

Growth Learning Agenda

For the Strategic Impact Evaluation and Learning (SIEL) Programme

This document was prepared by the Abdul Latif Jameel Poverty Action Lab (J-PAL) and Innovations for Poverty Action (IPA) in 2025 for the Foreign, Commonwealth and Development Office's (FCDO) Strategic Impact Evaluation and Learning (SIEL) Programme. It is not an exhaustive review of all the rigorous evidence on this topic. The views expressed here do not necessarily reflect those of FCDO.

Background

What is the Strategic Impact Evaluation and Learning (SIEL) programme?

The **Strategic Impact Evaluation and Learning (SIEL) programme** of the United Kingdom's Foreign, Commonwealth and Development Office (FCDO) is a six-year learning partnership between FCDO's Evaluation Unit (EvU), Innovations for Poverty Action (IPA), and the Abdul Latif Jameel Poverty Action Lab (J-PAL). Launched in 2024, SIEL is here to support your efforts to understand what programmes and policies are most effective in driving impact. SIEL provides funding, resources, and technical capacity to help you make FCDO's global programmes more effective by generating evidence-based insights through impact evaluations.ⁱ All FCDO staff are eligible to apply for impact evaluation funding and support through SIEL via biannual calls for Expressions of Interest.

What is a learning agenda?

SIEL Learning Agendas identify key evidence gaps in a subset of FCDO's strategic priority areas **to help generate evidence on FCDO programmes through SIEL's centralised funding process.**ⁱⁱ The **Growth Learning Agenda** is intended to guide future evaluation of FCDO programmes and to target research to understudied areas with high potential to inform FCDO's work moving forward. The agenda is not an exhaustive list of evidence gaps but provides examples of the kinds of policy-relevant research questions that could be explored through SIEL and other FCDO-funded programmes.

How was the learning agenda created?

This agenda was produced through close consultations with FCDO staff and external partners. It was informed by FCDO resources, including multiple FCDO Best Buys Reports, FCDO Areas of Research Interest (ARIs) 2023, and spending reviews. It also

ⁱ Impact evaluations estimate programme effectiveness by comparing outcomes of those who participated in a programme (individuals, communities, schools) against those who did not participate. For a brief overview of different impact evaluation methods, see the related [J-PAL research resource](#). For an introduction to randomised controlled trials (RCTs), a form of impact evaluation, see [here](#).

ⁱⁱ SIEL will focus on four strategic areas: humanitarian assistance, growth, climate and nature, and conflict and fragility. This learning agenda can also be used to guide evidence-generating activity beyond impact evaluation in those areas.

draws on resources from J-PAL, IPA, [Private Enterprise Development in Low-Income Countries](#) (PEDL), the [International Growth Centre](#) (IGC), [Structural Transformation and Economic Growth](#) (STEG), and [Gender, Growth and Labour Markets in Low-Income Countries](#) (G²LM).

Who is the learning agenda for?

This learning agenda is intended to spur interest in impact evaluation among FCDO staff and their partners working on economic development programmes (e.g., advisers, programme managers, key implementing partners). Whether you're looking to inform your programme design with robust evidence, enhance your evaluation skills, or collaborate with top researchers, SIEL offers the tools and support you need to drive meaningful change. SIEL is open to those seeking to evaluate initiatives at the design stage or initiatives which have already been completed and robustly evaluated, where there is interest in the long-term impact.

SIEL can help you generate the evidence you need

To fill the priority evidence gaps identified in the growth learning agenda, SIEL is partnering with FCDO teams to provide funding and training for a range of evaluation methodologies, from large-scale impact evaluations to smaller, nimble studies that can quickly test new ideas. If you are designing an intervention in one of these areas and would like to find out the best way to deliver it, generate evidence about its impact, or would like to test the long-run impact of a past programme, reach out to our Help Desk at siel@poverty-action.org or visit [SIEL's website](#).

We are eager to help you think through evaluation opportunities and funding, evidence use, training, and more.

The importance of identifying effective strategies for promoting growth

With global economic growth projected to stagnate at just 2.7 percent through 2026, countries worldwide face mounting challenges, from stalling poverty reduction to increasing market instability.¹ Not only does this slowdown hinder global poverty reduction and improvements in human well-being, but it also directly impacts UK growth by reducing trade opportunities, constraining markets, and heightening economic uncertainty. Rising protectionism, external debt, lingering effects of Covid-19, and reductions in aid budgets have compounded these challenges.^{2 3 4} These dynamics risk perpetuating cycles of poverty and inequality, underscoring the need for targeted, inclusive economic growth strategies. Moreover, investing in strategies to stimulate inclusive growth abroad can yield reciprocal benefits for the United Kingdom, fostering stronger trade relationships and creating opportunities that support domestic economic growth.

Many factors shape economic growth, including economic stability, strong institutions, investment, and technological progress.^{5 6 7} Impact evaluations can help pinpoint which policies most effectively drive these outcomes, bridging critical evidence gaps and ensuring that growth strategies are rooted in empirical insights. As highlighted in the FCDO's latest Development Update, there is an urgent need for a comprehensive learning agenda that can guide the design and implementation of growth-oriented policies and programmes.⁸ By building a stronger evidence base on successful approaches to firm expansion, job creation, productivity enhancement, economic diversification, trade, market access, investment, and public-private partnerships, we can better navigate the complex challenges of economic growth globally and support lasting poverty reduction. This agenda focuses on areas where impact evaluations can provide actionable insights for both international and domestic policy while acknowledging that some macro-level growth questions require broader research.

Critical evidence gaps remain

Despite significant investments in promoting economic growth, large evidence gaps persist across key areas that hinder effective policymaking and programme implementation. These gaps span five key categories: [1](#)) trade and market access for firms and workers; [2](#)) government, regulation, and political economy; [3](#)) access to capital; [4](#)) entrepreneurship, business, and workforce development; and [5](#)) green and sustainable growth. The following sections outline illustrative questions for each of these categories, providing a road map for addressing these critical evidence gaps.

1. Trade and market access for firms and workers

Trade and market access are vital drivers of economic growth, particularly for firms and workers, playing a critical role in fostering resilience in an interconnected global economy. While export credit programmes, professional networks, and digital platforms show promise in expanding market reach, there are critical gaps in understanding their effectiveness across different industries and local contexts. Important questions remain on the impact of support mechanisms for smaller firms and effects on workers, communities, and entrepreneurs from disadvantaged backgrounds. In addition, the connection between exports and economic growth presents opportunities to explore reciprocal benefits for the United Kingdom, where fostering inclusive trade policies could strengthen trade relationships and boost domestic economic growth.

1.1 How can trade and export strategies enhance firm competitiveness and growth in global markets?

- How do regional economic integration (e.g., trade agreements or regional common markets) and strengthened supply chain linkages within and across countries affect export performance, market diversification, and competitiveness as well as broader regional economic growth and household income levels?
- How does foreign direct investment influence access to credit at the household, community, and firm level, and how do these dynamics vary across different demographic groups?
- How do targeted export support programmes for UK firms—like digital tools, buyer matchmaking, and trade promotion services—affect firms’ ability to enter and sustain access to new international markets, particularly in high-growth sectors like green tech or digital services?
- What are the effects of financial incentives for exporters—matching grants or performance-based subsidies—on firm profitability, productivity, and movement into higher value-added goods and services?
- How do capacity-building initiatives—such as export readiness training or mentorship—shape firms’ long-term competitiveness and integration into global value chains?
- How do investments in physical infrastructure—such as transport networks, logistics hubs, and digital connectivity—affect firms’ ability to integrate into regional and global supply chains, expand export markets, and increase productivity?

1.2 How can improved market access drive growth, innovation, and competitiveness?

- What strategies can be employed to reduce barriers to entering high-value markets, such as simplifying export processes, improving logistics, or supporting certification for quality standards?
- How do online marketing, product innovation services, and mobile trading platforms influence firms' ability to enter and compete in new markets, improve market efficiency, and enhance revenues?ⁱⁱⁱ
- How does greater competition from market integration create both opportunities and challenges for smaller or less-established businesses?
- How does building connections and learning from peers help women and other underrepresented business owners grow their businesses, increase profits, and enter new markets?
- Under what conditions does improved trade and market access influence worker well-being in terms of wages, health, and job satisfaction?

Emerging insights snapshot: Lessons from recent impact evaluations^{iv}

Market access: There is relatively strong evidence that **improving market access helps firms grow by boosting revenues and profits through new sales opportunities, connections with diverse buyers, and enhanced information sharing and learning.**^{9 10 11} Mobile-based marketplaces reduce search costs and boost trade, though larger firms are often better positioned to capitalise on these platforms due to scale advantages.^{12 13} Addressing informational barriers, such as linking firms to formal buyers or providing targeted sellership training, improves access to contracts, long-term operational success, and employment outcomes.^{14 15}¹⁶ Similarly, linking firms to multinational corporations can enhance productivity, working conditions, employment growth, and access to higher-value buyers over time.^{17 18}

Trade and exports: There is a growing body of evidence that **export support programmes enhance firm competitiveness, ease financial constraints, and facilitate entry into new markets.**^{19 20 21 22 15} In Egypt, for example, exporting to foreign buyers enhanced firm efficiency and product quality through a 'learning-by-

ⁱⁱⁱ Product innovation services refer to resources or support that help businesses create, design, or improve products to better meet market demands (e.g., prototyping tools, market testing).

^{iv} The evidence cited in these emerging insights tables is not meant to be an exhaustive review of the literature on these topics but rather a snapshot of recent lessons from primarily experimental and quasi-experimental literature to showcase where the evidence base is growing and the types of evidence impact evaluations can help generate. They are ordered roughly based on strength and breadth of the evidence, with areas where the evidence base is strongest or most extensive coming first. These insights should not be viewed in isolation from the broader academic literature on these topics.

exporting' effect.^{v 23} Financial support, such as subsidised loans and matching grants, can address exporters' financial challenges and support market diversification, though long-term impacts on economic growth and firm performance are still under study.^{21 22} The effectiveness of these initiatives often depends on a firm's ability to learn and apply new knowledge, with larger or more productive firms benefiting more from export seminars and consulting services.^{15 24}

2. Government, regulation, and political economy

Fostering sustainable growth requires a focus on government policies, regulatory frameworks, and firm-government relationships to support economic transformation. This involves transitioning economies towards higher-value industries and services by improving labour market efficiency, building productive business hubs, and strengthening governance. Addressing political economy challenges—such as corruption, tax compliance, and regulatory effectiveness—is critical for creating environments that foster equitable growth and innovation. Targeted strategies, such as public-private partnerships and business clusters, alongside broader objectives like improved governance, hold significant potential to drive innovation and competitiveness, with important implications for economic growth both abroad and domestically. However, key questions remain on how to design and implement these interventions effectively to achieve inclusive, lasting impacts.

2.1 How can industrial policies and partnerships drive innovation, boost productivity, and enhance competitiveness across sectors?

- What are the long-term impacts of industrial policy interventions designed to stimulate firm innovation and growth within business hubs on economic outcomes such as productivity, employment, and market competitiveness?
- How can industrial policies that promote partnerships between firms and external service providers be optimised to encourage sustained innovation and productivity? What roles do market exploration, knowledge exchange, and funding incentives play in enhancing firm competitiveness?
- How can public-private partnerships support the development and sustainability of business hubs?

^v 'Learning by exporting' refers to the process by which firms improve their efficiency, capabilities, and product quality as a result of participating in international markets. This often occurs as a result of exposure to more competitive environments, advanced technologies, and higher-quality standards demanded by foreign buyers.

- What design features of business hubs, such as regular networking opportunities, shared infrastructure, or targeted support for specific sectors, increase their likelihood of success?
- What systemic barriers, such as trust deficits or high search costs, prevent managers from self-organising into effective business networks, and how can government policies or regulatory frameworks address these challenges to foster collaboration and innovation?

2.2 How can governance, regulatory, and tax reforms enhance growth, equity, and compliance in markets?

- What strategies and tools, such as audits, regulatory reforms, incentives, and e-governance tools, can promote business growth and compliance while also minimising corruption?
- How do regulatory reforms and formalisation incentives impact firm registration, growth, and long-term economic outcomes?
- What are the most effective strategies to increase tax compliance among firms while minimising the risk of unintended negative behaviours? How can tax policies boost compliance in contexts with high levels of informality?
- Does greater political participation and democratisation of decision-making processes influence growth? What are the channels of influence?
- How can businesses communicate their needs to government, and does improving these channels lead to better policies and broader market benefits, or does it primarily favour larger, established firms?

2.3 How can research and innovation policies drive equitable growth and technological advancement?

- How can UK funding programmes for research and innovation be designed to better support inventions that drive economic growth and deliver inclusive benefits?
- What types of partnerships between governments and private companies can best speed up the spread of useful technologies and make businesses more productive?
- Do tax breaks or small grants for research and development help businesses grow and create jobs, and what strategies can ensure resources are effectively allocated to avoid funding projects with limited results?

Emerging insights snapshot: Lessons from recent impact evaluations

Governance and political economy: Anti-corruption reforms, such as **government audits to expose corrupt practices, can increase real economic activity, improve firm performance, and rebuild trust in public institutions**, leading to more firms participating in government contracts, though the evidence base remains limited.^{25 26 27} Simplified regulations and formalisation incentives can boost business registration and efficiency in some cases, though the effects can be temporary or industry specific.^{28 29} Tax compliance initiatives using consumer and bureaucratic incentives, third-party reporting, and digital tools can enhance firm compliance and tax collection efficiency, provided that governments have the administrative capacity to implement such measures.^{30 31 32 33 34 35 36 37} Stronger and more representative political institutions—by providing secure property rights, effective service delivery, low corruption, and accountability to citizens—can boost investment, support migration, and drive economic growth.^{38 39 40 41}

Encourage the growth of business hubs: While research on the effects of business networks and peer interactions is evolving, evidence indicates that these **networks can increase revenue, profit, and the diffusion of key business practices** like VAT registration and access to financial services.^{42 43} These networks facilitate knowledge sharing and partnerships, helping firms adapt to regulatory changes, improve performance, and foster growth among interconnected firms over the long term.^{42 43} A study in the United States found that productive cluster agglomerations led to increased productivity, contributing to firm growth and innovation.^{vi 44}

3. Access to capital

Access to resources and capital is a cornerstone of economic development, especially for small and medium enterprises (SMEs).^{vii} Innovations in firm financing and digital financial services are transforming access to credit, supporting entrepreneurial growth, and enabling better financial resilience. Yet, several gaps remain in understanding how

^{vi} Productive cluster agglomerations are groups of businesses and organisations located close together that benefit from sharing knowledge, resources, and ideas to boost growth and innovation.

^{vii} Gates Foundation. 2024. “Women and Equitable Growth in a Resource-Constrained World: Unleashing Capital for Women Entrepreneurs in Africa.” https://docs.gatesfoundation.org/documents/bill_and_melinda_gates_foundation_women_and_equitable_growth_unleashing_capital.pdf.

different financing models, digital services, and targeted support impact long-term outcomes.

3.1 How can financing innovations optimise growth outcomes?

- How does credit support for large firms, SMEs, and microenterprises compare in key economic outcomes, such as job creation, firm growth, and productivity?
- What are the indirect and market-level effects of expanding credit access, such as impacts on competitor performance, market-level revenue, shutdown rates, and consumer welfare?
- What strategies, such as AI-driven risk assessments, can support innovative credit products, such as equity-like contracts or tailored loan products, to better support firms with high growth potential?^{viii}
- How can financing models that use movable assets as collateral, such as rent-to-own or lease agreements, improve credit access and support firm growth for women and other marginalised entrepreneurs facing collateral and mobility constraints?
- How do bigger loans and targeted credit programmes affect whether businesses stay open or close, how resources are used, and the value they generate for consumers and other businesses?
- How can the expansion of angel investors and venture capital help close financing gaps for high-potential businesses?

3.2 How can digital financial service access catalyse inclusive growth?

- What barriers prevent the widespread adoption of digital financial services among low-income populations, and how can targeted interventions unlock their potential to drive entrepreneurship, business expansion, and job creation?
- How can improving the interoperability of digital financial services enhance market efficiency, support small business growth, and enable greater financial inclusion across different sectors?
- What role do digital financial services play in shaping labour market transitions, including rural-to-urban migration, job mobility, and the expansion of higher-value economic activities?
- What are the long-term effects of digital financial services adoption on household financial resilience, business investment, and broader economic growth?

^{viii} Equity-like contracts are financial agreements where repayment depends on how well a business performs, rather than fixed monthly payments.

- How can data from digital financial systems, like open banking, be leveraged to expand credit access for small businesses, improve financial product innovation, and support enterprise growth?^{ix}

Emerging insights snapshot: Lessons from recent impact evaluations

Digital financial service access: A strong body of evidence suggests that **expanding access to digital finance reduces information asymmetry, improves remittance flows, lowers transaction costs, and enhances economic outcomes.**^{x 45 46 47 48} In Kenya, access to mobile money services like M-PESA lifted households out of poverty by enabling better financial resilience, increasing savings, and facilitating productive investments, such as transitioning labour market outcomes—particularly for women who moved from agriculture to business.^{xi 47 49} Digital public infrastructure, including payment systems, can streamline social welfare transfers by reducing leakages, improving efficiency, and enabling secure, transparent delivery of benefits.^{xii 50 51 52 53 54 55}

Innovations in financing: A moderate growing body of evidence suggests that **large capital injections, such as hire-purchase contracts or enterprise loans, can increase business size, profits, and household consumption.**^{xiii 56 57} However, misallocation of loans can result in entrepreneurs taking too much risk, underscoring the importance of aligning credit allocation strategies with firm characteristics and entrepreneurial potential.^{57 58} In-kind grants, particularly for women-owned businesses, tend to lead to higher profits and business ownership compared to cash grants, suggesting that providing resources directly can be more effective in supporting long-term business growth.^{59 60 61} Access to new loan products may improve consumer satisfaction but can also create competitive pressures among firms, leading to varied market-level outcomes.⁶²

^{ix} Open banking refers to a system where banks and financial institutions share customer data (with the customer's consent) securely with third-party providers. This enables the development of personalized financial products and services, improving access to tailored loans and other financial solutions.

^x Information asymmetry in this context refers to the imbalance of financial- or business-related information between firms and financial institutions, where lenders lack sufficient data to accurately assess the creditworthiness or financial health of businesses, leading to inefficiencies in credit allocation and market participation.

^{xi} An important example of FCDO investments fostering socially valuable private sector decisions is the £1 million investment in M-PESA's development and regulatory support, a catalyst in the mobile money revolution. See <https://www.cgdev.org/blog/what-would-taking-economic-growth-seriously-look-fcdo>.

^{xii} Digital public infrastructure refers to digital systems like ID platforms, payment services, and data tools that make it easier for people to access services and for governments to deliver them efficiently and transparently.

^{xiii} Hire-purchase contracts are financing arrangements where businesses acquire assets through an initial payment and periodic installments, with ownership transferring upon full payment.

4. Entrepreneurship, business, and workforce development

Supporting business and workforce development is essential for fostering sustainable economic growth by enhancing firm performance (e.g., sales, profit, and productivity) and creating higher quality jobs. Governments and development agencies have invested in consulting approaches and workforce development programmes as potential strategies to improve business practices, drive technology adoption, and increase productivity.^{xiv xv} However, important questions remain about the long-term effectiveness of training and how targeted support can best identify and accelerate the growth of high-potential entrepreneurs. Additionally, the role of firm-specific factors in determining the adoption and impact of new practices and technologies requires further exploration.

4.1 How can firms with high-growth potential be identified and supported to drive economic development?

- What factors and characteristics most accurately predict enterprise growth and business performance across enterprises, and how can predictive models, including AI tools, enhance assessments?
- What are the most effective methods for identifying high-potential sectors or industries for industrial policy, and how do different targeting approaches compare in their effectiveness?
- How can market factors like competition, market size, and access to resources be improved to help businesses start, grow, and adapt by addressing barriers and inefficiencies?
- How can policymakers and investors best allocate resources to individuals, businesses, and sectors that would benefit most from grants, particularly those at high risk of failure without financial support?
- How can governments and investors encourage the creation of new businesses with strong growth potential, and what role do business support programmes like incubators, accelerators, and start-up hubs play in this process?

^{xiv} Consulting approaches are advisory services provided to businesses to improve their operations, strategy, or management practices. These can include one-on-one mentorship, expert advice, or group workshops aimed at enhancing firm performance and productivity.

^{xv} Workforce development programmes are designed to equip workers with the skills needed by employers, including vocational training, apprenticeships, and skill development workshops. These initiatives often aim to align worker skills with market demands and improve job placement outcomes.

4.2 How can removing barriers to technology adoption and market participation drive inclusive growth?

- What are the most effective strategies to reduce information, transaction, and labour market barriers that prevent individuals and businesses from adopting new technologies?
- How do organisational barriers, such as misaligned employer and employee incentives or limited management capacity, hinder the adoption of new technologies, and how may these be overcome?
- How does tax formalisation shape firm behaviours in adopting electronic payment systems and other formal financial technologies and thereby affect firm growth and performance?
- What are the broader economic implications of introducing advanced technologies, such as AI-driven automation, on employment rates, wages, and productivity across various industries?

4.3 How can consulting, technological support, and soft skills drive sustainable economic growth and improve market development across businesses of different sizes?

- How do group-based and individualised consulting approaches compare in their impact on entrepreneurial skills, productivity, and employment outcomes?
- What role does entrepreneurial mindset and soft skills training play in enhancing business practices and outcomes?
- How do market-level factors such as competition, availability of flexible funding, and advisory services in local areas shape the demand for and the effectiveness of training, consulting, and mentoring programmes?
- How can technology and AI be leveraged to enhance the delivery, accessibility, and retention of training programmes and consulting approaches?

4.4 What are the key elements of productive workforce development for a changing labour market?

- How can vocational training programmes balance teaching skills that are both specific and transferable so that the workforce remains adaptable across occupations?
- How can AI tools improve training and upskilling for job seekers and workers by enhancing accessibility and customisation?
- Do employer-linked training programmes lead to better long-term employment outcomes than standalone programmes, not only in short-term job placement but also in career progression, job quality, or entrepreneurial success?
- How can training and soft skills programmes for women, youth, and individuals with disabilities improve labour market participation and career growth in traditionally male-dominated industries?

- What strategies are most effective in helping highly educated, tech-oriented individuals find jobs that fully use their skills and expertise in evolving labour markets?

Emerging insights snapshot: Lessons from recent impact evaluations

Business and market development: There is relatively strong evidence that improving business practices through high-quality **management and consulting interventions can enhance firm performance and increase sales, profits, and productivity while fostering long-term growth and resilience.**^{63 64 65 66 67}

Research suggests that structured management practices—such as data-driven decision-making, goal setting, and performance monitoring—are particularly effective in improving firm outcomes.^{xvi} Marketing and finance training specifically supports this growth by helping businesses drive sales, hiring, and cost efficiency.⁶⁸ ⁶⁹ Long-term improvements in management practices can drive sustained gains in productivity, profitability, and job creation, with evidence showing lasting increases in firm size and wages even five years later.⁶⁸

Reducing information barriers between job seekers and employers: Strong evidence finds **programmes that address job search barriers improve employment outcomes** by helping job seekers increase their search efforts, navigate geographic and financial obstacles, and better communicate their qualifications to employers.^{70 71 72 73 74 75 76 77} Providing credible signals of job seekers' skills, like reference letters or certifications, has improved job placement, earnings, gender equity, and employment outcomes by reducing information gaps between employers and applicants.^{78 79 80 81 82 83} Addressing additional structural barriers—such as lack of childcare or rigid work schedules—can further expand access to job opportunities, particularly for women, by enabling them to seek higher-paying roles or transition to better jobs.^{84 85 86 87 88 89 90}

Firm adoption of technology: Emerging evidence suggests **technology adoption can drive productivity, efficiency, environmental sustainability, and market competitiveness within firms**, but its success often depends on addressing workplace challenges, aligning incentives, and adapting to local market conditions⁹¹ ^{92 93 94 95 96 97} Firms are more likely to adopt and sustain new technologies when coordination barriers are addressed and when local demand conditions—such as customer demographics—support adoption.^{94 95} Across different contexts, specific

^{xvi} The World Management Survey measures key management practices like target setting, performance tracking, and talent management. Firms with stronger management tend to be more productive, profitable, and resilient to economic shocks.

technologies have demonstrated measurable benefits: point-of-sale terminals in Mexico have boosted sales; digitising payroll deposits in Bangladesh reduced administration costs while promoting financial literacy; and e-payment systems in Kenya have strengthened resilience to financial shocks.^{96 98 99} Finally, differences in technology complexity across businesses can explain productivity differences.⁹⁷

Productive workforce development: Evidence on vocational and skills training is mixed. **Given the high cost of vocational and skills training programmes and their often modest and inconsistent impacts on employment and earnings, they are considered a low-return investment.**¹⁰⁰ However, programmes that feature soft skills training, job referrals, and targeted support in high-demand sectors have shown promising results in boosting employment and income outcomes over time.^{101 102 103 104 105} The effectiveness of vocational training depends heavily on aligning participants' expectations with realistic labour market opportunities, which helps sustain engagement and achieve long-term success.^{79 106 107} Programmes that combine classroom-based technical instruction with practical experience, such as apprenticeships or internships, have generally been successful in equipping job seekers with new skills and modestly increasing employment and earnings, though their impacts vary in the short and long term.^{108 102 109}

Targeting firms: Business plan evaluations and entrepreneur characteristics like gender, age, and business sector have shown some ability to predict business growth, though poor selection can lead to negative outcomes.^{110 57} However, **targeted interventions like grants and competitions can identify and support high-potential firms.**^{111 100 112} Emerging evidence underscores how using community knowledge can help identify promising microentrepreneurs and direct financial support to those with the highest potential, especially when steps are taken to ensure honest feedback.¹¹³

5. Green and sustainable growth

Sustainable urban development requires integrating urban services, infrastructure, formal sector job creation, and green practices to address the challenges of rapid urbanisation. Supporting migration, expanding formal labour markets, and implementing climate-resilient growth strategies are key components, but critical questions remain on how to effectively coordinate these efforts for inclusive outcomes.

5.1 What targeted strategies and policies can effectively promote green growth and facilitate climate change adaptation?

- How do public-private partnerships facilitate the transition to green growth, particularly in sectors like agriculture and manufacturing?
- How can green loans and innovation support help businesses adapt to import taxes on high-carbon products while reducing emissions and supporting growth?
- How can low-cost solutions help industries reduce pollution and emissions while maintaining productivity and growth? How can market-based systems, like emissions trading, help reduce pollution while keeping costs manageable for businesses in growing economies?
- How and to what extent does access to clean energy improve efficiency and business productivity, and how much do power outages limit these outcomes?
- How do climate adaptation measures in workplaces, such as protection from extreme heat, impact worker productivity and firm resilience in climate-vulnerable areas? Similarly, what are the benefits of pollution reduction to worker well-being and productivity?
- How can training programmes and incentives encourage firms to adopt green technologies and cleaner production practices, leading to reduced emissions and improved efficiency?

5.2 What strategies can maximise the benefits of rural-to-urban migration while fostering inclusive and productive urban development?

- How can digital financial services improve financial connections between urban migrants and rural households to reduce rural poverty and support productive urbanisation?^{xvii}
- How do transportation and migration subsidies contribute to poverty alleviation and participation in labour markets?
- What are the long-term economic and social effects of migration support programmes (such as the Graduation approach and other ‘big push’ interventions) on both migrants and their households in rural and urban areas?
- What are the indirect effects of seasonal and internal migration, such as changes in local labour markets, household labour allocation, and gender roles, in rural areas?

^{xvii} Productive urbanisation refers to urban growth that creates formal jobs, improves infrastructure and services, and supports economic opportunities for both new migrants and existing residents.

5.3 How can agricultural markets and labour dynamics drive profitability, efficiency, and economic shifts?

- What are the most effective strategies to increase farmers' profitability and market participation across different scales of agricultural production?
- How do shifts from subsistence farming to commercial agriculture affect rural labour markets, wages, and the allocation of household labour, especially for women?
- What bundles, policies, or financial tools can help farmers manage risk, improve climate resilience, and invest in technology?
- How can contract farming, producer cooperatives, and other institutional arrangements enhance access to markets, shared productive assets, and value-added agricultural processing?
- How do investments in mechanisation and technology adoption impact farm productivity, labour reallocation, and economic diversification?

Emerging insights snapshot: Lessons from recent impact evaluations

Rural-to-urban migration: There is compelling evidence that **rural-to-urban migration can lead workers to more productive industries and higher-paying jobs, while also reducing seasonal hardships and enabling rural households to diversify income sources.**^{114 45 115 116 48 49 117}

Interventions like transport subsidies and cash incentives can encourage migration, alleviating labour market pressures during agricultural downturns and increasing rural incomes.^{114 116} Migration can also lead to better employment prospects, higher wages, and improved remittance flows, resulting in broader positive effects, such as increased rural wages and consumption.^{73 46 47 48 49} Liquidity constraints and information barriers often limit migration, but mechanisms like job information systems and migrant support networks can help reduce these barriers, improve migration outcomes, and enhance household resilience to economic shocks.^{118 115}

Agricultural profitability: There is strong evidence that **when farmers have better access to resources and selling opportunities—through transport infrastructure, contracts, buyer-seller connections, and crop storage and credit—they invest more in their farms, have higher yields, and trade more easily, leading them to produce higher-value crops and earn higher incomes.**^{119 120 121 122 123 124 125 126} Despite growing consumer demand for high-quality agricultural goods, weak market coordination and inconsistent price incentives limit producers' ability to invest in quality improvements and potentially restrict productivity gains.^{127 128 129 130 131}

Climate adaptation: A promising but still limited body of evidence suggests that **financial tools like anticipatory cash transfers and emergency loans help communities and businesses recover faster** from extreme weather events by reducing food insecurity, asset loss, and economic downturns.^{132 133 134 135} Early warning systems and accurate weather forecasts improve disaster preparedness, lowering medical costs and helping businesses mitigate revenue losses during extreme conditions.^{136 137}

Green growth: Emerging evidence suggests that **market-based solutions, as well as cleaner production technologies and practices, can reduce emissions while enhancing firm productivity, competitiveness, and long-term growth, making them a great buy.**^{xviii 138 139 140} Regulatory frameworks and market-based incentive structures, such as emissions trading schemes and improved environmental audit structures, encourage firms to adopt low-carbon technologies and sustainable practices, reducing compliance costs and enhancing efficiency.^{141 139} Targeted interventions in energy-intensive industries, like brick manufacturing, show that technical training and operational improvements can cut emissions, reduce fuel use, and boost efficiency at scale.^{138 140 142}

SIEL can help you generate the evidence you need

To fill these priority evidence gaps, SIEL is partnering with FCDO teams to provide funding and training for a range of evaluation methodologies, from large-scale RCTs to smaller, nimble studies that can quickly test new ideas. If you are designing an intervention in one of these areas and would like to find out the best way to deliver it, generate evidence about its impact, or would like to test the long-run impact of a past programme, reach out to our Help Desk at siel@poverty-action.org or visit [SIEL's website](#).

We are eager to help you think through effective ways of delivering your programming, evaluation opportunities and funding, evidence use, training, and more.

^{xviii} Market-based solutions use pricing, competition, and incentives to encourage sustainable practices. Examples include emissions trading, pollution taxes, and subsidies for cleaner technology, which help reduce emissions while keeping businesses competitive.

Learning Agenda Annex 1: About SIEL

What is SIEL?

The Strategic Impact Evaluation and Learning (SIEL) programme is a new FCDO initiative. Led by the Evaluation Unit, in partnership with [Innovations for Poverty Action](#) (IPA) and the [Abdul Latif Jameel Poverty Action Lab](#) (J-PAL), SIEL will support the delivery of FCDO's priorities by developing learning on "what works, what doesn't, for whom, and why" in development and foreign policy.

SIEL will build a strong evidence base in strategic priority areas, ensuring that FCDO interventions are effective and provide good value for money. By focusing on rigorous impact evaluations (objective tests of whether changes have occurred due to the intervention), including randomised controlled trials (RCTs), and providing adaptive management support, SIEL will help FCDO to make informed decisions that maximise positive outcomes in four strategic areas: growth, humanitarian assistance, climate and nature, and conflict and fragility.

What SIEL offers:

SIEL provides a range of opportunities and resources to support your work and professional development. Please reach out to siel@poverty-action.org to learn more about accessing the following services:

Funding and support for evaluations

- **Rigorous evaluations:** Access funding for high-quality impact evaluations, including RCTs, long-term follow-ups, and nimble evaluations.
- **Pilot studies:** Receive support for pilot projects that explore new ideas or evaluate interventions on a smaller scale before full implementation.
- **Adaptive management support:** Get ongoing support to adapt and improve your programmes based on real-time evidence and findings.
- **Matchmaking with experts:** Connect with leading researchers from IPA and J-PAL to collaborate on impactful evaluations tailored to your programme's needs.

Training and capacity strengthening

- SIEL will offer training on managing, commissioning, and understanding impact evaluations. The training sessions, open to all staff, are designed to help you understand how to use evidence to support delivery of your priorities.

Identifying, sharing, and using evidence

- SIEL learning agendas will identify key evidence gaps in the four strategic priority areas described above to spark rigorous impact evaluations of FCDO interventions. The agendas intend to guide future evaluation of FCDO interventions and target evaluations to understudied areas with high potential to inform FCDO's work moving forward.
- Research uptake: Once evaluations are complete, SIEL will support the wide dissemination of findings across FCDO and beyond. All staff will have access to key insights from all evaluations undertaken, including through webinars, presentations, and other resources. This will help strengthen knowledge management and organisational learning and deliver more impactful and sustainable programmes and policies.

Get involved

- **SIEL could be relevant to you if any of these apply:**
 - You are looking to start a new initiative or generate evidence about a past initiative.
 - You would like to learn 'what works', improve your programme and/or enhance your evaluation skills.
 - You are working in one of the priority areas for SIEL: growth, humanitarian assistance, climate and nature, and conflict and fragility.
- **SIEL offers:**
 - A partnership approach to answer the questions you need to answer, with the support of world-class researchers.
 - Training and support from leading organisations in the impact evaluation field.
- Visit our [SIEL website](https://siel.poverty-action.org) for more information and reach out to our Help Desk at siel@poverty-action.org with any questions.

-
- ¹ World Bank. 2025. *Global Economic Prospects, January 2025*. World Bank. <https://www.worldbank.org/en/publication/global-economic-prospects>.
- ² United Nations Conference on Trade and Development (UNCTAD). 2021. *Trade and Development Report 2021: From Recovery to Resilience—The Development Dimension*. UNCTAD. <https://unctad.org/webflyer/trade-and-development-report-2021>.
- ³ International Monetary Fund (IMF). 2022. *World Economic Outlook: War Sets Back the Global Recovery*. IMF. <https://www.imf.org/en/Publications/WEO/Issues/2022/04/19/world-economic-outlook-april-2022>.
- ⁴ Organisation for Economic Co-operation and Development (OECD). 2023. *Development Co-Operation Report 2023: Debating the Aid System*. OECD. <https://www.oecd.org/publications/development-co-operation-report-20747721.htm>.
- ⁵ Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2005. “Institutions as a Fundamental Cause of Long-Run Growth.” In *Handbook of Economic Growth*, vol. 1A, edited by Philippe Aghion and Steven Durlauf. Elsevier. [https://doi.org/10.1016/S1574-0684\(05\)01006-3](https://doi.org/10.1016/S1574-0684(05)01006-3).
- ⁶ Rodrik, Dani. 2007. *One Economics, Many Recipes: Globalization, Institutions, and Economic Growth*. Princeton University Press. <https://doi.org/10.1016/j.jinteco.2008.09.003>.
- ⁷ Commission on Growth. 2008. *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. World Bank Publications.
- ⁸ UK Government. 2023. *Delivering the UK’s International Development Strategy: 2023 Progress Update*. Government of the United Kingdom. <https://www.gov.uk/government/publications/delivering-the-uks-international-development-strategy-2023-progress-update/delivering-the-uks-international-development-strategy-2023-progress-update>.
- ⁹ Atkin, David, Amit K. Khandelwal, and Adam Osman. 2017. “Exporting and Firm Performance: Evidence from a Randomized Experiment.” *Quarterly Journal of Economics* 132, no. 2: 551–615. <https://doi.org/10.1093/qje/qjx002>.
- ¹⁰ Cai, Jing, and Adam Szeidl. 2018. “Interfirm Relationships and Business Performance.” *Quarterly Journal of Economics* 133, no. 3: 1229–1282. <https://doi.org/10.1093/qje/qjx049>.
- ¹¹ Abdul Latif Jameel Poverty Action Lab (J-PAL). 2024. “Market Access: Connecting Firms and Entrepreneurs to Markets to Spur Business and Job Growth.” J-PAL Policy Insights. Last modified September 2024.
- ¹² Bergquist, Lauren F., Craig McIntosh, and Meredith Startz. “Search Costs, Intermediation, and Trade: Experimental Evidence from Ugandan Agricultural Markets.” NBER Working Paper #33221, December 2024. <https://doi.org/10.3386/w33221>.
- ¹³ Couture, Victor, Benjamin Faber, Yizhen Gu, and Lizhi Liu. 2021. “Connecting the Countryside via E-Commerce: Evidence from China.” *American Economic Review: Insights* 3, no. 1: 35–50. <https://doi.org/10.1257/aeri.20190382>.
- ¹⁴ Hjort, Jonas, Golvine de Rochambeau, Vinayak Iyer, and Fei Ao. “Informational Barriers to Market Access: Experimental Evidence from Liberian Firms.” NBER Working Paper #27662, April 2024. <https://doi.org/10.3386/w27662>.

-
- ¹⁵ Kim, Yu Ri, Yasuyuki Todo, Daichi Shimamoto, and Petr Matous. 2018. "Are Seminars on Export Promotion Effective? Evidence from a Randomised Controlled Trial." *World Economy* 41, no. 11: 2954–2982. <https://doi.org/10.1111/twec.12658>.
- ¹⁶ Park, Sangyoon, Zhaoneng Yuan, and Hongsong Zhang. 2023. "Technology Training, Buyer-Supplier Relationship, and Quality Upgrading in an Agricultural Supply Chain." *Review of Economics and Statistics* 1–17. https://doi.org/10.1162/rest_a_01341.
- ¹⁷ Alfaro-Ureña, Alonso, Isabela Manelici, and Jose P. Vasquez. 2022. "The Effects of Joining Multinational Supply Chains: New Evidence from Firm-to-Firm Linkages." *Quarterly Journal of Economics* 137, no. 3: 1495–1552. <https://doi.org/10.1093/qje/qjac006>.
- ¹⁸ Tanaka, Mari. 2020. "Exporting Sweatshops? Evidence from Myanmar." *Review of Economics and Statistics* 102, no. 3: 442–456. https://doi.org/10.1162/rest_a_00827.
- ¹⁹ Atkin, David, and Dave Donaldson. 2015. "Who's Getting Globalized?: The Size and Implications of Intra-national Trade Costs." NBER Working Paper #21439, July 2015.
- ²⁰ Bergquist, Lauren, Jie Bai, Christian Lippitsch, and Ignacio Marra de Artinano. "Financial Constraints to Exporting: Experimental Evidence from Rwanda." In Progress. 2025.
- ²¹ Jensen, Robert, and Nolan H. Miller. 2018. "Market Integration, Demand, and the Growth of Firms: Evidence from a Natural Experiment in India." *American Economic Review* 108, no. 12: 3583–3625. <https://doi.org/10.1257/aer.20161965>.
- ²² De Giorgi, Giacomo, Aminur Rahman, and Eric Verhoogen. "Evaluating an Exporting Scheme in Tunisia." In Progress. 2025.
- ²³ Atkin, David, Amit K. Khandelwal, and Adam Osman. 2017. "Exporting and Firm Performance: Evidence from a Randomized Experiment." *Quarterly Journal of Economics* 132, no. 2: 551–615. <https://doi.org/10.1093/qje/qjx002>.
- ²⁴ Münch, Florian, Fabian Scheifele, and Amira Bouziri. 2023. "Stronger Together: Promoting Export Through Female-Only SME Consortia." AEA RCT Registry. <https://doi.org/10.1257/rct.9910-1.0>.
- ²⁵ Colonnelli, Emanuele, Spyridon Lagaras, Jacopo Ponticelli, Mounu Prem, and Margarita Tsoutsoura. 2022. "Revealing Corruption: Firm and Worker Level Evidence from Brazil." *Journal of Financial Economics* 143, no. 3: 1097–1119. <https://doi.org/10.1016/j.jfineco.2021.12.013>.
- ²⁶ Colonnelli, Emanuele, Francesco Loiacono, Edwin Muhumuza, and Edoardo Teso. "Do Information Frictions and Corruption Perceptions Kill Competition? A Field Experiment on Public Procurement in Uganda." NBER Working Paper #32170, February 2024. <https://doi.org/10.3386/w32170>.
- ²⁷ Colonnelli, Emanuele, and Mounu Prem. 2022. "Corruption and Firms." *Review of Economic Studies* 89, no. 2: 695–732. <https://doi.org/10.1093/restud/rdab040>.
- ²⁸ Bruhn, Miriam. 2011. "License to Sell: The Effect of Business Registration Reform on Entrepreneurial Activity in Mexico." *Review of Economics and Statistics* 93, no. 1: 382–386. https://doi.org/10.1162/REST_a_00059.
- ²⁹ Monteiro, Joana C. M., and Juliano J. Assunção. 2012. "Coming Out of the Shadows? Estimating the Impact of Bureaucracy Simplification and Tax Cut on Formality in Brazilian Microenterprises." *Journal of Development Economics* 99, no. 1: 105–115. <https://doi.org/10.1016/j.jdevec.2011.10.002>.

-
- ³⁰ Besley, Timothy, Robin Burgess, Adnan Khan, and Guo Xu. 2022. "Bureaucracy and Development." *Annual Review of Economics* 14, no. 1: 397–424. <https://doi.org/10.1146/annurev-economics-080521-011950>.
- ³¹ Chetty, Raj, Mushfiq Mobarak, and Monica Singhal. 2014. "Increasing Tax Compliance Through Social Recognition." *Policy Brief* 31101.
- ³² Dunning, Thad, Felipe Monestier, Rafael Pineiro, Fernando Rosenblatt, and Guadalupe Tuñón. "Is Paying Taxes Habit Forming? Theory and Evidence from Uruguay." Working Paper, July 2017.
- ³³ Khan, Adnan Q., Asim I. Khwaja, and Benjamin A. Olken. 2016. "Tax Farming Redux: Experimental Evidence on Performance Pay for Tax Collectors." *Quarterly Journal of Economics* 131, no. 1: 219–271. <https://doi.org/10.3386/w20627>.
- ³⁴ Khan, Adnan Q., Asim Ijaz Khwaja, and Benjamin A. Olken. 2019. "Making Moves Matter: Experimental Evidence on Incentivizing Bureaucrats Through Performance-Based Postings." *American Economic Review* 109, no. 1: 237–270. <https://doi.org/10.1257/aer.20180277>.
- ³⁵ Naritomi, Joana. 2019. "Consumers as Tax Auditors." *American Economic Review* 109, no. 9: 3031–3072. <https://doi.org/10.1257/aer.20160658>.
- ³⁶ Kumler, Todd, Eric Verhoogen, and Judith Frías. 2020. "Enlisting Employees in Improving Payroll Tax Compliance: Evidence from Mexico." *Review of Economics and Statistics* 102, no. 5: 881–896. https://doi.org/10.1162/rest_a_00907.
- ³⁷ Pomeranz, Dina. 2015. "No Taxation Without Information: Deterrence and Self-Enforcement in the Value Added Tax." *American Economic Review* 105, no. 8: 2539–2569. <https://doi.org/10.1257/aer.20130393>.
- ³⁸ Afridi, Farzana. "Governance and Public Service Delivery in India." IZA Discussion Paper #10856, June 2017.
- ³⁹ Callen, Michael, Jonathan L. Weigel, and Noam Yuchtman. 2024. "Experiments About Institutions." *Annual Review of Economics* 16: 105–131. <https://doi.org/10.1146/annurev-economics-091823-031317>.
- ⁴⁰ De Janvry, Alain, Kyle Emerick, Marco Gonzalez-Navarro, and Elisabeth Sadoulet. 2015. "Delinking Land Rights from Land Use: Certification and Migration in Mexico." *American Economic Review* 105, no. 10: 3125–3149. <https://doi.org/10.1257/aer.20130853>.
- ⁴¹ Goldstein, Markus, Kenneth Hounbedji, Florence Kondylis, Michael O'Sullivan, and Harris Selod. 2018. "Formalization Without Certification? Experimental Evidence on Property Rights and Investment." *Journal of Development Economics* 132: 57–74. <https://doi.org/10.1016/j.jdeveco.2017.12.008>.
- ⁴² Cai, Jing, and Adam Szeidl. 2018. "Interfirm Relationships and Business Performance." *Quarterly Journal of Economics* 133, no. 3: 1229–1282. <https://doi.org/10.1093/qje/qjx049>.
- ⁴³ Fafchamps, Marcel, and Simon Quinn. 2018. "Networks and Manufacturing Firms in Africa: Results from a Randomized Field Experiment." *World Bank Economic Review* 32, no. 3: 656–675. <https://doi.org/10.1093/wber/lhw057>.
- ⁴⁴ Greenstone, Michael, Richard Hornbeck, and Enrico Moretti. 2010. "Identifying Agglomeration Spillovers: Evidence from Winners and Losers of Large Plant Openings." *Journal of Political Economy* 118, no. 3: 536–598. <https://doi.org/10.1086/653714>.

-
- ⁴⁵ Batista, Catia, and Pedro C. Vicente. 2023. "Is Mobile Money Changing Rural Africa? Evidence from a Field Experiment." *Review of Economics and Statistics* 1–10. https://doi.org/10.1162/rest_a_01333.
- ⁴⁶ Jack, William, and Tavneet Suri. 2014. "Risk Sharing and Transactions Costs: Evidence from Kenya's Mobile Money Revolution." *American Economic Review* 104, no. 1: 183–223. <https://doi.org/10.1257/aer.104.1.183>.
- ⁴⁷ Abdul Latif Jameel Poverty Action Lab (J-PAL). 2024. "Digital Financial Services to Improve Formalized Access and Inclusion." J-PAL Policy Insights. Last modified June 2024.
- ⁴⁸ Lee, Jean N., Jonathan Morduch, Saravana Ravindran, Abu Shonchoy, and Hassan Zaman. 2021. "Poverty and Migration in the Digital Age: Experimental Evidence on Mobile Banking in Bangladesh." *American Economic Journal: Applied Economics* 13, no. 1: 38–71. <https://doi.org/10.1257/app.20190067>.
- ⁴⁹ Suri, Tavneet, and William Jack. 2016. "The Long-Run Poverty and Gender Impacts of Mobile Money." *Science* 354, no. 6317: 1288–1292. <https://doi.org/10.1126/science.aah5309>.
- ⁵⁰ Aiken, Emily, Suzanne Bellue, Dean Karlan, Chris Udry, and Joshua E. Blumenstock. 2022. "Machine Learning and Phone Data Can Improve Targeting of Humanitarian Aid." *Nature* 603, no. 7903: 864–870. <https://doi.org/10.1038/s41586-022-04484-9>.
- ⁵¹ Aker, Jenny C., Rachid Boumnijel, Amanda McClelland, and Niall Tierney. 2016. "Payment Mechanisms and Antipoverty Programs: Evidence from a Mobile Money Cash Transfer Experiment in Niger." *Economic Development and Cultural Change* 65, no. 1: 1–37. <https://doi.org/10.1086/687578>.
- ⁵² Callen, Michael, Miguel Fajardo-Steinhäuser, Michael G. Findley, and Tarek Ghani. 2025. "Can Digital Aid Deliver During Humanitarian Crises?" *Management Science*. <https://doi.org/10.1287/mnsc.2024.06469>.
- ⁵³ Foreign, Commonwealth & Development Office (FCDO). 2024. *Digital Development Strategy 2024–2030*. FCDO.
- ⁵⁴ Karlan, Dean, Matt Lowe, Robert Darko Osei, Isaac Osei-Akoto, Benjamin N. Roth, and Christopher R. Udry. "Social Protection and Social Distancing During the Pandemic: Mobile Money Transfers in Ghana." NBER Working Paper #30309, July 2022. <https://doi.org/10.3386/w30309>.
- ⁵⁵ Muralidharan, Karthik, Paul Niehaus, and Sandip Sukhtankar. 2016. "Building State Capacity: Evidence from Biometric Smartcards in India." *American Economic Review* 106, no. 10: 2895–2929. <https://doi.org/10.1257/aer.20141346>.
- ⁵⁶ Bari, Faisal, Kashif Malik, Muhammad Meki, and Simon Quinn. 2024. "Asset-Based Microfinance for Microenterprises: Evidence from Pakistan." *American Economic Review* 114, no. 2: 534–574. <https://doi.org/10.1257/aer.20210169>.
- ⁵⁷ Bryan, Gharad, Dean Karlan, and Adam Osman. 2024. "Big Loans to Small Businesses: Predicting Winners and Losers in an Entrepreneurial Lending Experiment." *American Economic Review* 114, no. 9: 2825–2860. <https://doi.org/10.1257/aer.20220616>.
- ⁵⁸ Meager, Rachael. 2019. "Understanding the Average Impact of Microcredit Expansions: A Bayesian Hierarchical Analysis of Seven Randomized Experiments." *American Economic Journal: Applied Economics* 11, no. 1: 57–91. <https://doi.org/10.1257/app.20170299>.
- ⁵⁹ Blattman, Christopher, Nathan Fiala, and Sebastian Martinez. 2014. "Generating Skilled Self-Employment in Developing Countries: Experimental Evidence from Uganda." *Quarterly Journal of Economics* 129, no. 2: 697–752. <https://doi.org/10.1093/qje/qjt057>.

-
- ⁶⁰ Fafchamps, Marcel, David McKenzie, Simon Quinn, and Christopher Woodruff. 2014. "Microenterprise Growth and the Flypaper Effect: Evidence from a Randomized Experiment in Ghana." *Journal of Development Economics* 106: 211–226. <https://doi.org/10.1016/j.jdeveco.2013.09.010>.
- ⁶¹ Innovations for Poverty Action. 2024. "Designing Credit Products to Support Women's Economic Activity: Synthesis of Recent Literature." <https://poverty-action.org/designing-credit-products-support-womens-economic-activity-synthesis-recent-literature>.
- ⁶² Cai, Jing, and Adam Szeidl. 2024. "Indirect Effects of Access to Finance." *American Economic Review* 114, no. 8: 2308–2351. <https://doi.org/10.1257/aer.20220711>.
- ⁶³ Bloom, Nicholas, Aprajit Mahajan, David McKenzie, and John Roberts. 2020. "Do Management Interventions Last? Evidence from India." *American Economic Journal: Applied Economics* 12, no. 2: 198–219. <https://doi.org/10.1257/app.20180369>.
- ⁶⁴ Higuchi, Yuki, Vu Hoang Nam, and Tetsushi Sonobe. 2017. *Management Skill, Entrepreneurial Motivation, and Enterprise Survival: Evidence from Randomized Experiments and Repeated Surveys in Vietnam*. Unpublished technical report.
- ⁶⁵ Iacovone, Leonardo, William Maloney, and David McKenzie. 2022. "Improving Management with Individual and Group-Based Consulting: Results from a Randomized Experiment in Colombia." *Review of Economic Studies* 89, no. 1: 346–371. <https://doi.org/10.1093/restud/rdab005>.
- ⁶⁶ Abdul Latif Jameel Poverty Action Lab (J-PAL). 2019. "Supporting Firm Growth Through Consulting and Business Training." J-PAL Policy Insights. Last modified December 2019. <https://doi.org/10.31485/pi.2594.2019>.
- ⁶⁷ McKenzie, David, and Susana Puerto. 2021. "Growing Markets Through Business Training for Female Entrepreneurs: A Market-Level Randomized Experiment in Kenya." *American Economic Journal: Applied Economics* 13, no. 2: 297–332. <https://doi.org/10.1257/app.20180340>.
- ⁶⁸ Bruhn, Miriam, Dean Karlan, and Antoinette Schoar. 2018. "The Impact of Consulting Services on Small and Medium Enterprises: Evidence from a Randomized Trial in Mexico." *Journal of Political Economy* 126, no. 2: 635–687. <https://doi.org/10.1086/696154>.
- ⁶⁹ Anderson-Macdonald, Stephen J., Rajesh Chandy, and Bilal Zia. 2015. "Impact of Marketing (Versus Finance) Skills on Firm Performance: Evidence from a Randomized Controlled Trial in South Africa." PhD diss., London Business School (University of London).
- ⁷⁰ Abebe, Girum, Stefano Caria, Marcel Fafchamps, Paolo Falco, Simon Franklin, and Simon Quinn. 2021. "Anonymity or Distance? Job Search and Labour Market Exclusion in a Growing African City." *Review of Economic Studies* 88, no. 3 (May): 1279–1310. <https://doi.org/10.1093/restud/rdaa057>.
- ⁷¹ Abel, Martin, Rulof Burger, Eliana Carranza, and Patrizio Piraino. 2019. "Bridging the Intention-Behavior Gap? The Effect of Plan-Making Prompts on Job Search and Employment." *American Economic Journal: Applied Economics* 11, no. 2: 284–301. <https://doi.org/10.1257/app.20170566>.
- ⁷² Banerjee, Abhijit V., and Sandra Sequeira. "Spatial Mismatches and Imperfect Information in the Job Search." CEPR Discussion Paper #14414, 2020.
- ⁷³ Baseler, Travis. 2023. "Hidden Income and the Perceived Returns to Migration." *American Economic Journal: Applied Economics* 15, no. 4: 321–352. <https://doi.org/10.1257/app.20210571>.

-
- ⁷⁴ Beam, Emily A. 2016. "Do Job Fairs Matter? Experimental Evidence on the Impact of Job-Fair Attendance." *Journal of Development Economics* 120: 32–40.
<https://doi.org/10.1016/j.jdeveco.2015.11.004>
- ⁷⁵ Franklin, Simon. 2018. "Location, Search Costs and Youth Unemployment: Experimental Evidence from Transport Subsidies." *The Economic Journal* 128, no. 614: 2353–2379.
<https://doi.org/10.1111/ecoj.12509>.
- ⁷⁶ Abdul Latif Jameel Poverty Action Lab (J-PAL). 2022. "Reducing Search Barriers for Job Seekers." J-PAL Policy Insights. Last modified January 2022. <https://doi.org/10.31485/pi.2234.2022>.
- ⁷⁷ Abel, Martin, Rulof Burger, and Patrizio Piraino. 2020. "The Value of Reference Letters: Experimental Evidence from South Africa." *American Economic Journal: Applied Economics* 12, no. 3: 40–71.
<https://doi.org/10.1257/app.20180666>.
- ⁷⁸ Bassi, Vittorio, and Aisha Nansamba. 2022. "Screening and Signalling Non-Cognitive Skills: Experimental Evidence from Uganda." *The Economic Journal* 132, no. 642: 471–511.
<https://doi.org/10.1093/ej/ueab071>.
- ⁷⁹ Alfonsi, Livia, Oriana Bandiera, Vittorio Bassi, Robin Burgess, Imran Rasul, Munshi Sulaiman, and Anna Vitali. 2020. "Tackling Youth Unemployment: Evidence from a Labor Market Experiment in Uganda." *Econometrica* 88, no. 6: 2369–2414. <https://doi.org/10.3982/ECTA15959>.
- ⁸⁰ Carranza, Eliana, Robert Garlick, Kate Orkin, and Neil Rankin. 2022. "Job Search and Hiring with Limited Information About Workseekers' Skills." *American Economic Review* 112, no. 11: 3547–3583.
<https://doi.org/10.1257/aer.20200961>.
- ⁸¹ Heller, Sara B., and Judd B. Kessler. 2024. "Information Frictions and Skill Signaling in the Youth Labor Market." *American Economic Journal: Economic Policy* 16, no. 4: 1–33.
<https://doi.org/10.1257/pol.20220544>.
- ⁸² Abdul Latif Jameel Poverty Action Lab (J-PAL). 2024. "Improving Job Seekers' Employment and Earnings Through Credible Skills Signals." J-PAL Policy Insights. Last modified November 2024.
- ⁸³ Ajayi, Kehinde F., Aziz Dao, Estelle Koussoubé, and P. Rita Nikiema. 2024. "Who Uses Childcare Centers? Evidence from Burkina Faso." *AEA Papers and Proceedings* 114: 454–458.
<https://doi.org/10.1257/pandp.20241013>.
- ⁸⁴ Ajayi, Kehinde F., Aziz Dao, and Estelle Koussoubé. *The Effects of Childcare on Women and Children: Evidence from a Randomized Evaluation in Burkina Faso*. Center for Global Development Working Paper, November 2022.
- ⁸⁵ Clark, Shelley, Caroline W. Kabiru, Sonia Laszlo, and Stella Muthuri. 2019. "The Impact of Childcare on Poor Urban Women's Economic Empowerment in Africa." *Demography* 56: 1247–1272.
<https://doi.org/10.1007/s13524-019-00793-3>.
- ⁸⁶ Ho, Lisa, Suhani Jalota, and Anahita Karandikar. "Bringing Work Home: Flexible Arrangements as Gateway Jobs for Women in West Bengal." STEG Working Paper, April 2024.
- ⁸⁷ J-PAL Policy Insight. 2023. "Access to Childcare to Improve Women's Economic Empowerment." Cambridge, MA: Abdul Latif Jameel Poverty Action Lab. Last modified February 2023.
- ⁸⁸ Jensen, Robert. 2012. "Do Labor Market Opportunities Affect Young Women's Work and Family Decisions? Experimental Evidence from India." *Quarterly Journal of Economics* 127, no. 2: 753–792.
<https://doi.org/10.1093/qje/qjs002>.

-
- ⁸⁹ Martínez, Claudia, and Marcela Perticará. 2017. "Childcare Effects on Maternal Employment: Evidence from Chile." *Journal of Development Economics* 126: 127–137. <https://doi.org/10.1016/j.jdeveco.2017.01.001>.
- ⁹⁰ Nandi, Arijit, Parul Agarwal, Anoushaka Chandrashekar, and Sam Harper. 2020. "Access to Affordable Daycare and Women's Economic Opportunities: Evidence from a Cluster-Randomised Intervention in India." *Journal of Development Effectiveness* 12, no. 3: 219–239. <https://doi.org/10.1080/19439342.2020.1773898>.
- ⁹¹ Alfaro-Serrano, David, Tanay Balantrapu, Ritam Chaurey, Ana Goicoechea, and Eric Verhoogen. 2021. "Interventions to Promote Technology Adoption in Firms: A Systematic Review." *Campbell Systematic Reviews* 17, no. 4: e1181. <https://doi.org/10.1002/cl2.1181>.
- ⁹² Atkin, David, Azam Chaudhry, Shamyala Chaudry, Amit K. Khandelwal, and Eric Verhoogen. 2017. "Organizational Barriers to Technology Adoption: Evidence from Soccer-Ball Producers in Pakistan." *Quarterly Journal of Economics* 132, no. 3: 1101–1164. <https://doi.org/10.1093/qje/qjx010>.
- ⁹³ Chaurey, Ritam, Gaurav Nayyar, Siddharth Sharma, and Eric Verhoogen. "Information and Adoption of Energy-Efficient Stitching Motors in Bangladesh." In Progress. 2025.
- ⁹⁴ Crouzet, Nicolas, Apoorv Gupta, and Filippo Mezzanotti. 2023. "Shocks and Technology Adoption: Evidence from Electronic Payment Systems." *Journal of Political Economy* 131, no. 11: 3003–3065. <https://doi.org/10.1086/724847>.
- ⁹⁵ Crouzet, Nicolas, Pulak Ghosh, Apoorv Gupta, and Filippo Mezzanotti. "Demographics and Technology Diffusion: Evidence from Mobile Payments." Working Paper, April 2024. <https://dx.doi.org/10.2139/ssrn.4778382>.
- ⁹⁶ Breza, Emily, Martin Kanz, and Leora F. Klapper. "Learning to Navigate a New Financial Technology: Evidence from Payroll Accounts." NBER Working Paper #28249, December 2020. <https://doi.org/10.3386/w28249>.
- ⁹⁷ Comin, Diego A., Xavier Cirera, and Marcio Cruz. "Technology Sophistication Across Establishments." NBER Working Paper #33358, January 2025. <https://doi.org/10.3386/w33358>.
- ⁹⁸ Dalton, Patricio S., Haki Pamuk, Ravindra Ramrattan, Burak Uras, and Daan van Soest. 2024. "Electronic Payment Technology and Business Finance: A Randomized Controlled Trial with Mobile Money." *Management Science* 70, no. 4: 2590–2625. <https://doi.org/10.1287/mnsc.2023.4821>.
- ⁹⁹ Higgins, Sean. 2024. "Financial Technology Adoption: Network Externalities of Cashless Payments in Mexico." *American Economic Review* 114, no. 11: 3469–3512. <https://doi.org/10.1257/aer.20201952>.
- ¹⁰⁰ McKenzie, David. 2017. "Identifying and Spurring High-Growth Entrepreneurship: Experimental Evidence from a Business Plan Competition." *American Economic Review* 107, no. 8: 2278–2307. <https://doi.org/10.1257/aer.20151404>.
- ¹⁰¹ Atkin, David, Antoinette Schoar, and Kiara Wahnschafft. "Evaluating Sama's Training and Job Programs in Nairobi, Kenya." Working Paper, May 2021.
- ¹⁰² J-PAL Evidence Review. 2019. "Preparing for the Work of the Future" Cambridge, MA: Abdul Latif Jameel Poverty Action Lab.
- ¹⁰³ Abdul Latif Jameel Poverty Action Lab (J-PAL). 2023. "Vocational and Skills Training Programs to Improve Labor Market Outcomes." J-PAL Policy Insights. Last modified March 2023.

-
- ¹⁰⁴ Honorati, Maddalena. “The Impact of Private Sector Internship and Training on Urban Youth in Kenya.” World Bank Policy Research Working Paper #7404. August 2015.
- ¹⁰⁵ Osman, Adam, and Jamin Speer. 2025. “Are Soft Skills Enough? Experimental Evidence on Skill Complementarity for College Graduates.” *ILR Review*. <https://doi.org/10.1177/00197939251316849>.
- ¹⁰⁶ Bandiera, Oriana, Vittorio Bassi, Robin Burgess, Imran Rasul, Munshi Sulaiman, and Anna Vitali. “The Search for Good Jobs: Evidence from a Six-Year Field Experiment in Uganda.” NBER Working Paper #31570, August 2023. <https://doi.org/10.3386/w31570>.
- ¹⁰⁷ Field, Erica M., Leigh L. Linden, Ofer Malamud, Daniel Rubenson, and Shing-Yi Wang. “Does Vocational Education Work? Evidence from a Randomized Experiment in Mongolia.” NBER Working Paper #26092, July 2019. <https://doi.org/10.3386/w26092>.
- ¹⁰⁸ Crépon, Bruno, and Patrick Premand. 2024. “Direct and Indirect Effects of Subsidized Dual Apprenticeships.” *Review of Economic Studies*, rdae094. <https://doi.org/10.1093/restud/rdae094>.
- ¹⁰⁹ Shonchoy, Abu, Tomoki Fujii, and Selim Raihan. “Barriers to Labor Migration for the Rural Poor: Experimental Evidence from a Vocational Training Program in Bangladesh.” Working Paper, June 2019. <https://dx.doi.org/10.2139/ssrn.3395229>.
- ¹¹⁰ Atkin, David, Leonardo Iacovone, and Eric Verhoogen. “Promoting High Impact Entrepreneurship in Mexico: An Impact Evaluation.” In Progress. 2024.
- ¹¹¹ Fafchamps, Marcel, and Christopher Woodruff. 2017. “Identifying Gazelles: Expert Panels vs. Surveys as a Means to Identify Firms with Rapid Growth Potential.” *World Bank Economic Review* 31, no. 3: 670–686. <https://doi.org/10.1093/wber/lhw026>.
- ¹¹² McKenzie, David, and Dario Sansone. 2019. “Predicting Entrepreneurial Success is Hard: Evidence from a Business Plan Competition in Nigeria.” *Journal of Development Economics* 141: 102369. <https://doi.org/10.1016/j.jdeveco.2019.07.002>.
- ¹¹³ Hussam, Reshmaan, Natalia Rigol, and Benjamin N. Roth. 2022. “Targeting High Ability Entrepreneurs Using Community Information: Mechanism Design in the Field.” *American Economic Review* 112, no. 3: 861–898. <https://doi.org/10.1257/aer.20200751>.
- ¹¹⁴ Akram, Agha Ali, Shyamal Chowdhury, and Ahmed Mushfiq Mobarak. “Effects of Emigration on Rural Labor Markets.” NBER Working Paper #23929, October 2017.
- ¹¹⁵ Bryan, Gharad, Shyamal Chowdhury, and Ahmed Mushfiq Mobarak. 2014. “Underinvestment in a Profitable Technology: The Case of Seasonal Migration in Bangladesh.” *Econometrica* 82, no. 5: 1671–1748. <https://doi.org/10.3982/ECTA10489>.
- ¹¹⁶ Mushfiq Mobarak, Ahmed, and Maira Emy Reimão. 2020. “Seasonal Poverty and Seasonal Migration in Asia.” *Asian Development Review* 37, no. 1: 1–42. https://doi.org/10.1162/adev_a_00139.
- ¹¹⁷ Yang, Dean. 2008 “International Migration, Remittances and Household Investment: Evidence from Philippine Migrants’ Exchange Rate Shocks.” *The Economic Journal* 118, no. 528: 591–630. <https://doi.org/10.1111/j.1468-0297.2008.02134.x>.
- ¹¹⁸ Bazzi, Samuel, Lisa Cameron, Simone G. Schaner, and Firman Witoelar. “Information, Intermediaries, and International Migration.” NBER Working Paper #29588, June 2022. <https://doi.org/10.3386/w29588>.

-
- ¹¹⁹ Abdul Latif Jameel Poverty Action Lab (J-PAL) and Center for Effective Global Action (CEGA). 2024. "Increasing Small-Scale Farmers' Access to Agricultural Markets." J-PAL Policy Insights. Last modified December 2024.
- ¹²⁰ Aggarwal, Shilpa, Eilin Francis, and Jonathan Robinson. 2018. "Grain Today, Gain Tomorrow: Evidence from a Storage Experiment with Savings Clubs in Kenya." *Journal of Development Economics* 134: 1–15. <https://doi.org/10.1016/j.jdeveco.2018.04.001>.
- ¹²¹ Arouna, Aminou, Jeffrey D. Michler, and Jourdain C. Lokossou. 2021. "Contract Farming and Rural Transformation: Evidence from a Field Experiment in Benin." *Journal of Development Economics* 151: 102626. <https://doi.org/10.1016/j.jdeveco.2021.102626>.
- ¹²² Bold, Tessa, Selene Ghisolfi, Frances Nsonzi, and Jakob Svensson. 2022. "Market Access and Quality Upgrading: Evidence from Four Field Experiments." *American Economic Review* 112, no. 8: 2518–2552. <https://doi.org/10.1257/aer.20210122>.
- ¹²³ Gollin, Douglas. 2023. "Agricultural Productivity and Structural Transformation: Evidence and Questions for African Development." *Oxford Development Studies* 51, no. 4: 375–396. <https://doi.org/10.1080/13600818.2023.2280638>.
- ¹²⁴ Macchiavello, Rocco, and Josepa Miquel-Florensa. "Buyer-Driven Upgrading in GVCs: The Sustainable Quality Program in Colombia." CEPR Discussion Paper #13935, August 2019.
- ¹²⁵ J-PAL. 2023. "Agricultural Productivity and Labor: Evidence and Open Questions for Researchers." Abdul Latif Jameel Poverty Action Lab (J-PAL). <https://www.povertyactionlab.org/blog/2-21-23/agricultural-productivity-and-labor-evidence-and-open-questions-researchers>.
- ¹²⁶ Abdul Latif Jameel Poverty Action Lab (J-PAL). 2021. "Incentivizing Higher-Quality Agricultural Outputs." J-PAL Policy Insights. Last modified September 2021. <https://doi.org/10.31485/pi.3010.2021>.
- ¹²⁷ Bai, Jie. 2025. "Melons as Lemons: Asymmetric Information, Consumer Learning and Seller Reputation." *Review of Economic Studies*, rdaf006. <https://doi.org/10.1093/restud/rdaf006>.
- ¹²⁸ Bernard, Tanguy, Alain de Janvry, Samba Mbaye, and Elisabeth Sadoulet. 2017. "Expected Product Market Reforms and Technology Adoption by Senegalese Onion Producers." *American Journal of Agricultural Economics* 99, no. 4: 1096–1115. <https://doi.org/10.1093/ajae/aax033>.
- ¹²⁹ Bold, Tessa, Selene Ghisolfi, Frances Nsonzi, and Jakob Svensson. 2022. "Market Access and Quality Upgrading: Evidence from Four Field Experiments." *American Economic Review* 112, no. 8: 2518–2552. <https://doi.org/10.1257/aer.20210122>.
- ¹³⁰ Park, Sangyoon, Zhaoneng Yuan, and Hongsong Zhang. 2025. "Technology Training, Buyer-Supplier Relationship, and Quality Upgrading in an Agricultural Supply Chain." *Review of Economics and Statistics* 1–17. https://doi.org/10.1162/rest_a_01341.
- ¹³¹ Rao, Manaswini, and Ashish Shenoy. 2023. "Got (Clean) Milk? Organization, Incentives, and Management in Indian Dairy Cooperatives." *Journal of Economic Behavior & Organization* 212: 708–722. <https://doi.org/10.1016/j.jebo.2023.06.002>.
- ¹³² De Mel, Suresh, David McKenzie, and Christopher Woodruff. 2012. "Enterprise Recovery Following Natural Disasters." *The Economic Journal* 122, no. 559: 64–91. <https://doi.org/10.1111/j.1468-0297.2011.02475.x>.
- ¹³³ Lane, Gregory. 2024. "Adapting to Climate Risk with Guaranteed Credit: Evidence from Bangladesh." *Econometrica* 92, no. 2: 355–386. <https://doi.org/10.3982/ECTA19127>.

-
- ¹³⁴ Adhvaryu, Achyuta, Namrata Kala, and Anant Nyshadham. 2023. "Returns to On-the-Job Soft Skills Training." *Journal of Political Economy* 131, no. 8: 2165–2208. <https://doi.org/10.1086/724320>.
- ¹³⁵ Pople, Ashley, Ruth Hill, Stefan Dercon, and Ben Brunckhorst. 2021. "Anticipatory Cash Transfers in Climate Disaster Response." AEA RCT Registry. <https://doi.org/10.1257/rct.6576-1.1>.
- ¹³⁶ Jagnani, Maulik, and Rohini Pande. "Forecasting Fate: Experimental Evaluation of a Flood Early Warning System." Working Paper, April 2024.
- ¹³⁷ Annan, Francis, Edem Klobodu, Jeffrey Shrader, and Suman Basuroy. "Competition Constrains Adaptation to Climate Shocks." Working Paper, December 2024. <https://dx.doi.org/10.2139/ssrn.5031838>.
- ¹³⁸ Atkin, David, and Banu Demir Pakek. "Reducing Carbon Emissions While Boosting Growth: Turkey's Response to the EU's Carbon Border Adjustment Mechanism." In Progress. 2025.
- ¹³⁹ Greenstone, Michael, Rohini Pande, Anant Sudarshan, and Nicholas Ryan. "The Benefits and Costs of Emissions Trading: Experimental Evidence from a New Market for Industrial Particulate Emissions." Working Paper, July 2022.
- ¹⁴⁰ Brooks, Nina, Debashish Biswas, Sameer Maithel, Sonal Kumar, Mohammad Rofi Uddin, Shueb Ahmed, Moogdho Mahzab, Grant Miller, Mahbubur Rahman, and Stephen P. Luby. 2024. "Building Blocks of Change: The Energy, Health, and Climate Co-Benefits of More Efficient Brickmaking in Bangladesh." *Energy Research & Social Science* 117: 103738. <https://doi.org/10.1016/j.erss.2024.103738>
- ¹⁴¹ Duflo, Esther, Michael Greenstone, Rohini Pande, and Nicholas Ryan. 2013. "Truth-Telling by Third-Party Auditors and the Response of Polluting Firms: Experimental Evidence from India." *Quarterly Journal of Economics* 128, no. 4: 1499–1545. <https://doi.org/10.1093/qje/qjt024>.
- ¹⁴² Brooks, Nina, and Grant Miller. "Scaling Cleaner Brick Manufacturing in Bangladesh." In Progress. 2025.