

Research Statement – Yuma Noritomo

I am a development economist studying how human capital can expand economic opportunities and reduce poverty in low-income, risky environments. My research focuses on two linked stages in this process. First, I study why children fail to acquire education when households face risk, liquidity constraints, demand for child labor, restrictive social institutions, or geographic isolation. Second, I study why education and skills do not always translate into stable, higher-paying employment when labor markets are thin or information and matching frictions are severe. Across both strands, I ask how expectations about future opportunities shape current investment and which policies can relax the constraints that limit it.

From Education to Better Jobs

Education is an investment in future opportunities, so parents' schooling decisions depend partly on what they expect those opportunities to be. A large literature shows that perceived returns to education can shape schooling choices, but less is known about how households compare those expected returns with returns to traditional productive assets when both are uncertain. My job market paper studies this trade-off among pastoralist households in Kenya and Ethiopia, where livestock generate income and provide resilience under the climate change but require labor, while education can open opportunities outside pastoralism. Because observed choices conflate beliefs, preferences, and constraints, we combine a vignette-based choice experiment with randomized information about future climate risk and labor-market opportunities for more than 2,000 parents. The design allows us to separately estimate subjective beliefs and preferences; a structural model uses these estimates to quantify the importance of beliefs for household investment decisions and how that importance varies with prior beliefs and belief updating.

The next step in my job market project is to follow the same households and test whether experimentally shifted beliefs translate into realized education choices and other human-capital investments, as well as migration and labor-market outcomes, including occupational choices. The initial choice and information experiments are complete, and a follow-up survey is planned for 2027. This panel will connect expectations measured before major schooling decisions to subsequent behavior and test whether changes in beliefs generate durable human-capital and livelihood transitions. [1]

Constraints and Policies to Increase Education

Even when parents value education, household production can change the opportunity cost of children's time. Development policy often treats productive assets and human capital as complementary: protecting assets or raising income should help households invest more in schooling. But when children work with those assets, asset accumulation can also raise demand for child labor. My work studies this nonseparability and asks when policies that protect productive capacity increase, rather than crowd out, human-capital investment.

A central policy question is whether temporary protection against risk can alter household trajectories long after the intervention ends. We study this using temporary drought insurance, instrumenting coverage with randomized premium discounts and resurveying pastoralist households a decade later. Among households below the poverty-trap threshold - the lowest two-thirds of the baseline herd distribution - insurance reduces holdings of small, liquid livestock and produces a large, persistent increase in children's education. Households in the top third instead increase higher-return large-animal holdings, with no comparable schooling effect. These long-run, bifurcated responses are consistent with asset-based poverty-trap dynamics: relaxing risk shifts poorer households toward human capital while allowing wealthier households to accumulate higher-return productive assets. For poorer households, reduced demand for child herding provides a mechanism linking the change in asset portfolios to schooling. [2]

To isolate the underlying mechanism, I also study how exogenous changes in livestock productivity affect education when children are inputs into household production. Combining household panel data from Kenya and Ethiopia with satellite measures of rangeland conditions, I exploit exogenous variation in the timing and local intensity of livestock productivity shocks across childhood. Droughts reduce livestock holdings and, among school-age children, reduce the likelihood that livestock work is their primary activity and increase school attendance; school-age exposure is also associated with more completed education. Positive shocks do not generate a corresponding observable schooling response. These asymmetric effects are consistent with an asset-based opportunity-cost channel in which livestock losses reduce household demand for child labor. [3]

My earlier work examines complementary constraints on human-capital formation and persistent poverty. In Sri Lanka, we exploit a policy restricting international migration for mothers with children under age five as a natural experiment. Using a difference-in-differences design, we show that the policy increases maternal

presence, improves child health, and reduces grade retention among older siblings, highlighting the trade-off between caregiving and migration opportunities. [4]

Related work studies how livestock insurance protects assets and why sustained demand remains limited. [5-7] A methodological paper shows that field research in the Peruvian Amazon overrepresents accessible, better-off communities. [8]

Future Research Agenda

First, improving education is not sufficient if young people face few attractive opportunities after school. In thin rural labor markets, workers may lack experience, employer connections, and opportunities to match with firms. An ongoing field experiment in pastoralist communities in Kenya and Ethiopia asks whether creating skills-based income opportunities for young men improves employment and reduces participation in livestock raiding. We use a three-arm randomized design across 436 communities: a control group, an encouragement intervention that raises take-up of index-based livestock insurance, and a treatment that combines insurance encouragement with paid apprenticeships in locally demanded trades. Baseline household data and a census of local businesses have been collected, and the interventions are being implemented. Livestock-raiding participation is the project's primary outcome, while employment is central to understanding whether improved outside options mediate conflict effects and persist beyond the intervention. [9]

Second, formal regulation can also reshape children's opportunity sets. Child-labor restrictions may move children into school, but when poor households still depend on children's work, they may instead induce substitution into other jobs. In Cambodia, we study whether a targeted ban on hazardous child labor redirects children toward safer work or schooling. We exploit the 2004 prohibition on hazardous employment for children under age 18 using a difference-in-differences design that compares cohorts exposed to the ban with older cohorts across communes with and without hazardous establishments. A preliminary draft and estimates show a decline in hazardous work accompanied by increases in both non-hazardous employment and school attendance, with these effects still visible several years after the reform. [10]

Economic shocks can also interact with social institutions that govern children's opportunities. Existing work shows that drought can change the timing of child marriage in bride-price settings because marriage transfers can provide consumption smoothing. In pastoral Kenya and Ethiopia, however, drought may also change incentives for cattle raiding and therefore the livestock available to finance bridewealth. We are developing a project on how these channels connect climate shocks to child marriage. The empirical analysis will combine marriage histories and conflict data with satellite-based vegetation measures and exploit spatial and temporal variation in drought exposure in an event-history framework, estimating how local shocks change the annual hazard into marriage and how conflict responds to the same shocks. The design is motivated by competing bride-side consumption-smoothing and insecurity channels and groom-side bridewealth constraints. [11]

Beyond these ongoing projects, I am interested in how exposure to future occupations shapes children's human-capital investment. In many remote communities, children have limited opportunities to observe or experience the skilled and white-collar jobs that education can make accessible. One direction I hope to explore is whether connecting students with adults from similar communities who have successfully entered these occupations—and giving students opportunities to learn about or experience their work—changes their aspirations, perceived returns to education, and schooling effort. More broadly, this line of research would connect my work on human-capital investment to the labor-market opportunities that ultimately give education its value.

References

- [1] Trading Off Human Capital versus Productive Asset Investment: Perceptions of Risk and Return (*Job Market Paper*).
- [2] Long-run Effects of Temporary Catastrophic Drought Insurance Coverage (*Revise and Resubmit, American Economic Review*).
- [3] Productive Assets, Child Labor, and Schooling: Evidence from Pastoralist Communities (*Working Paper*).
- [4] Restricting Mothers' International Migration and Human Capital Investment (*World Development*, 2026).
- [5] Can Insurance Payouts Prevent a Poverty Trap? Evidence from Randomised Experiments in Northern Kenya (*Journal of Development Studies*, 2020).
- [6] Understanding Pastoralists' Dynamic Insurance Uptake Decisions: Evidence from Four-Year Panel Data in Ethiopia (*Food Policy*, 2020).
- [7] Index-Based Livestock Insurance to Support Pastoralists against Droughts (*Food Policy*, 2025).
- [8] Site Selection Causes Bias in Policy-Oriented Social Science Research (*Working Paper*).
- [9] Reducing Conflict Incentives through Insurance and Paid Apprenticeships (*Ongoing field experiment*).
- [10] Hazardous Child Labor Ban: Substitution to Non-Hazardous Work and Education (*Work in progress*).
- [11] Droughts, Cattle Raiding, and Child Marriage: Evidence from Pastoralist Communities (*Work in progress*).