Research statement

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I am a development economist studying labor and behavioral economics using a combination of theory-informed field experiments, secondary data, and survey data.

The first strand of my research focuses on knowledge diffusion in low-income countries. My work explores how certain features typical of low-income settings—such as contracting frictions and fragmented markets—affect knowledge diffusion. Using large-scale field experiments, I also quantify the economic costs of barriers to technology diffusion.

The second and overlapping strand of my research focuses on the functioning of labor markets in poor countries and how features of low-income jobs—such as short-term contracts, frequent shocks, and credit constraints—affect labor supply choices and human capital formation.

A third, cross-cutting theme in my research and ongoing work is understanding the broad economic consequences of life shocks—both high-frequency shocks (*e.g.*, income or labor demand shocks) and traumatic lifetime events—which are prevalent in low-income contexts.

Below, I discuss several of my projects under each of these broad themes. Because my work has strong policy relevance, I have built meaningful research partnerships with large NGOs, international organizations, and private companies for these projects, which I plan to expand in future research.

1. Technology adoption

A conventional view in development economics suggests that if the returns to a technology are high, non-adopters will eventually acquire it, for example, by leveraging the social capital within their networks. My work reexamines this perspective by showing that contracting frictions persist even in environments with features—such as repeated interactions, social ties, and small communities—that are typically thought to alleviate them. To study these questions, I developed a research partnership with the University of Burundi and the NGO One Acre Fund, where we investigate the diffusion of agricultural techniques, such as row planting—a labor-intensive technique that boosts farm yields and grants higher wages in agricultural spot markets to workers skilled in it.

In Under-training by Employers in Informal Labor Markets, with Pedro Naso, Michel Ndayikeza, and Nicholas Swanson, we examine how reliance on informal contracts between employers and workers—common in low-income countries—limits employers' willingness to invest in training casual laborers, as they cannot fully capture the returns from that training. This lack of investment leads farmers to fail to adopt profitable agricultural technologies requiring skilled labor. Using a large field experiment inducing employers to train their workers, we show that a 20 percentage point increase in skilled laborers leads to a 20% increase in employers' adoption of the technology and a 9% rise in farm profitability. However, as trained workers often work for multiple employers during the season, most of the surplus from training is captured by employers who did not provide the training. We also show that employers are 50% more willing to train when offered contracts guaranteeing that trained workers will return, but they are unable to write such contracts, highlighting the extent of contracting frictions in low-income settings.

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In my job market paper, The Economic Consequences of Knowledge Hoarding, with Franck Irakoze, Pedro Naso, and Nicholas Swanson, we approach the issue of limited technology diffusion from the perspective of social learning. Extensive literature shows that social networks can effectively diffuse technologies in small communities where members share social capital. However, there is limited evidence on the incentives early adopters have to share their knowledge and why diffusion happens in real-world networks. This paper tests whether early adopters in small markets have strategic motives to "hoard knowledge"—that is, to actively prevent its diffusion—when they fear that wider adoption will reduce their returns.

We use two large-scale field experiments, matching initial adopters of row planting with non-adopters either from their own village (direct competitors in the labor market) or from a different village. We measure the economic consequences by randomizing the treatment at the village level. Reducing knowledge hoarding incentives has meaningful economic consequences: i) early adopters are 50% more likely to share row-planting knowledge with a laborer in their own village than one from another village; ii) greater knowledge diffusion increases new adopters' earnings by 9% and iii) reduces early adopters' earnings by 7%. We also provide suggestive evidence that early adopters implicitly coordinate to sanction individuals who share knowledge beyond their original group.

In ongoing work with Grady Killeen and Nicholas Swanson, we aim to test whether the fear that competition from late adopters will erode early adopters' rents limit technology and product adoption in low-income countries. We study whether retailers in Burundi experiment too little with new products due to non-excludable information and business stealing. We also plan to examine the trade-offs between product innovation—through exclusive contracts—and consumer welfare, contributing to the understanding of how poor contracting environments affect technology adoption in low-income settings.

2. Labor markets

The intermittent nature of work contracts in low-income countries, combined with the frequent shocks faced by the poor, may prevent workers from forming regular labor supply habits. In Habit Formation in Labor Supply, with Supreet Kaur, Heather Schofield, and Yogita Shamdasani, we use a habit formation model to test whether small, temporary financial incentives can create persistent labor supply effects among casual urban laborers in Chennai, India. We randomly provide some workers with small financial incentives for attendance over two months and find a persistent 15% increase in labor supply 2-5 months after the incentives are removed, leading to an 11% increase in employment.

Importantly, shocks that temporarily pull workers out of the labor market lead subsequent treatment effects to collapse to zero; in the absence of these shocks, we cannot reject that there is no decay in effects over time. Together, our results suggest that the intermittent nature of employment and frequent shocks experienced in low-income settings may inhibit workers from becoming habituated to regular work—with potential implications for absenteeism and labor supply levels.

Frequent shocks also affect low-income workers in wealthy countries, especially with the rise of gig jobs and hourly contracts. To explore how income shocks affect demand for short-term liquidity, I developed a partnership with Wagestream Ltd., Europe's largest provider of Earned Wage Access (EWA)—a technology enabling workers to withdraw earned wages before payday. Using experimental, survey, and administrative data, in How Do Workers Use Earned Wage Access? Evidence and Welfare Implications, with Eric Koepcke, Afras Sial, and Nicholas Swanson, we

investigate the optimal design of EWA products for workers who face liquidity shocks but are also present-focused. In ongoing work with Alex Wellsjo Steiny and Nicholas Swanson, we plan to evaluate the impact of EWA technology on workers' productivity.

3. Life shocks

As part of my postdoc with Professor Ulrike Malmendier, I study how major traumatic events, such as exposure to war and terror attacks, affect i) the psychological well-being of survivors; ii) their long-term employment and economic outcomes; and iii) their parenting and investment in their children's human capital.

In ongoing work with Hadar Avivi, Maor Milgrom, and Ulrike Malmendier, we combine rich administrative datasets from Israel to study how the dead of a loved one in a terror attack affects the long-term educational and employment outcomes of children.

In another project with Ulrike Malmendier, we study the effects of exposure to violence during the Burundian civil war on the psychological well-being of women who were children at the time of the war. We then examine whether this trauma impacts their parenting style and interactions with their children. We plan to conduct a field experiment to test whether modern psychological interventions can break the cycle of trauma passed from one generation to the next.

References

Cefalà, Luisa, Eric Koepcke, Afras Sial, and Nicholas Swanson, "How Do Workers Use Earned Wage Access? Evidence and Welfare Implications," Technical Report 2024.

_ **, Franck Irakoze, Naso Pedro, and Nicholas Swanson**, "The Economic Consequences of Knowledge Hoarding," Technical Report 2024.

_ **, Naso Pedro, Michel Ndayikeza, and Nicholas Swanson**, "Under-training by Employers in Informal Labor Markets: Evidence from Burundi," Technical Report 2024.

_ **, Supreet Kaur, Heather Schoefield, and Yogita Shamdasani**, "Habit Formation in Labor Supply," Technical Report 2024.