

Diana Van Patten

Research Statement

I am an international trade economist. **My research studies how firms shape who gains from globalization.** Across my work, I develop new measures and devise empirical strategies to test mechanisms that are difficult to observe, combining administrative records on firms, households, and transactions with natural experiments and economic models. My main agenda in international trade is complemented by a related stream in macro-development that leverages similar techniques to study technology adoption and innovation in developing economies.

1. International trade: firms and the incidence of openness

In *Multinationals, Monopsony, and Local Development* ([Econometrica](#), 2022), with Mendez, we study the effects of foreign direct investment when a multinational has labor-market power. The paper examines the United Fruit Company, one of the largest multinational firms of the 20th century, and its long-run impact on Costa Rica, where it operated from 1899-1984. We hand-digitize archival concession maps and company records on payroll and amenity spending to reconstruct the firm’s footprint and investments. Combining the maps with georeferenced census microdata from 1973–2011, we use a geographic regression discontinuity design based on a redrawn concession boundary to identify the firm’s effect. This effect disciplines a spatial model whose central insight is that the local gains from FDI depend on the workers’ outside options. When a foreign monopsonist faces mobile labor, it may invest in local amenities (like schools, hospitals, and infrastructure) as an efficient way to attract and retain workers. These investments were profit-maximizing, but generated gains in living standards that lasted for decades. The paper finds that worker mobility and labor-market competition determine how much of the surplus created by a multinational is shared locally. This mechanism helps reconcile our findings with a large set of historical studies that use geographic RDs to examine colonial and quasi-colonial firms and find negative effects. We show limited labor mobility can aid identification by reducing sorting across boundaries, but it also weakens workers’ outside options and increases firms’ ability to extract surplus, conditioning welfare effects to be negative.

In *The Legacy of Banana Culture: How Multinational Exposure Reshapes Local Norms*, with Mendez, we study whether multinational firms transmit foreign work-related values across generations. We reconstruct over *one hundred years of genealogy* for Costa Rica’s full population and infer ancestors’ UFCo employment, identifying UFCo intergenerational ties for 8% of the current population. Historians’ accounts of “banana culture” document UFCo’s efforts to shape workplace values. We digitize thousands of pages of Unifruitco, its monthly magazine and main vehicle for these messages, to reconstruct how its cultural agenda changed over time. Linking descendants’ IDs to administrative records, we compare UFCo-linked lineages whose ancestors encountered different messages during their employment, conditioning on exposure duration. We find corresponding differences in descendants’ employment choices, employer attachment, and workplace ties. These findings indicate firms shape the local consequences of globalization by transmitting values across borders and generations, leaving a lasting imprint on workplace culture.

In *Voting on a Trade Agreement: Firm Networks and Attitudes Towards Openness* ([Review of Economic Studies](#), lead article, 2025), with Mendez, we find that firm networks and expected consumer gains explain support for trade beyond sector-level exposure. We break new ground in anonymity-compatible voting data, linking highly disaggregated results from Costa Rica’s single-issue 2007 CAFTA referendum to workers’ employers, production networks, and consumption baskets. We find direct and indirect exposure to the FTA through employers and their network was decisive in the referendum’s outcome.

In *How New Products Enter Markets: Social Networks, Consumer Imports, and Retailer Learning* ([Quarterly Journal of Economics](#), forthcoming), with Argente and Mendez, we show that direct consumer imports expand domestic assortments by revealing demand for products not yet stocked locally. We reconstruct family, coworker, and neighborhood networks for Costa Rica’s adult population and infer friendships from bilateral peer-to-peer transfers. We link these networks to relatives abroad and the universe of consumer imports, then connect consumers to the domestic retailers where they shop and track those

retailers’ product choices. Using foreign expenditure shocks transmitted through migrant ties, we identify how demand spreads through consumer networks and induces retailers to stock new products. A survey of 700 retailers supports the learning mechanism. Pioneer consumers thereby expand access to foreign varieties, even for households that never import directly.

In *De Minimis as a Constraint on Local Retail Market Power*, with Argente and Mendez, we study whether consumers’ foreign outside option disciplines domestic retailers and who benefits from this competition. Answering this question involves at least three challenges: measuring markups, defining markets, and obtaining variation from competition shocks. Our setting delivers all three. We measure retail markups by linking the *universe of firms’ electronic invoices* to customs records, observing the price retailers pay domestic and foreign suppliers and what they charge customers by product; invoices with customer identifiers linked to their residences allow us to define each retailer’s local market; and Costa Rica’s removal of its de-minimis exemption raises consumers’ import costs without changing retailers’ costs. We find more exposed retailers raise prices without corresponding increases in input costs. We develop variable markups model to trace effects across income groups. Although direct imports are concentrated among richer households, greater retail concentration in poorer areas amplifies price increases. Thus, the model delivers a new result: *a reform that is progressive in exposure can be regressive in equilibrium*. Together with the [QJE](#) paper, this shows how consumer imports benefit nonimporters through retailer learning and competition.

2. Macro-development: payment networks, technology adoption, and innovation

In *Strategic Complementarities in a Dynamic Model of Technology Adoption* ([American Economic Review](#), conditionally accepted), with Alvarez, Argente, Lippi, and Mendez, we study complementarities in *consumers’* payment networks. We link Costa Rica’s SINPE Móvil transactions to employer–employee records to reconstruct coworker networks. Following mass layoffs, existing adopters reduce usage as coworker adoption falls, supporting complementarities beyond learning the technology exists. These estimates discipline a dynamic model which highlights how strategic complementarities can shape adoption dynamics while dealing with technical issues of multiplicity and stability that have plagued the economic geography and trade literature. In our calibration, the optimal subsidy accelerates diffusion and achieves universal adoption. *Drivers of Digital Payment Adoption* ([IMF Economic Review](#), accepted) further examines why digital-payment adoption and financial inclusion differ across Brazil, Costa Rica, and Mexico. Moreover, in *Are Cryptocurrencies Currencies?* ([Science](#), research article, 2023), with Alvarez and Argente, we document low and declining Bitcoin and peer-to-peer use despite El Salvador’s legal-tender designation and incentives. Survey and blockchain evidence suggests substantial adoption costs, strong complementarities, and trust barriers.

Beyond consumer networks, on the firm side, *Payment-Chain Crises*, with Bigio and Mendez, shows how reliance on customer receipts to pay suppliers turns payment disruptions into losses across an input-output network. We link Costa Rica’s universe of interbank transfers to invoices covering all formal sales; using payment timing, contractual due dates, and product delivery payments to measure otherwise unobserved dependencies. We find when buyers’ bank accounts unexpectedly froze, suppliers along payment chains suffered productivity losses. Our model shows how these dependencies amplify liquidity shocks, reducing aggregate productivity by leaving productive capacity idle. Relatedly, *On the Resilience of Payment Methods*, with Alvarez and Argente, leverages and RCT to show how cash cushions spending during disruptions and is key to maintain consumption.

More recently, *Personalized Recommendations and Product Innovation*, with Argente, Trejos and Yang, shows how personalization can increase market-wide differentiation while narrowing individual exposure. Our model and music-industry evidence explain how producers innovation responds to the new technology. In *Data Centers and Local Economies in the Age of AI: A Shift–Share Approach*, with Alvarez, Argente and Chow, we find data centers raise economic activity while putting pressure on local resource prices. Historical fiber connectivity interacted with foreign facility growth identifies these effects, and a spatial model interprets them.

My research often starts with questions that the available data were not designed to answer. Nearly every project involves building a new dataset with detail and linkages rarely available elsewhere. With these data in hand, I craft empirical designs that identify causal relationships, using economic models to guide estimation and clarify the underlying mechanisms. Together, these projects explain how firms shape the creation, distribution, and persistence of economic gains.

Teaching Approach

I bring my research into the classroom to help students understand how globalization affects firms, workers, and communities. Drawing on my work on multinationals, trade, and technology adoption, I connect economic models to decisions students may face at work. We discuss current news and policy decisions, often in real time, asking what they mean for firms' choices about investment, hiring, or entering new markets. Comparing countries helps students see why the same policies can produce different outcomes. I want students to understand the logic behind an argument, ask what assumptions it depends on, and judge how much the evidence really tells us. I encourage them to consider other explanations and ask what evidence would help distinguish between them. My goal is to develop students' independent economic judgment: interpreting global developments, evaluating evidence, and assessing consequences for businesses, workers, and society.

References

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