 2020.
- Using numerical simulations, we find that Local Projection always delivers the asymptotic normality for non-stationary time series data while the conventional Delta method does not.

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

- Professor Jens Hilscher; 2020-2023.
- We find that our proposed model, which incorporates the industry practice that holders will lose promised coupon payments after default, performs better than traditional models 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.
- Using the California water allocation and futures data as well as weather data, we study if price changes in water futures reflect the evolving conditions in the spot markets of water.

PRESENTATIONS

Chinese Economists Society 2023 North America Conference, Norman, Oklahoma, April 2023
Development Workshop, Department of Agricultural and Applied Economics, University of Georgia, Remote, February 2023
2022 Agricultural & Applied Economics Association Annual Meeting, Anaheim, California, August 2022
Western Economics Association International 97th Annual Meeting, Portland, Oregon, July 2022
Midwest Economics Association 86th Annual Meeting, Minneapolis, Minnesota, March 2022
Development Workshop, 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
Undergraduate courses:

- *Econometric Theory and Applications*: Winter & Spring 2022; 48 students on average
Students' evaluations of overall teaching effectiveness: 4.0/5 → 4.4/5
- *Financial Management of Firm*: Winter & Spring 2019; 45 students on average
Students' evaluations of overall teaching effectiveness: 4.1/5 → 4.5/5
- *Intermediate Microeconomics*: Fall 2018; 60 students
Students' evaluations of overall teaching effectiveness: NA
- *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 → 4.9/5

REFeree

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

HONORS AND AWARDS

A mini research grant, The USDA National Institute of Food and Agriculture, Hatch project S-1072: U.S. Agricultural Trade and Policy in a Dynamic Global Market Environment, 2023
Research grant \$30k, The Giannini Foundation of Agricultural Economics, 2022
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

VOLUNTEER WORK

Co-editor for an online platform posting research briefs in Ag, Dev, and Env economics, 2021-present
Departmental representative, Graduate Student Association, 2018-2022

CONTACTS

Dissertation Committee

Michael Carter (Chair)	mrcarter@ucdavis.edu	530-752-4672
Steve Boucher	srboucher@ucdavis.edu	530-752-1527
Bulat Gafarov	bgafarov@ucdavis.edu	530-752-9638
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Coauthors

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Nilesh Shinde	nilesh@vt.edu	540-214-0821

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