Markets and Development Initiative

Aaron Santos

ABOUT

The Markets and Development Initiative, hosted by the Economic Growth Center, brings together Yale economists and collaborators from a range of subfields to explore how the structure and functioning of markets shape economic growth and development in low- and middle-income countries (LMICs).

RATIONALE

Some of the most important policy issues facing LMICs today relate to market dynamics: how agricultural, educational, energy, financial, manufacturing, and other markets can best be designed and regulated to promote entrepreneurship, spur firm growth, and drive economic development. A large body of research has shown that market failures and poor public policies can hinder firm productivity – yet empirical research on how market dynamics interact with firm decisions remains nascent, especially in LMICs.

By cultivating collaboration among a diverse network of economists, the Markets and Development Initiative brings together the methods and approaches from a set of cross-cutting subfields within economics, namely Industrial Organization (IO), trade, and development economics. The initiative's goal is to combine a deep understanding of markets in LMICs with micro-empirical evidence and an understanding of local institutions, in order to shed new light on the power of policy to shape markets for economic growth and development.

RESEARCH AREAS

Firm size and productivity: Firms in low- and middle-income countries tend to be small and inefficient: many firms are born, never grow, and – in contrast to advanced economies – rarely exit. What are the distortions underlying these patterns? EGC affiliates have examined various factors affecting firm size and growth, including the impact of government-subsidized inputs, such as water or fertilizer, on productivity in the agricultural sector.

Market structure, contracting, and trade: Work in development, often combining detailed data with industrial organization-based models, has provided a useful empirical grounding for what obstacles to trade and market integration are most important for low- and middle-income countries. EGC affiliates, for example, have employed experimental methods to evaluate competition models of rural agricultural markets. These issues also interact with EGC affiliates' broader research agenda on international trade.

Tony Wu Studio, Shutterstock

Energy markets: Energy markets are prone to monopoly and produce large external costs through pollution. How should governments regulate such markets, particularly in countries with weak state capacity? EGC researchers are examining the role of government procurement in energy markets, the impacts of expanding energy access in lower-income contexts, how firms respond to environmental regulation, as well as how market-based regulations or distributed monitoring such as emissions trading programs might reduce the cost of regulation for firms.

Markets for financial services: Economists' tools within the field of industrial organization are ideal for exploring questions of market design in financial services. For instance, existing work has suggested the profound consequences of the first wave of the mobile phone and 3G revolutions for LMICs, including their gendered employment effects. Yet we know less about the implications for a second wave of deeper mobile-based markets for goods, services, and market integration, including financial inclusion. In another example from the banking system, policymakers often use regulation to influence bank branch entry, but evidence examining the impacts of this regulation on market-level outcomes is nascent.

Industrial policy: We are witnessing a new era of industrial policy that includes the use of tariffs, subsidies, and export bans to influence market activity. How effective are these policies in the countries that implement them? How do they affect countries that are directly targeted, such as the US and China? How are "bystander" countries affected, such as Vietnam and Cambodia? EGC researchers are investigating these questions empirically by studying the complex impacts of the US-China trade war and ensuing global reallocations and examining industrial policy in the global semiconductor market.

SELECT RESEARCH IN PROGRESS

Firm size and productivity

TRADE IN THE PRESENCE OF INFORMALITY, LABOR MARKET FRICTIONS, AND REGULATIONS

How does trade affect economic outcomes in the presence of informality? Using data from Brazil, Penny Goldberg and co-authors develop a framework for evaluating the role of trade in contexts with large informal sectors, yielding new insights on trade's effects on the labor market, productivity, welfare, and wage inequality. The study has six key findings. (1) While informality in the non-tradable sector may increase as an economy opens up to trade – depending on the starting point and the extent of trade liberalization – informality in the tradable sector is reduced. (2) The productivity gains from trade are understated when the informal sector is omitted. (3) Trade openness leads to large welfare gains even when informality is repressed. (4) Repressing informality increases productivity, but at the expense of employment and welfare. (5) The effects of trade on wage inequality are reversed when the informal sector is included in the analysis. (6) The informal sector works as an "unemployment buffer" but not a "welfare buffer" in the event of negative economic shocks. Future work may explore the transition dynamics associated with various policy changes.

Market structure, contracting, and trade

SEARCH COSTS, INTERMEDIATION, AND TRADE: EXPERIMENTAL EVIDENCE FROM UGANDAN AGRICULTURAL MARKETS

How does a reduction in search and matching costs impact intermediation and trade in agricultural markets? Lauren Falcao Bergquist and co-authors examine search costs as a barrier to market integration in lower income countries, harming both producers and consumers. They present evidence from the large-scale experimental rollout of a mobile phone-based marketplace intended to reduce buyer-seller search and matching costs for agricultural commodities in Uganda. The study finds that market integration improves substantially: trade increases and price dispersion falls. Incorporating


Ishan Tankha

equilibrium effects through a trade model, the study's results suggest that the intervention reduced fixed trade costs between treated markets by 21% and increased average trade flows across all markets by 2%. Almost all activity on the platform is among larger traders, with very little use by smallholder farmers. Nevertheless, the benefits of improved arbitrage by traders appears to pass through to farmers in the form of higher revenues in surplus markets.

Industrial policy

TRADE, LABOR MARKET CONCENTRATION, AND WAGES

How does a reduction in trade barriers impact wages in labor markets that become more exposed to import competition? Mayara Felix examines the effect of trade on local labor market concentration and the repercussions on wages in light of tariff shocks from Brazil's trade liberalization. Trade increased concentration, an effect driven by firm exit and labor reallocation towards exporters. Increased concentration raised wage markdowns by enough to offset small wage gains from reallocation, but on balance did not meaningfully reduce wages. Most of the wage decline due to trade was driven instead by reductions in the marginal revenue product of labor.

SELECT PUBLICATIONS

Fajgelbaum, P., P. K. Goldberg, P. Kennedy, A. Khandelwal and D. Taglioni. (2024). **"The US-China Trade War and Global Reallocations."** *American Economic Review: Insights* 6(2).

Goldberg, P.K. and T. Reed. (2023). **"Presidential Address: Demand-Side Constraints in Development. The Role of Market Size, Trade, and (In)Equality."** *Econometrica* 91(6).

Demir, B., A. C. Fieler, D. Y. Xu and K. K. Yang (2024). **"O-Ring Production Networks."** *The Journal of Political Economy* 132(1).

Baragwanath, K., R. Goldblatt, G. Hanson and A. K. Khandelwal (2021). **"Detecting urban markets with satellite imagery: An application to India."** *Journal of Urban Economics* 125.

Ryan, N. (2021). **"The Competitive Effects of Transmission Infrastructure in the Indian Electricity Market."** *American Economic Journal: Microeconomics* 13(2).

INITIATIVE APPROACH

Cultivation of a network of top scholars working at the intersection of IO, trade, and development
Build a community of scholars within the markets and development domain, support high potential projects in the initiative's focus areas, and foster collaboration among IO, trade, and development economists, including those at Yale and beyond.

Mentorship and collaboration with junior researchers
Encourage and support younger scholars (assistant professors, post-doctoral researchers, graduate students and pre-doctoral fellows) to work on topics in the markets and development domain.

Policy outreach
Bring together researchers, practitioners, and policymakers to discuss the current evidence base, new research contributions, and high potential, policy-relevant, research areas for further exploration.

Hussain Warraich, Shutterstock

LEARN MORE ABOUT THE INITIATIVE AT:
https://egc.yale.edu/initiatives/markets-and-development