# Patrick Agte

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## **Current Employment**

#### Yale Economic Growth Center

2023

Postdoctoral Fellow

#### **Graduate Studies**

# **Princeton University**

2017-2023

PhD in Economics

Dissertation: "Essays on Preference Formation, Norms Transmission, and Healthcare in Development Economics"

#### References

Professor Janet Currie Department of Economics Princeton University 609-258-7393

jcurrie@princeton.edu

Professor Thomas Fujiwara Department of Economics Princeton University

609-258-6993

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Professor Rohini Pande Department of Economics Yale University 203-432-3637 rohini.pande@yale.edu

#### **Prior Education**

# University of St. Gallen

2012-2016

B.A. in Economics

Visiting Student, Harvard University, 2015

#### **Fields**

Primary Development Economics

SECONDARY Health Economics, Education Economics, Behavioral Economics,

Industrial Organization

"Improving Health Outcomes Through Mid-level Providers: Evidence from a Large-Scale Expansion of Public Primary Healthcare in India." With Jitendra Kumar Soni.

This paper examines the stepwise rollout of one of the world's largest healthcare reforms: the assignment of a new mid-level provider (non-physician practitioner) to each public primary health facility across rural India, impacting healthcare provision for more than 450 million people. We use a matched difference-in-differences strategy based on provider assignment rules to study how expansion of basic outpatient care and increased screening for chronic diseases affects health outcomes. Using large-scale administrative data covering all villages in the state of Rajasthan, we document that elderly deaths are 12% lower in treated areas one year post-reform. Monthly patient loads at public primary health facilities increase by 68% and diagnoses of hypertension and diabetes at these facilities increase by 67% and 62%, respectively. We observe no effects on maternal and child outcomes, suggesting that the new focus on chronic diseases did not divert resources from existing maternal and child health services. Results from audits and patient exit surveys document improvements to public healthcare quality and availability of services. We also survey private providers and find that the increased competition from the public sector incentivized private providers to invest in quality upgrades. Strengthening public primary healthcare through mid-level providers can be highly cost-effective, generating 51 dollars in private benefits for every government dollar spent.

## **Working Papers**

"Investing in the Next Generation: The Long-Run Impacts of a Liquidity Shock." With Arielle Bernhardt, Erica Field, Natalia Rigol, and Rohini Pande. Revise and resubmit at American Economic Review.

Poor entrepreneurs must frequently choose between business investment and children's education. To examine this trade-off, we exploit experimental variation in short-run microenterprise growth among a sample of Indian households and track children's education and business outcomes over eleven years. Treated households, who experience higher initial microenterprise growth, invest more in education and are one-third more likely to send children to college. However, only literate households experience child schooling gains and their enterprises stagnate in the long-run. In contrast, illiterate treatment households experience long-run business gains but declines in children's education. This pattern implies that initial microenterprise growth reduced relative intergenerational educational mobility.

"Search and Biased Beliefs in Education Markets." With Claudia Allende, Adam Kapor, Christopher Neilson, and Fernando Ochoa

When learning about schools requires costly search, search decisions depend on families' beliefs about the returns. This paper asks how families' (limited) awareness of schools and (inaccurate) beliefs about schools' prices, quality ratings, and placement chances distort their search efforts and application decisions in the context of Chile's nationwide centralized school choice process. We combine novel data on search activity with a panel household surveys, administrative application data, randomized information experiments, and a model of demand for schools. We find

that households are unaware of many relevant schools, and hold inaccurate beliefs about admissions chances, prices, and quality scores. The average household underinvests in search because it is excessively optimistic about the quality rating of the schools it knows. Correcting this bias causes students to match to schools with higher quality approaching what can be achieved under a full-information benchmark, but providing this information broadly and early, before search takes place, discourages some households from applying and reduces placement rates.

"The Making of a Public Sector Worker: The Causal Effects of Temporary Work Assignments to Poor Areas." With Mariel Bedoya.

Can temporary work assignments to poor areas affect worker preferences, beliefs, and career choices? We provide evidence on this question using random variation in the assignment of psychologists within a one-year mandatory rural service program in Peru. Psychologists who completed the program in poorer places are later 15% more likely to work for the public sector and 86% more likely to work in the poorest districts in the country. We provide survey evidence that points to increased prosociality as an important mechanism.

"The Economics of Purity Norms: Caste, Social Interaction, and Women's Work in India." With Arielle Bernhardt.

Caste norms, the religious and social rules that underpin the Hindu caste system, impose strong constraints on behavior: women should stay secluded within the home, caste groups should stay segregated, and certain foods should not be eaten. This paper shows that caste norms are weakened when Hindus live alongside Adivasis, an indigenous minority outside of the caste system. Using a number of estimation strategies, including a historical natural experiment that led to local variation in Adivasi population share, we show that having more Adivasi neighbors decreases Hindus' adherence to a wide range of caste rules. Hindu women in Adivasi-majority villages are 50% more likely to work and have substantially higher earnings. Individuals higher on the caste hierarchy are less likely to practice "untouchability" towards those lower than them and villages are more likely to be integrated. We argue that Hindus adhere to caste norms as an investment in status within the caste system, and that this investment is less valuable when Adivasis - a lower-status out-group - form a larger share of the village population. Consistent with this explanation, caste norms are weaker in areas where British colonial policy led Adivasis to hold more land and political power, increasing the returns to social and economic interactions with Adivasis independent of their population share.

## Work in Progress

"The Causal Effects of Teacher Identity on Student Outcomes: Evidence from a Large-Scale Teacher Lottery in India." With S.K. Ritadhi and Rohit Joseph.

"Research Information and the Last-Mile: Evidence from a Scale-Up Experiment." With Daniel Morales, Christopher Neilson, and Sebatian Otero.

"Lessons from the Covid Care Centers in West Bengal." With Abhijit Chowdhury, Jishnu Das, Parthasarathi Mukherjee, and Satyarup Siddhanta, 2022. Center for Policy Research Working Paper.

With the continuing emergence of Covid-19 variants, there is an underlying concern in all countries, including India, that another surge will occur in the coming months. In case of a surge like that experienced with the Delta variant, a strategy that deserves further attention for the provision of care in rural areas is the use of off-hospital sites for patients who are not severely ill. We discuss one such effort from the state of West Bengal, the lessons from which may be relevant for the management of surge cases for generalized pandemic planning. In March 2021, India experienced a large surge in Covid cases and the spike in patients led to a shortage of hospital beds and oxygen cylinders around the country. Following a notification by the Ministry of Health and Family Welfare that allowed organizations to set up care centers for the treatment of Covid-19 patients outside the hospital setting, the Liver Foundation and the Covid Care Network established eight Covid Care Centers in rural West Bengal. These centers were operational between May 2021 and September 2021, which coincided with the post-peak phase of the second Covid-19 wave in India. This report describes the project, summarizes the performance of the centers, and discusses the challenges faced during the project. We conclude that temporary facilities like the Covid Care Centers can be a viable option to provide urgent care during health emergencies.

"Chasing the Indian Dream: Enabling and Equalizing Access to Economic Opportunity." With Nils Enevoldsen and Rohini Pande, 2022. *Kautilya Economic Conclave*.

Over the last three decades, strong economic growth led India to transition from a low to a lower-middle-income country, and this was matched with significant improvements in individual well-being, on average. However, India's growth has not been a tide that lifts all boats equally. Service-led growth has been urban-biased and inter-generational occupational mobility remains strikingly low, especially in rural areas and among historically disadvantaged groups. Over the next three decades, India will witness one of the world's largest additions to the labor force. How can policy help ensure inclusive and sustainable growth that benefits all its citizens? This note outlines the distributional features of India's current economic trajectory and highlights the need for state interventions to address market failures. We highlight five critical areas: the need for financial products - especially flexible credit products - that enable human capital investments by the poor, the need for regulation (including the use of market-based instruments) to account for negative externalities associated with certain economic activities, the need to complement public policies with transparency and accountability initiatives so that the citizens can know what is due to them and demand it, the need for expanded social protection programs that accommodate interstate migrants, a vulnerable yet critical group, and, finally, the need to permit regional and local flexibility in policy-making.

#### Research Experience

# Teaching Experience

Princeton University
Junior Independent Work, TA for Prof. Christopher Neilson,
Prof. Hope Corman, Prof. Colleen Carey

2021, 2022
Economic Analysis of Development (Advanced), TA for Prof. Anne Case
2019, 2020, 2021
International Development, TA for Alicia Adsera
2019

# Honors, Scholarships, Fellowships, and Grants

J-PAL Cash Transfers for Child Health Initiative	2022
SurveyCTO Data Collection Grant	2022
J-PAL Gender and Economic Agency Travel Grant	2020
Weiss Family Grant	2020
NSF Doctoral Dissertation Research Improvement Grant	2020
Princeton Center for Health and Wellbeing Graduate Research Grant	2019, 2020
Program in Latin American Studies Summer Research Grant	2019, 2022
Princeton Institute for International and Regional Studies Summer Research Grant	2019, 2022
Princeton Graduate Economics Fellowship	2017-2022
German National Merit Foundation Fellowship	2012-2016

## **Professional Activities**

## Presentations

Midwest International Economic Development Conference, German Development Economics Conference, North East Universities Development Consortium Conference

## Refereeing

American Economic Review: Insights, Review of Economics of the Household, American Economic Journal: Applied Economics

## Languages

German (native), English

Last updated: November 2023