

J-PAL JOBS AND OPPORTUNITY INITIATIVE BRAZIL: OVERVIEW AND INSTRUCTIONS

Round 2 – 2022 Second Semester

J-PAL's [Jobs and Opportunity Initiative Brazil \(JOI Brazil\)](#) funds randomized evaluations of strategies to improve employment outcomes. JOI Brazil is now calling for proposals from J-PAL affiliates, J-PAL postdocs, and J-PAL invited researchers for full research projects, pilot studies and development grants. PhD students who have the support of a J-PAL affiliated researcher or J-PAL invited researchers that are part of their thesis committee, are also eligible to apply. **Letters of interest are due by Thursday, August 25 at 7:00 PM UTC-3. Proposals are due by Thursday, October 6 at 7:00 PM UTC-3.**

BACKGROUND

The International Labor Organization estimates 220 million people were unemployed globally as of 2020¹. High unemployment and low labor force participation are particularly acute in certain geographies, and often among subsets of the population such as youth and women. While men's labor force participation was 72.1 percent in 2020, women's labor force participation was just 45.2 percent². Globally the youth labor force participation rate was 37.8 percent in 2020³.

Beyond the challenge of getting work, employment does not guarantee that people have decent livelihoods to maintain themselves and their families. Globally 22 percent of workers lived in either extreme or moderate poverty in 2020⁴. Many workers remain trapped in low-quality jobs with low pay, unsafe conditions, or poor social protections.

Existing literature suggests several key causes for these employment challenges, including job search and matching frictions and economies that do not create enough quality jobs. Despite the wide array of programs that innovators have designed in response to this global challenge, many questions remain unanswered to guide policymakers toward the most effective solutions.

¹ https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_795453.pdf

² https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_795453.pdf

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RESEARCH GAPS IN JOBS AND OPPORTUNITY

The Jobs and Opportunity Initiative (JOI) Brazil will provide targeted funding to test the most promising innovations related to jobs and opportunities. It will generate rigorous research that addresses pressing employment challenges in Brazil. This initiative will focus on evaluating the impact of programs related to skills training and job assistance and job creation (entrepreneurial support, in particular), with the future of work and social issues in labor markets as secondary themes. Moreover, the initiative will prioritize cross-cutting issues that are common to these four research topics: gender, race, youth, soft skills, regional inequalities, green jobs, and job quality.

This document presents a summary of the JOI Brazil research agenda and a list of questions the initiative would like to answer using rigorous evidence. After this brief presentation, a [more detailed version](#) with references of each topic is provided for those interested in the state of academic research on these topics.

Skills Training

One of the most popular explanations for youth unemployment is the mismatch between the competencies youth have and those needed and valued in the labor market. Equipping young people with the right employability skills is therefore seen as a major policy priority. Training programs are a common feature of government and NGO programming. But these programs tend to be very expensive, and some have had disappointing results when rigorously evaluated. A great challenge to draw conclusive statements about the success of training programs is that programs vary substantially in terms of how they are implemented and who they target. In addition, evaluations largely test interventions as a whole, not individual components.

Understanding which components of a training program are most effective could be particularly insightful to help design more cost-effective programs. Implementation features that would be helpful to test further within training programs include: (i) matching trainees to programs that are the best fit for them, (ii) addressing participants costs of attending to reduce dropout rates, (iii) recruiting/screening for high-quality trainers, (iv) aligning payment incentives for training providers, (v) involving the private sector in curriculum development and for on-the-job training opportunities, and (vi) emphasizing soft skills training.

Job Search Assistance

Besides lacking the skills demanded by the market, many jobseekers face barriers to transition into the workforce. Searching for a job is often expensive, and some job seekers underestimate the benefits of job search and end up underinvesting in it. Moreover, seekers may not know how or where to look for a job, or how to communicate or match their skills to potential employers. Many randomized evaluations of job search assistance programs and other innovations to reduce those barriers show they helped people look for work more intensively and efficiently.

Despite promising results, these programs have been less effective when other important barriers exist in the labor market. These barriers could include a lack of job openings, high relocation costs, or mismatched expectations between jobseekers and employers. The literature would benefit from further research on these topics. Moreover, while most of the studies showed positive impacts on outcomes such as interview offers, job offers, and quality employment, not all measured or showed sustained benefits to earnings, total employment, or well-being. It would also be beneficial for future research to explore which programs lead to improvements in a broader set of economic outcomes. Finally, in the few cases where it was measured, some of the gains from job search assistance programs came at the expense of jobseekers who did not receive the programs, implying that job search assistance may have merely reshuffled who got the limited number of available jobs. It would be beneficial for future research to rigorously measure the displacement effects of job search programs and explore ways to mitigate these effects.

Evidence on the effects of job search policies in the Latin America and the Caribbean (LAC) is remarkably scarce, despite the existence of a large network of intermediation public policies in the region. Descriptive analysis suggests that these programs have performed poorly in recent years. Intermediation reforms and revisions have been introduced in some LAC countries to face those challenges, like expanding the role of private and non-profit providers within the national intermediation policy and using new technologies to improve matching. Future research could exploit ongoing policy reforms in the region to test which intervention designs are most effective at enhancing labor intermediation services.

Entrepreneurial Support

Microentrepreneurship has long been considered a plausible strategy to boost the income of vulnerable households as self-employment is a key source of income in low-and middle-income countries. Microentrepreneurs in those countries often do not implement the business and management practices that are common among businesses in high income countries. Business training and consulting programs are a popular approach to improving those practices. Traditional interventions aim to do that by teaching microentrepreneurs an assortment of business practices. Most evaluations have found that conventional training improves business practices but fails to improve business profits or sales. Simplifying training by teaching a few heuristics or rules-of-thumb offer more promise, although there are still few studies of this approach.

Alternatively, instead of teaching entrepreneurs how to carry out specific business practices, changing their mindset may be more effective. Personal initiative training has shown some promise in improving firm performance through creating a more proactive mindset. Variation in the longevity of impact on profits, however, raises questions about how best such psychological training should be implemented and whether they should be combined with other forms of training. While evidence on the effectiveness of these programs for women participants is mixed, this line of research into psychological training may shed light on the relationship between entrepreneurial mindsets and the gender profit gap.

High-growth potential enterprises (“gazelles”) are of particular interest to many policymakers' objectives, because of their potential for innovation and rapid growth, and because of their relative scarcity in low- and middle-income countries. These entrepreneurs are less likely to need training on basic business skills or on cultivating an entrepreneurial mindset, but instead need more specialized assistance through business accelerators and incubators. Early evidence suggests that grants and specialized training targeted at high-potential entrepreneurs through business plan competitions and business accelerators have shown promising results on business outcomes and employment. However, the positive impacts of such programs may often be limited to the highest-potential entrepreneurs, emphasizing the importance of the selection process. Together, these studies illustrate the importance of correctly identifying high-growth-potential entrepreneurs, and the promise of grants combined with—or possibly separate from—more sophisticated business training. Evidence is still limited on the effectiveness of business plan competitions and accelerators for women. Further research would benefit from incorporating a gender focus to identify additional barriers that female entrepreneurs face to participating in and benefiting from these programs.

Additional Topics: The Future of Work and Social Issues in Labor Markets

There is currently much concern and discussion around how automation and globalization might transform labor markets and threaten livelihoods. While there is a growing body of rigorous research addressing the future of jobs, few of these studies come from low- and middle-income countries. Examples include training low-skilled marginalized youth to access Internet-based employment or using online platforms to support job search efforts. Future research around the role of the gig economy in low- and middle-income countries, technology-based employment solutions, and equipping people to succeed in light of changing labor market demands would be valuable contributions to the existing literature.

In addition, labor markets are constantly affecting and being affected by social issues. Topics like informality, crime, mental health, and social protections are key to understanding labor markets' functioning. For example, experimental research already found that cash transfers and workfare programs can induce workers to migrate from the formal to the informal sector. Besides that, some labor market interventions have already been shown successful in deterring crime, improving mental health outcomes, and spurring formalization. However, many questions remain unanswered. For example, there is little evidence about which firms benefit more from formalization. In general, previous studies have found no effects on overall performance. Moreover, there is no clear consensus about which mechanisms drive crime reduction in employment programs for youth. Lastly, more research investigating the longer-term effects of mental health treatment on labor market outcomes would be valuable. Further research would also benefit from assessing broader labor market outcomes, like administrative or standardized survey data on wages and earnings, rather than self-reported measures, commonly used in clinical trials.

Key Open Research Questions

JOI Brazil funds randomized evaluations of programs and policies aimed at improving employment conditions, building a better bridge between field experiments and underlying economic theories. While this list is not exhaustive, key open questions this initiative seeks to address are presented below. The [Detailed Research Agenda](#) presents further open research questions we would like to address.

Skills Training and Job Search Assistance:

1. Under what conditions do skills training programs improve employment outcomes? What is the optimal role of the private sector in skills training programs?
2. Which design features of skills training programs have the most impact?
3. What are the most effective ways to reduce the barriers (information, financial, or otherwise) that people face to access training programs?
4. What type of skills (soft skills vs technical skills) are most effective at improving employment outcomes?
5. Which programs best encourage increased and broader job search efforts among jobseekers? Does this increase net employment?
6. How can policymakers leverage both online platforms and low technology strategies to reduce search barriers for jobseekers and reduce hiring costs for firms?
7. What are the most effective ways to align people's expectations with the realities of the labor market? How can technology platforms serve this purpose?

Entrepreneurial Support:

1. How does combining personal initiative training with other entrepreneurial training interventions impact the effectiveness of either? When is combining appropriate, and when is it not?
2. How effective is rule-of-thumb training at instilling skills outside of business finances?
3. What are the key constraints that women and youth face to running successful businesses, and what forms of alternative business training are best suited to helping participants overcome them?
4. Why do firms not choose to use consulting and training services themselves?
5. What are the important determinants of success of a high-growth-potential entrepreneur, and is human judgment best for making these predictions?
6. What are effective targeting mechanisms to identify high-potential entrepreneurs?
7. When are cash grants, non-monetary services, or a combination more appropriate for high-growth-potential entrepreneurs?

The initiative will prioritize evaluations that measure cost-effectiveness, scalability, diversity and inclusion, and displacement.

If a researcher is uncertain about whether a research project is eligible for JOI Brazil, please email joi-br-rfp@povertyactionlab.org.

GEOGRAPHIC FOCUS

Projects related to (1) supply and matching, (2) job creation, (3) the future of jobs and (4) social issues and labor market will be accepted if they are in Brazil. The Jobs and Opportunity Initiative Brazil is unable to fund research focused in other countries.

Funds

These types of proposals will be considered by the JOI Brazil initiative:

Full Research Projects: These grants are for research projects at a mature level of development. Not only must the research question be clear, but applicants must also demonstrate a commitment from implementing partners, a method of randomization, well-defined instruments, and sample size estimates. Proposals can also be submitted for funding the continuation of research projects that have already started without JOI Brazil funding (including those for which field data collection has been completed). The expectation is that these projects will result in a publicly available paper that is eventually submitted to a top economics journal. The total amount awarded to a single project, including any JOI Brazil funding for proposal development or piloting, will not exceed BRL 500,000.^{5 6}

Pilot Studies: These grants are for studies with a clear research question, but for which the design and implementation requires further testing and pilot data. The expectation is that these projects will ultimately develop into full-scale randomized evaluations. The maximum amount awarded for pilot studies is BRL 200,000.⁷

Development Grants: These grants cover work related to preliminary research ideas, such as conducting background research, developing partnerships, visiting field sites, and collecting preliminary data. The expectation is that these funds will be used to support costs related to the principal investigator (PI) travel and relationship-building with implementation partners to develop a proposal for a pilot or full-

⁵ In rare circumstances, proposals with a compelling reason for requesting more than BRL 500,000 may be considered on a case-by-case basis.

⁶ Please note that full evaluations requesting less than BRL 200,000 are still considered full research projects and evaluated accordingly. The criteria is not amount-based. The criteria for pilot funding apply only to proposals requesting funds to conduct piloting, or pre-randomization, activities.

⁷ Please note that the total amount awarded to a single project, including any JOI Brazil funding for full RCT or pilot studies, will not exceed respectively BRL 500,000 and BRL 200,000.

scale randomized evaluation during a subsequent call for proposals. The maximum amount awarded for development grants is BRL 50,000.

Please note, initiative pilot and development grants may be used for activities intended to facilitate access to administrative data for designing or conducting an RCT. Examples of these activities include, but are not limited to, negotiating data use agreements, conducting exploratory data analysis and cleaning, or setting up technical access mechanisms.

Please note that JOI Brazil was established to fund randomized impact evaluations of programs and policies being implemented in the field. As a general rule, JOI Brazil does not fund pure lab experiments. A proposal may be considered if there is a randomized field evaluation of an underlying program or policy which supplements a lab experiment.

Off-Cycle Proposals: JOI Brazil offers a possibility of funding outside of the regular RFP cycles. Eligibility for this proposal is the same as for the regular funding cycle. JOI Brazil will accept off-cycle proposals for (1) development grants up to BRL 50,000 and (2) pilot studies and full research projects for up to BRL 200,000⁸. These grants are intended for research projects that face a significant time constraint and need to receive funding before the end of a regular funding round to make use of an unanticipated opportunity (e.g. a newly announced policy change that will go into effect soon, creating an opportunity for an evaluation). Proposals must clearly justify the need to receive a decision on an expedited schedule. Please note that PhD students are not eligible to apply for off-cycle funding.

ELIGIBILITY

The following are eligible to apply for any type of JOI Brazil funding:

- J-PAL affiliates,
- J-PAL post-doctoral fellows,
- J-PAL invited researchers, and
- PhD students who have the support of a J-PAL affiliated researcher or J-PAL invited researchers that are part of their thesis committee*

*PhD students have application restrictions that are not applicable to the other three target groups.

Please note that JOI Brazil invited researchers are nominated and reviewed on a quarterly basis, with the review based on a nominee's previous research with a particular emphasis on the ability to perform randomized evaluations related to labor markets. All proposals may include collaborators outside of this network.

⁸ In rare circumstances, proposals with a compelling reason for requesting more than BRL 200,000 off-cycle may be considered.

In addition, PhD students may be eligible to apply for development grants or up to BRL 135,000 in pilot studies or full research project funding. To be eligible, PhD students must have a J-PAL affiliate or J-PAL invited researchers on their thesis committee. This adviser must provide a letter of support and indicate willingness to remain involved in a supervisory role throughout the lifetime of the project.⁹ If the student is pre-thesis, the letter should state “I am actively responsible for supervising this project/research and anticipate being on the student’s thesis committee.” In addition, in order to apply for up to BRL 135,000 for full-scale funding, PhD students must provide documented evidence of successful pilot activities, funded either through a JOI Brazil development grant or other sources. Additionally, PhD students are not eligible to apply for off-cycle funding.

Please note that any J-PAL affiliate, J-PAL postdoc, J-PAL invited researchers or eligible PhD student can submit a maximum of three pilot or full-scale proposals within a 12-month period to JOI Brazil, either as a main PI or co-PI in the proposal. For example, if a researcher submitted 2 (two) pilot studies or full research project proposals in our 2022 First Semester round, they can then only submit a maximum of 1 (one) pilot study or full research project proposal in our 2022 Second Semester round¹⁰.

LETTER OF INTEREST (LOI) APPLICATION INSTRUCTIONS

Please note the following before beginning your application:

- Our portal operates best when using the latest version of Google Chrome. We recommend using this browser when accessing our online portal.
- If you already have an account but do not remember the password, please contact fc_help@povertyactionlab.org for help retrieving or resetting your password.
- If you do not have a J-PAL portal account and need one created, please complete this form and specify that you want an applicant account. Account creation normally takes no more than two business days; you will be asked to verify your email address and set a password. For further information and troubleshooting, please get in touch with fc_help@povertyactionlab.org. Your J-PAL portal account credentials will allow you to apply to or review for any J-PAL initiative.
- In the interim, to facilitate your letter of interest (LOI) development, we have hosted preview documents on [JOI Brazil’s website](#) that outline in detail all required information that applicants will be asked to provide when submitting a letter of interest to JOI Brazil via our online portal system. You are welcome to begin drafting your letter of interest materials using these

⁹Please note that PhD students are eligible to submit a maximum of two development grant applications and two pilot/full study proposals during their time as PhD students. All else equal, priority will be given to PhD students who have not applied before. Applicants who received development funding as PhD students but have since moved to another institution may only apply for funding to continue that same project, and may not apply for funding for unrelated projects unless they have since become a J-PAL affiliate or invited researchers.

¹⁰ If a PI or PI team submits the same project multiple times within a 12-month period, that will count as one proposal for the purposes of our proposal limit. For example, if a PI submitted 2 pilot proposals in our 2022 First Semester round, they could re-submit one of those proposals and an additional, new pilot or full-scale proposal in our Second Semester 2022 round.

templates. However, please do submit these reference documents by email to JOI Brazil, but rather submit them via the online portal for consideration.

Once you have your J-PAL portal account set-up:

- The first step is uploading the letter of interest (LOI) on our [online portal](#) before or by August 25, 2022. The JOI Brazil team will notify you via the portal once we have reviewed your LOI and you are clear to begin including your proposal.
- Please note that proposals for this call should discuss any Covid-related risks to the feasibility of the project and share how the team will prepare for and mitigate these risks.
- We emphasize that the materials to be submitted in the portal must be in English.
- We also make available JOI Brazil's email address (jo-br-rfp@povertyactionlab.org) to clarify any doubts, in English or Portuguese, that you may have.

Researchers should submit a letter of interest by Thursday, August 25 at 7:00 PM UTC-3. Proposal applications are due by Thursday, October 6 at 7:00 PM UTC-3. Please submit your application via J-PAL's [online portal](#).

PROPOSAL APPLICATION INSTRUCTIONS

Once you have submitted your letter of interest¹¹, you are welcome to begin drafting your proposal materials. Proposals for JOI Brazil research funding for full studies and pilots consist some documents that must be submitted through J-PAL's online portal, as follows:

- Please submit via J-PAL's [online portal](#):
 - a. Application form, which includes a cover sheet and narrative
 - b. Budget sheet
 - c. Letters of support
 - d. Project execution schedule and description of the activities
 - e. Term of approval and consent
 - f. Statement of adherence to policies and standards
 - g. Declaration of awareness and agreement with the general terms and conditions of the financial aid contract

¹¹ Please note that letters of interest are, at this point, reviewed by staff. This is an eliminatory stage. For any doubts, contact us at jo-br-rfp@povertyactionlab.org.

Please be sure to submit your budget in BRL. The JOI Brazil initiative is funded by donations in Brazilian Real (BRL) and the initiative will make all awards in BRL.

To facilitate your proposal development, we have hosted reference documents on [JOI Brazil's website](#) that outline in detail all required information that applicants will be asked to provide when submitting a proposal to JOI Brazil.

TIMELINE

Thursday, July 28	JOI Brazil's 2022 Second Semester RFP (round 2) launch
Thursday, August 25 at 7:00 PM UTC-3	Letters of interest deadline
Thursday, October 6 at 7:00 PM UTC-3	Proposal submission deadline
Week of December 12-16	Results announced to the applicants

REVIEW PROCESS

Proposals are reviewed along five broad criteria: academic contribution, policy relevance, technical design, project viability, and value of research.

1. Full RCT, Pilot Proposals, and Development Grants: Proposals are distributed for review and scoring by peer-reviewers in a first anonymized round, and then in a second non-anonymized round, based on the scores and the comments of the peer-reviewers, they are ranked relative to one another by the members of the Review Board, which may consist of the JOI Brazil co-chairs and other J-PAL affiliates chosen by the J-PAL Executive Committee, and policy reviewers. During the Review Board decision call, applications can be: (1) approved, (2) conditionally approved (with minor revisions or clarifications), (3) requested to be revised and resubmitted during this or a subsequent round, and (4) not approved.
2. Co-chair recusal policy: Whenever any one of the chairs of a single initiative applies for funding in any round, they should recuse themselves from all funding decisions. In case a co-chair is a supervisor of a graduate student who had a proposal submitted to their initiative in a round, the co-chair is recused from being assigned as a reviewer of that proposal and from commenting on that proposal during the review process¹².

¹² In addition, no spouse, partner, or immediate family member (parent, child, or sibling) of any individual named on a proposal application may serve as a peer or board reviewer in the round in which the applicant's proposal is being reviewed.

3. Off-Cycle Proposals: The JOI Brazil co-chairs review the proposals and can decide to award funding, reject the proposal for funding, or include the proposal in the regular review process for the next RFP round.

GRANT CONDITIONS

Full RCT studies and Pilot grants

If your proposal is selected for funding, the terms of the award will be as follows:

- Peer-review proposals: Grantees may be requested to peer-review proposals in future JOI Brazil rounds.
- Participate in JOI Brazil activities: Grantees may be requested to participate in one of the JOI Brazil's activities at a mutually agreed time and place. Activities may include evidence workshops, matchmaking conferences, or presentations to one of the JOI Brazil's donors.
- Credit JOI Brazil: Any presentations and publications, including academic papers, policy briefs, press releases, blogs, and organizational newsletters that emerge from this project should credit the J-PAL Jobs and Opportunity Initiative with the following text and link: "This research is funded by the J-PAL LAC [Jobs and Opportunity Initiative Brazil](#)."
- Project registration: Before starting fieldwork, researchers must register their randomized evaluation/RCT with the AEA RCT Registry (<http://www.socialscienceregistry.org>). Registration includes 18 required fields (such as your name and a small subset of your IRB requirements), and the entire process should take less than 20 minutes if all documentation is in order. There is also the opportunity to include more information, including power calculations and an optional pre-analysis plan. Grantees are required to submit proof of AEA registration with their three-month Start-up Report. Please note that registration is only required for RCTs (not pilots). For questions and support with the registry, please contact the help desk (support@socialscienceregistry.org).
- Annual progress reporting: Grantees will be requested to provide a brief start-up report, semi-annual financial updates; annual progress reports; a final financial report within 60 days of completion of the award period; and a final project report with preliminary results within four months of completion of the award period (for pilots, the final project report is due within two months of the completion of the award period).
- Collecting and reporting Gender-disaggregated data: J-PAL, through its Gender sector, is making an effort to study heterogeneity in program impacts by beneficiary/participant gender more systematically. Please note that the following request only applies to J-PAL internal reports and does not extend to the academic paper or online J-PAL summary.

Many studies funded by J-PAL initiatives already collect study participants' gender. In such cases, and when outcome data are individual-specific, we request that grantees conduct

heterogeneity analyses by beneficiary gender for the study's main results for internal reporting to J-PAL (to be shared in the final grant report). A single study might be underpowered to detect heterogeneous treatment effects, or null results might not seem interesting in one study, but these findings may be meaningful when included in an analysis across studies. J-PAL will use the reported results for (a) determining potential pooled statistical analyses to conduct across studies and (b) generating gender-related policy lessons in Labor Markets. Our reporting template will include a question on this, which researchers are encouraged to fill in when applicable. We recognize that there will be cases where this reporting is not applicable for various reasons. In these cases, the PIs can just provide a brief explanation to be shared with the Gender sector.

- Since J-PAL is part of MIT, everyone who is associated with J-PAL, including researchers worldwide receiving grants from J-PAL initiatives, are considered part of the broader MIT community. Therefore, it is our hope and expectation that they will adhere to MIT's community-wide policies that are available [here](#). Please review the Code of Conduct document as it relates to J-PAL and affiliates [here](#). In parallel, all proposals governed under this Call of Proposals must comply with [Insper's Code of Ethics in Research](#).
- Collecting and reporting program cost data (Full RCT studies only): Policymakers are interested in program costs, as it is one of the key factors in their decision to support a program. Cost data also allows for [cost effectiveness analysis \(CEA\)](#) which J-PAL may conduct (with permission from the researchers), even if such analysis is not part of an academic paper. In order to facilitate cost collection, JOI Brazil awards include BRL 5,000 to defray expenses associated with collecting cost data. JOI Brazil will provide a costing worksheet for grantees to update annually. If grantees are unable to collect detailed cost data, grantees are still required to provide estimates of total program cost, average cost per beneficiary, and marginal cost to add another beneficiary.
- Data publication (Full RCT studies only): Grantees may be requested to share data collection instruments and methodologies with other grantees. Furthermore, researchers funded through this grant will be required to publish de-identified data in accordance with J-PAL's [Data and Code Availability Policy](#) and the [Brazilian General Data Protection Law - LGPD](#). J-PAL's research team can work with you to clean, label, de-identify, document and replicate datasets collected as part of a randomized trial before publishing them in the [J-PAL Dataverse](#) or another data repository of your choice. Requests for data publication services can be made by sending an email to data@povertyactionlab.org.

Development Grants

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- Peer-review proposals: Grantees may be requested to peer-review proposals in future JOI Brazil rounds.
- Participate in JOI Brazil activities: Grantees may be requested to participate in one of the JOI Brazil's activities at a mutually agreed time and place. Activities may include evidence workshops, matchmaking conferences, or presentations to one of the JOI Brazil's donors.
- Credit JOI Brazil: Any presentations and publications, including academic papers, policy briefs, press releases, blogs, and organizational newsletters that emerge from this project should credit the J-PAL Jobs and Opportunity Initiative with the following text and link: "This research is funded by the J-PAL LAC [Jobs and Opportunity Initiative Brazil](#)."
- Progress reporting: Recipients will be required to submit a brief progress report after completing travel and/or other activities.

ADMINISTRATIVE NOTES

JOI Brazil can accommodate two research funding management models (Model Executed by J-PAL LAC and Model Executed by Another Host Institution). These models are meant to work within institutional constraints to best accommodate the needs of projects from different types of organizations involved in the research, researcher host institutions, funding amounts, among other concerns.

The funds are earmarked directly for research and must be managed by an entity indicated by the applicant and approved by JOI Brazil and Insper. For this reason, we reserve the right to reject proposals that indicate institutions not accredited by the initiative according to its criteria and standards.

In compliance with the prevailing legislation and the internal rules of each host institution, applicants should familiarize themselves with the available financial management models as described below, and indicate their preferred option in the proposal¹³.

- Model Executed by J-PAL LAC: According to Insper's policies and instructions for disbursement and accountability, J-PAL LAC, in partnership with Insper, manages the financial resources and research activities of the project.

¹³ Please note that Development Grants should necessarily adhere to the Model Executed by J-PAL LAC.

- Model Executed by Another Host Institution: The host institution of the research, directly or through an accredited or authorized Research Support Foundation, will receive the award funds from Insper and will execute the project.

When following the Model Executed by J-PAL LAC, you must coordinate the budget details with the J-PAL LAC office for review and approval by emailing the Finance and Operations' Manager José Domingo Navarro at jnavarro@povertyactionlab.org. The budget must be sent for J-PAL LAC's review no later than 72 hours before the application submission deadline. In the current cycle, budgets submitted after **7 PM on Monday, October 3** may not be reviewed for approval by J-PAL LAC.

We will work with you to make sure your award is made in a way that suits you, your project, your affiliated institution(s), and your needs for administrative support.

For more information on budget, requirements, and process, please contact jo-br-rfp@povertyactionlab.org. Further information can be provided to researchers after the grant has been awarded.

RELATED INITIATIVES

Please do not submit the same proposal to more than one J-PAL or IPA initiative at the same time. Before applying to JOI Brazil, consider whether your proposal may be better suited for another initiative. If you are uncertain about which initiative to choose, please contact jo-br-rfp@povertyactionlab.org.

Detailed Research Agenda

ACKNOWLEDGEMENTS

The Jobs and Opportunity Initiative Brazil (JOI Brazil) is an initiative of J-PAL Latin America and the Caribbean (J-PAL LAC) launched in 2021. The initiative has the partnership of the [Arymax Foundation](#), [B3 Social](#), [Tide Setubal Foundation](#), [Potencia Ventures](#), the [Inter-American Development Bank](#) (IDB) and [Insper](#).

The JOI Brazil team would like to thank its partners for their participation in strengthening and fostering rigorous research on the labor market in Brazil.

Some portions of the following section draw on a related report produced for the Inter-American Development Bank (IDB) by the same team.

The JOI Brazil team is also grateful to those who shared their time and knowledge in contributing to refining the initiative's Detailed Research Agenda.

SUMMARY

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LABOR SUPPLY AND MATCHING

SKILLS TRAINING

Job seekers often lack the skills required to perform jobs, so training should in theory help them to become better candidates. Training programs are a common feature of government and NGO programming, especially for youth. Nevertheless, these interventions tend to be very expensive,¹⁴ and some have had disappointing results when rigorously evaluated. For instance, see evidence from [Brazil](#), [Peru](#), [Colombia](#), [Dominican Republic](#), [Argentina](#), [Uganda](#), and [Ghana](#).

A great challenge to draw conclusive statements about the success of training programs is that they vary substantially in terms of how they are implemented and who they target. In addition, evaluations largely test interventions as a whole, not individual components. Understanding which components of a training program are most effective could be particularly insightful to help design more cost-effective programs. Implementation features that would be helpful to test further within training programs include: (i) matching trainees to programs that are the best fit for them (for example, by helping young people navigate educational tracks that lead to better labor market options), (ii) addressing participants costs of attending to reduce dropout rates, (iii) recruiting/screening for high-quality trainers, (iv) aligning payment incentives for training providers, (v) involving the private sector in curriculum development and for on-the-job training opportunities, (vi) emphasizing soft skills training, and (vii) communicating the quality of training.

JOB SEARCH

Job Search Assistance

While jobseekers face many barriers to transition into the workforce, some of the most commonly cited issues are that (i) they do not know where or how to search for jobs, (ii) they underestimate the benefits of job search and therefore end up underinvesting in it, and (iii) they struggle to communicate their qualifications to employers. These barriers are often magnified for youth, who lack both experience searching for jobs and the work experience that could help employers gauge their abilities.

Many evaluations from high-income countries have confirmed that job search assistance has been largely successful at improving employment outcomes for jobseekers. There is less evidence from low-and middle-income countries, and studies have targeted interventions taking place in a few [African and Asian countries](#).

¹⁴ <http://documents.worldbank.org/curated/en/256001490191438119/pdf/WPS8011.pdf>

1. **Reducing search costs:** Especially in low- and middle-income contexts where information about job opportunities can be costly to acquire, reducing barriers to this information can have large effects on job outcomes. Examples of successful interventions include providing transportation subsidies to job seekers so they can commute to the city center to look for work, providing vouchers to help people attend job fairs, and providing information in rural areas about jobs available in the city.
2. **Motivation, communication, and other soft skills can play an important role:** Motivating jobseekers to invest more in their search and helping them stretch themselves to look in places they might not have considered yet can improve their employment outcomes. Some examples of programs that touch on this topic motivate jobseekers to make a detailed job search plan, or provide them with an online platform that orients them to sectors or types of jobs that they might not have considered before. Another promising approach consists in helping jobseekers to better recognize their skills and communicate them to potential employers. Examples of programs in this area include [CV and interview workshops](#), encouraging jobseekers to include [reference letters in their job applications](#), or providing jobseekers with [certificates that rate their soft skills](#).

Despite promising results from job search support programs in low- and middle-income countries, [these programs have been less effective when other important barriers exist in the labor market](#). These barriers could include a lack of job openings, high relocation costs, or mismatched expectations between jobseekers and employers. The literature would benefit from further research on these topics. Moreover, while most of the studies showed positive impacts on outcomes such as interview offers, job offers, employment, and quality employment, not all measured or showed sustained benefits to earnings, total employment, or well-being. It would also be beneficial for future research to explore which programs lead to improvements in a broader set of economic outcomes. Finally, [in the few cases where it was measured, some of the gains from job search assistance programs came at the expense of jobseekers who did not receive the programs](#), implying that job search assistance may have merely reshuffled who got the limited number of available jobs. It would be beneficial for future research to rigorously measure the displacement effects of job search programs and explore ways to mitigate these effects.

Labor Intermediation Services in the Latin America and the Caribbean

Evidence on the effects of job search policies in Latin America and the Caribbean (LAC) is remarkably scarce, despite the existence of a [large network of intermediation public policies in the region](#). Descriptive analysis suggests that these programs have performed poorly in recent years. In particular, they have intermediated a tiny number of job vacancies, and the resulting matchings have high separation rates.

Moreover, public intermediation services in the LAC region got the reputation for only having the least skilled jobs registered in their database. Therefore, disadvantaged workers rarely get information and

access to better-paying jobs through those services. In this vein, observational studies in [Brazil](#) and [Colombia](#) have shown that jobseekers who found employment through public intermediation services received lower wages than similar individuals who found their jobs through other means.

Intermediation reforms and revisions have been introduced in some LAC countries to face those challenges. For instance, the Brazilian government started expanding the role of private and non-profit providers within the national intermediation policy. Moreover, there is a clear trend in the country to use [new technologies](#) to improve the performance of the national labor intermediation system, including machine learning algorithms to improve the matching process. Future research could exploit ongoing policy reforms in the region to test which intervention designs are most effective at enhancing labor intermediation services.

DISCRIMINATION IN HIRING

There is strong evidence of [hiring discrimination against minority and underrepresented groups in many countries](#). However, most correspondence experiments of discrimination, that produced such evidence, come from high-income countries, and it would be helpful to better understand the extent of hiring discrimination in low- and middle-income countries.

Recent studies have used randomization to explore ways to combat hiring discrimination. In these limited studies to date, removing identifying information on job applications had perverse effects on minorities if [the impacted firms were the ones already treating minority applicants favorably](#), or [if firms discriminated on other characteristics after some information was removed](#). Strategies to test in the future include: (i) socio-cognitive debiasing, (ii) technological de-biasing, (iii) increasing the prevalence of minority leaders as role models, (iv) intergroup contact, and (vi) legal solutions.

OPEN RESEARCH QUESTIONS

1. Under what conditions do skills training programs improve employment outcomes? What is the optimal role of the private sector in skills training programs?
2. Which design features of skills training programs have the most impact?
3. What are the most effective ways to reduce the barriers (information, financial, or otherwise) that people face to access training programs?
4. What type of skills (soft skills vs technical skills) are most effective at improving employment outcomes?
5. Which programs best encourage increased and broader job search efforts among jobseekers? Does this increase net employment?

6. How can policymakers leverage both online platforms and low technology strategies to reduce search barriers for jobseekers and reduce hiring costs for firms?
7. What are the most effective ways to align people's expectations with the realities of the labor market? How can technology platforms serve this purpose?
8. Which policies are most effective at reducing hiring discrimination?

JOB CREATION

LABOR MARKET REGULATIONS AND JOB CREATION

Beyond cash grants, there are other exciting innovations that have had some impact on firm growth. For example, solutions could include [increasing small business's market access](#) by increasing their access to export markets or [addressing regulatory barriers to firm growth](#) by helping firms to better understand the labor regulations in their country. There is limited research to date on how to help firms grow and hire more workers, and more research in this space would be a valuable contribution.

SKILLS TRAINING TO SUPPORT SMALL AND MICROENTREPRENEURS

Small and microentrepreneurs face an ever-evolving set of challenges, yet traditional business training programs tend to teach a broad set of skills that small-scale firm owners may not find or perceive to be useful and applicable to their business. While trainings that teach basic concepts like record-keeping and costing in classroom settings are easier to deliver to large numbers of entrepreneurs, this format may limit how adaptive the content is to specific needs of individual businesses and the performance of these training programs has been mixed.

In addition, specific groups of entrepreneurs—such as women and youth—face further constraints that can limit the effectiveness of traditional training. Despite the fact that women run the [majority of microenterprises](#) in low-and middle-income countries, there is a significant gender gap in business performance. Women face unique and numerous challenges running successful businesses, from lack of mobility and autonomy, safety concerns, and often-low levels of education. There is limited evidence on how the impacts of alternative business training models vary for women, and the studies that do examine gender-disaggregated impact find mixed results.

How can we go beyond the traditional business training model to better support small and microentrepreneurs? A growing body of evidence suggests that [alternative training programs](#) that are delivered one-on-one, tailored to participants' needs, teach easy-to-apply skills, or go beyond

traditional curricula to foster entrepreneurial mindsets may be more effective. Several alternatives to the traditional business training model show promise for improving small firm outcomes:

1. **Personal initiative training:** This training aims for attitudinal change, particularly the fostering of entrepreneurial mindsets and aspirations. A [growing body of research](#) is finding promising results for psychological training: In [Togo](#) and [Jamaica](#), for example, microentrepreneurs invited to entrepreneurial mindset training improved their profits after participating. In addition to raising profits, in Togo entrepreneurs who were offered the training also employed more people and invested more in their business. Variation in the longevity of impact on profits, however, raises questions about how best such psychological trainings should be implemented and whether they should be combined with other forms of training. While evidence on the effectiveness of these programs for women participants is [also mixed](#), this line of research into psychological training may shed light on the relationship between entrepreneurial mindsets and the gender profit gap.
2. **Rule-of-thumb training:** Heuristics or rule-of-thumb training aims to simplify standard business training into a set of routines that can be more easily understood. Rather than trying to teach accounting, for example, such training focuses on basic financial principles like keeping household and business money in two separate drawers. Such an approach holds appeal for training the smallest businesses and least-educated business owners. In the [Dominican Republic](#), researchers found that a rule-of-thumb finances training, in which nearly all participants were women, was indeed more effective at driving business best practices use among lower-educated microentrepreneurs than a standard accounting training. Similarly, in [Ecuador](#), a rule-of-thumb finances training increased daily profits and sales, particularly among women microentrepreneurs and people experiencing more cognitive load (i.e., more stress like children, house duties, etc. to keep in mind). While evidence on the long-lasting effects of heuristics training is limited, this simplified training model shows promise for supporting more vulnerable microentrepreneurs.
3. **Peer interactions and mentorship:** Firms may also be able to improve their business and management practices through learning from each other. Matching firms with peers and mentors to share better business and management practices that are also locally relevant seems to offer [promising results](#) when firms get matched with similar, but slightly better peers who are not close competitors. In [China](#), for example, researchers randomly assigned firm owners into groups of 10, which met for monthly chats for 10 months. Participant firms improved their management practices, and those that were randomized into groups with higher-quality peers showed larger increases in sales, profits, and management practices than those with weaker peers. The value of high-quality peers is further demonstrated by a study from [India](#), in which high-growth tech startups were randomized into pairs for peer advice. Firms advised by more formally managed firms grew

28 percent larger and were 10 percentage points less likely to fail two years after the intervention than those advised by peers with an informal approach.

In addition to increasing learning, interactions with peers can have positive psychological effects that may lead to improved business outcomes. In [India](#), researchers offered a two-day business training program to female microentrepreneurs and invited half of the participants to bring a friend with them. They found that, in addition to reporting significantly increased business activity, women who brought a friend set higher goals for their business and formed stronger networks with other female entrepreneurs. In contexts where women experience social restrictions, programs that increase interactions with other business owners and seek to raise aspirations may contribute to [closing the gender profit gap](#).

Mentorship may be another pathway through which firm owners can learn from each other, but evidence to date on traditional mentorship programs for female mentees finds [limited impact](#) on business outcomes.

4. **Alternative training for youth:** There is some evidence from vocational training (e.g. [Dominican Republic](#)) and adolescent empowerment (e.g. [Zambia](#)) literature that points to the positive impacts that teaching soft skills can have on youth specifically. However, evidence is lacking on the impact of soft skills training in the context of business training for youth. Initial studies such as one comparing hard skills to soft skills for entrepreneurial success in [Uganda](#) are ongoing, but more research would be valuable to understand how alternative forms of business training can support youth.

IDENTIFYING AND SUPPORTING HIGH-GROWTH-POTENTIAL ENTREPRENEURS

Observational studies have shown that in some contexts, high-growth-potential enterprises (often known as “gazelle firms”) are a key driver of employment growth. In [Ghana](#), for example, researchers found that 15 of the largest 50 leading domestic firms began as small-scale startups. And in [Sri Lanka](#), researchers show that 12 percent of firms with more than five employees had no employees during their first year of operation, illustrating the potential value of high-growth firms to job creation. But how do we best identify these high-potential entrepreneurs among the general entrepreneurial population and make sure that they have the support they need to start or grow their business to its full potential?

1. **Identifying high-growth-potential entrepreneurs:** Two studies using expert analysis by a panel of judges to predict high-growth entrepreneurs show mixed results, suggesting that identification is indeed challenging. An alternative to expert judgment is to use machine learning to build prediction models; however, there is little evidence to date suggesting that such models can outperform human experts.

One potentially promising approach is to leverage non-traditional sources of information to identify high-impact entrepreneurs. In India, for instance, researchers leveraged

community members' knowledge about one another as a cost-effective way of reducing uncertainty about the potential of entrepreneurs. Using a ranking system, they found that communities were able to successfully identify the best entrepreneurs, with those selected going on to earn three times higher monthly profits compared to the average entrepreneur. By providing targeted support to these high-potential individuals, such as in the form of business training and additional financing, this could help entrepreneurs overcome their constraints and allow them to grow rapidly beyond a small scale.

2. **Supporting high-growth-potential entrepreneurs:** Entrepreneurs starting high-growth-potential firms are often highly educated and highly motivated and may be less likely to need basic business skills or entrepreneurial mindset training. Instead, they may benefit more from more specialized assistance.

Grants and training targeted at high-potential entrepreneurs through business plan competitions and business accelerators have shown promising results on business outcomes and employment. Trough one randomized evaluation in Nigeria and two quasi-experimental studies in Central America and East Africa, business competitions winners offered targeted support in the form of grants and business plan training were found to be more likely to start or expand a business, more likely to create new jobs, and in some cases had large impacts on profits and sales. The World Bank is now supporting similar programs in Kenya and Senegal. In the Western Balkans, another randomized evaluation finds that small tech start-ups who received investment-readiness coaching were more likely to get external financing than those that did not, and this was particularly true of smaller firms who were otherwise less likely to receive outside investments.

However, the positive impacts of such programs may often be limited to the highest-potential entrepreneurs, emphasizing the importance of the selection process. In Chile, one quasi-experimental study assesses the impact of participation in an accelerator program that provides cash grants and office space, finding that only the highest-quality ventures selected to participate saw improved firm outcomes by the end. In another quasi-experimental study, researchers evaluated a Colombian business accelerator that provides exclusively non-monetary (such as training, advice, and visibility) support to participants. While they found that providing non-monetary services significantly increased average revenue, the impact was entirely driven by firms identified as having the highest growth potential at the application stage. Together, these studies illustrate the importance of correctly identifying high-growth-potential entrepreneurs, and the promise of grants combined with—or possibly separate from—more sophisticated business training.

Evidence is still limited on the effectiveness of business plan competitions and accelerators for women. Women entrepreneurs make up less than one-fifth of the study samples in the Nigeria and Western Balkans evaluations, making it difficult to detect impact. Further research would benefit from incorporating a gender focus to identify additional barriers that female entrepreneurs face to participating in and benefiting from these programs.

Interventions that move beyond the boundary of the entrepreneur and link firms to marketplaces may fill crucial gaps not met by training or grants. As small firms grow larger, it becomes increasingly difficult for an entrepreneur to successfully manage all aspects of the business, regardless of their training. Connecting business owners with experts to whom they can delegate specialized tasks such as marketing and finance can thus be important to helping firms grow. This is examined in Nigeria, where researchers find that assisting entrepreneurs in hiring a subsidized specialist through an online marketplace for business services led to improved marketing practices, more innovation, and higher profits over two years. One-third of firms chose to retain their specialists even after the subsidy ended, indicating that they found the services highly useful.

Finally, promising evidence is emerging around interventions that aim to alleviate demand constraints through connecting firms to large or international buyers. In Liberia, for example, firms that participated in a week-long training for how to market to procurement buyers won three times as many contracts and appear to have higher revenue, although this effect was limited to firms with internet access. And in Egypt, offering small rug producers the opportunity to export to higher-income markets led to increased profits as firms improved their production techniques and efficiency. The results of these two studies suggest that interventions that target barriers to market participation are a promising path for supporting high-growth-potential entrepreneurs.

OPEN RESEARCH QUESTIONS

1. How do labor market regulations impact job creation?
2. How can programs better address credit constraints challenges from Small and Medium Enterprises (SMEs)? How can SMEs have faster access to credit information and opportunities?
3. Why do firms not choose to use consulting and training services themselves?
4. Under what circumstances does firm growth lead to job creation?
5. What are the key constraints that women and youth face to running successful businesses, and what forms of alternative business training are best suited to helping participants overcome them?
6. How does combining personal initiative training with other training interventions impact the effectiveness of either? When is combining appropriate, and when is it not?
7. How effective is rule-of-thumb training at instilling skills outside of business finances?

8. What are the important determinants of success of a high-growth-potential entrepreneur, and is human judgment best for making these predictions?
9. What are effective targeting mechanisms to identify high-potential entrepreneurs?
10. How can female participation in business plan competitions and accelerators be increased?
11. When are cash grants, non-monetary services, or a combination more appropriate for high-growth-potential entrepreneurs?
12. What is the role of demand constraints in limiting the growth of high-potential entrepreneurs, and how can we alleviate those constraints?
13. What is the role of constraints due to a lack of technical skills such as finance and marketing, and are these constraints better alleviated through training, insourcing, or outsourcing?

FUTURE OF JOBS

There is currently much concern and discussion around how automation and globalization might transform labor markets and threaten livelihoods. While there is [a growing body of rigorous research addressing the future of jobs](#), few of these studies come from low- and middle-income countries.

AUTOMATION AND ROUTINIZATION

Studies assessing the implications of automation to the [US](#) labor market have found that the expansion of industrial robots was associated with reduced employment opportunities and wages. Moreover, such disruptive effects are unequal and may lead to labor market polarization.

Recent [IDB reports](#) show that 62 to 75 percent of LAC workers are in occupations with a high risk of being replaced by robots. In [Brazil](#), estimates have a similar magnitude, with substantial heterogeneity across [economic sectors](#). Theoretically, the [consequences of automation](#) and [digital adoption](#) might not be the same in the LAC as for high-income countries. Still, some evidence is found for incipient polarization in [Mexico and Brazil](#).

Also, the consequences of automation in high-income economies might be felt in emerging markets too. Data from labor markets in [Colombia](#) suggests that robotization in the US is associated with lower employment and earnings for Colombian workers in local sectors that are highly automated in the US. Similarly, a recent study in [Brazil](#) shows that foreign automation is associated with an employment shift

from higher value-added manufacturing industries to lower value-added raw-material extraction activities.

Another recent quasi-experimental study indicates that robot adoption in [Brazil](#) is associated with productivity growth in the formal sector five years later. Results suggest that aggregate employment remains unchanged, but with workers migrating from the production to support services firms in the short run. Organizational capital, in the form of workers' expertise, immediately depreciates and slowly recovers within five years, possibly leading to later productivity gains.

The regional and large-scale nature of these technological changes makes experimental evidence on the subject rare. A promising path for future studies would be to explore and confirm the effects of exposure to automation on worker-firm interactions, their dynamics on organizational capital, and how these consequences relate to local labor markets. Field studies can investigate how heterogeneous these effects can be according to the characteristics of firms and workers exposed to different levels of automation incentives. In addition, experimental evidence is still needed on how skills, occupations, and workers are replaced across firms and locations. Finally, future research would benefit from assessing how workers, employers, and government can prepare for and perhaps mitigate technology's disruptive effects while maximizing its potential benefits.

ACTIVE LABOR MARKET POLICIES AND WORKER-FIRM INTERACTIONS

Concurrent with the shift in skills demanded by the jobs of the future, workers will need training in these new competencies to compete or benefit from technological change. This targeted skills-building process will encompass new types of vocational and job-specific training, but also the post-secondary education content that fuels skilled jobs. In addition, new technologies have been shown to impact the way firms and workers relate, both in the process of looking for jobs and hiring, as well as during the execution of tasks.

1. **Learning the skills of the future:** Training initiatives may focus on [“future-proof” technical evolving and socioemotional skills](#). Those efforts are akin to traditional vocational training, adapted for tech skills such as coding and operating automation devices. The first and obvious concern is how to foster these technical skills among inexperienced and young workers. One recent evaluation in [Kenya](#) suggests a promising approach. In particular, training youth from low-resource communities with digital skills and providing them a job referral to digital work increased earnings by 37 percent and reduced unemployment rates by 10 percentage points. In the scope of technology training, the experiences of [“coding bootcamps”](#) point that these programs, even though small-scaled, show promising results for youth employment in low-entry level tech jobs, with particular implications for women and other workers facing barriers in labor markets.

Investing in the formation of new skills is a conventional policy response to accommodate

growing advances in technology that can “leave some workers behind.” Therefore, understanding what can be achieved through such investments, which training models are most effective, and what consequences these initiatives have in helping workers boost their long-term employment and income prospects is essential for future research.

2. **New types of interactions in the labor market:** A growing literature seeks to understand how new technologies can positively affect labor market outcomes. New mechanisms and innovative ways of incorporating technology into ALMPs can positively affect workers. For instance, there is evidence that providing readily available information about labor markets and tailored advice [can improve job search efforts](#), broadening the set of jobs that seekers consider and increasing their job interviews. Another promising approach involves integrating new mobile technologies into the labor intermediation process. In particular, a recent experimental study in [Peru](#) shows that integrating mobile technology in labor intermediation programs positively increases employment outcomes. Results from an experimental intervention in [South Africa](#) also highlight the benefits of integrating new technologies into traditional ALMPs. In particular, training jobseekers to join and use the LinkedIn platform increased employment rates by 10 percent.

The spread of Artificial Intelligence (AI) can also reshape worker-firm interactions. Recent evidence on the performance of new recruiting technologies in the field highlights the potential of these innovations to augment traditional human resource strategies. Job testing technology can improve hiring quality by reducing the influence of recruiters’ biases or mistakes. Moreover, AI-based recommendations in online labor platforms can substantially increase hiring rates. Additional research is still needed to fully understand the potential of these technological improvements and how to prevent AI from fueling inequality or damaging competition and productivity in labor markets, especially in low-and middle-income local labor markets.

THE GIG ECONOMY

New technologies also foster alternative work arrangements associated with the so-called “gig economy.” One of the most recent efforts to estimate the size of this sector finds that about 10 percent of [US](#) workers were participating in an alternative work arrangement in 2017. In [Brazil](#), the number of workers in non-traditional jobs has seen exponential growth in recent years. Most of this growth is associated with the fast rise of transportation apps. Estimates suggest up to 1.4 million Brazilian “gig” workers in the passenger and freight transport sector, corresponding to 31 percent of the whole sector.

The growth of new types of work arrangements highlights the need to test and implement alternative models of worker representation. The motivations for gig work are still unclear. Most [workers are not willing to pay for scheduling flexibility](#) in the US, but a tail of workers with high valuations allows for sizable compensating differentials. Moreover, gig workers generally have little individual bargaining

power to negotiate contracts with intermediaries and end customers. A report for [the US economy](#) discusses that these workers' relationships with intermediaries or customers are not dependent, deep, extensive, or long-lasting enough for intermediaries or clients to assume responsibility for the worker's benefits or protections. This relationship implies concerns about social protection and future healthy retirement coverage.

New work arrangements might also present deeper concerns about market power. Despite the seemingly low switching and search costs of on-demand online labor markets, recent evidence from [the Amazon Mechanical Turk](#) platform shows substantial monopsony power. Furthermore, labor market barriers faced by women and vulnerable groups may still be present in the gig economy. In particular, an observational study using data from a [large Spanish-language online labor platform](#) suggests that information frictions long observed in traditional labor markets are exacerbated in digital labor, resulting in worse outcomes for foreign job-seekers. Another observational study examined labor supply choices and earnings for more than [1 million Uber drivers in the US](#) and documented a 7 percent gender pay gap favoring men.

Future research around the role of the gig economy in low- and middle-income countries would be a valuable contribution to the existing literature. In particular, it would be helpful to better understand the multitude of employment barriers that workers face in the gig and online platforms and how to best alleviate those barriers. Moreover, an important focus for research in this area centers on the need to test social safety nets and work regulations that are better adapted to the employment arrangements that characterize the gig economy.

OPEN RESEARCH QUESTIONS

1. How can economies best prepare their workers for the changing demands of the labor market? How can economies harness technological advances to improve job opportunities for both high-skill and lower-skill workers? For example, how can programs best connect marginalized youth to internet-based employment?
2. How do unstable or irregular work arrangements and “gigs” influence productivity, inclusiveness, and career prospects of youth, women, or other subsets of the population?
3. How can economies build in protections and benefits for workers who do not have access to traditional social protections?
4. How can technology contribute to job creation and firm growth, improve matching, reduce search frictions, and influence job quality?
5. Which policies are most effective to promote female labor force participation also in non-standard labor arrangements?

SOCIAL ISSUES IN LABOR MARKETS

INFORMALITY

[Informality is a defining feature of low- and middle-income economies worldwide](#), which is likely to have profound economic implications. A large informal sector hinders government fiscal capacity by reducing its tax base. It may also lead to misallocation of resources as formal firms are affected by "unfair competition" from less efficient informal firms. Moreover, informality implies that workers are excluded from a number of benefits, including health coverage and unemployment compensation.

Recently, [applied researchers have tested different strategies to induce firm formalization](#), including (a) reduction of entry costs, by offering registration assistance and eliminating registration costs; (b) reduction of ongoing costs, such as tax simplification; (c) increase in benefits for formal firms, such as access to business training, banking assistance, and monetary rewards; and (d) increase in the costs of informality, which could be done by increasing enforcement of the existing laws and regulations.

1. **Reducing entry costs:** Experimental evidence on the effects of reducing formal firms' entry costs is mixed. Research in [Sri Lanka](#) and [Brazil](#) showed that providing information about business registration and eliminating registration costs did not affect registration rates. However, in [Benin](#), an intervention that provided assistance in registering by qualified staff positively affected firm formalization. The findings from quasi-experimental research on large-scale programs are also mixed. Interventions in [Mexico](#) and [Brazil](#) to simplify and reduce the monetary costs of registering a firm have found minimal effects on registration. However, [more recent research](#), studying the same Brazilian program (*Microempreendedor Individual* – MEI), but using newer administrative data, found that the intervention increased formality rates by 88 percent.
2. **Reducing the tax burden:** Besides reducing businesses registration costs, MEI also reduced the costs of remaining formal by reducing monthly taxes. However, this last program component was only *de facto* implemented when firms' entry costs were already zero. Previous studies in Brazil have exploited this empirical setting to additionally assess the effects of reducing the tax burden on firm formalization. [One](#) found a small impact of this program component on business registration: 4 percent. The [other](#) suggests that after the program reduced registration costs, further reducing monthly taxes did not cause more microentrepreneurs to register. Similarly, the evaluation of another large-scale Brazilian program designed to reduce small and medium enterprises' tax burden (*Simples Nacional*) [has produced no effects on formalization rates](#).
3. **Increasing formalization benefits:** The previously discussed experimental papers from [Sri Lanka](#) and [Benin](#) also study the effects of increasing formalization benefits and suggest this as a promising strategy. The first shows that offering firms substantial compensation for formalization (the equivalent of two months' profits for the median firm) increases

- registrations by half. The second shows that providing supplementary services to formal firms (personalized visits, business training, banking assistance, and tax mediation services) increased the number of registered microenterprises by up to 7 times.
4. **Increasing the costs of informality:** A far less emphasized formalization policy increases the enforcement of existing laws and regulations. There is only [one experimental study](#) focusing on this aspect. The authors show that better enforcement of existing regulations through additional visits by municipal inspectors increased the likelihood of tax registration in Minas Gerais, Brazil.

Taken together, the results in the literature are somewhat mixed on the effects of formalization policies on registration rates. In the studies that measured it in [Sri Lanka](#) and [Benin](#), formalized firms did not appear to have better firm performance, such as sales, profits, and number of employees. However, there may well be benefits from these interventions at the extensive margin if high-ability entrepreneurs not currently operating a business are induced to enter. Measuring such impact remains a key area for future research.

Another promising area requiring further research is targeting. The results from the interventions delivered in [Benin](#) were twice as large among informal firms that had similar characteristics to formal business. Contrary, the most recent evaluation of MEI in [Brazil](#) has found that the program had stronger effects on the formalization rates of marginalized microentrepreneurs. Policies to encourage formalization may thus be more effective with better targeting. The effect on performance was still muted in both studies, though. Future research could benefit from testing strategies to optimally target businesses that are more likely to benefit from formalization.

Regarding informal labor supply, a [wide range of studies](#) indicate that social welfare policies affect formalization decisions. We will discuss this next.

SOCIAL PROTECTION

There is an increasing global focus on social protection policies. For example, [the number of low-and middle-income countries with social safety nets doubled in the last two decades from 72 to 149 countries. During the same period, average spending on social programs as a percentage of GDP has also increased remarkably, especially among Latin American countries](#), known for implementing large-scale social programs.

While traditional welfare programs like [cash transfers](#) have been shown to reduce poverty and improve the lives of beneficiaries on several important dimensions in many contexts, their potential impacts on the labor market are controversial. The conventional wisdom is that

[beneficiaries' work decisions](#), particularly when they are required not to be formally employed in order to be eligible, imposing high-efficiency costs to the economy.

Cash Transfer Programs

Research analyzing data from seven randomized controlled trials of government-run cash transfer programs found no systematic evidence that cash transfer programs discourage work. This analysis includes findings from evaluations of both unconditional cash transfer (UCT) programs and conditional cash transfer (CCT) programs where payment is given under conditions related to the use of health and educational services. More recently, experimental research in [Italy](#) studied the effects of a CCT, where payment was linked to compliance with attending mentoring courses. Beneficiaries were 14 percent more likely to work one year after admission than individuals assigned to a UCT program or a pure control group.

Despite the evidence of null or positive effects in labor supply, there is evidence from [Argentina](#), [Brazil](#), and [Uruguay](#) that cash transfers might induce reallocation of beneficiaries from formal- to informal-sector work. At the same time, a [recent study](#) assessing the Brazilian CCT program exploited a reform that increased the total number of beneficiaries heterogeneously across the country to show that the program expansion increased the size of the local formal labor market, despite distorting beneficiaries' formal labor supply decisions. These results suggest that cash transfer programs may stimulate labor markets through increases in labor demand due to multiplier effects in the local economy. Future research could also study whether cash transfer programs can spur informal markets, thus providing evidence on the overall aggregate impacts of these programs on the labor market. Future research would also benefit from testing how different program designs can affect the incentives for informality in contexts with a large informal economy, like the LAC.

Unemployment Insurance

Unemployment insurance (UI) programs are other potential determinants of formal labor supply. Using quasi-experimental variation in potential UI duration in [Brazil](#), one study found that UI reduced incentives to return to a formal job. Nevertheless, the efficiency cost is lower than in the US and is lower in local labor markets with higher informality, suggesting that efficiency concerns may actually become more relevant as an economy formalizes. [Another recent study](#) using the same research design replicated these results. Additionally, it studied the employment effects of a lump-sum job displacement policy, which, compared to UI, is usually thought to be less disruptive to formal labor supply, especially in a context with high informality. However, the author found that the lump-sum policy was more detrimental to total earnings over the medium term, and the impact on employment was similar to the UI's effect. Future research would benefit from designing and testing other means of consumption smoothing for the unemployed that could be less costly in low- and middle-income regions. For example, it would be valuable to know whether conditioning UI payments to compliance with attending job search or job training courses would affect the program's efficiency costs.

Workfare Programs

Workfare programs offer temporary public employment for their beneficiaries. Since it is usually not means-tested, it might have lower incentives for distorting formal labor supply. In addition, working can help its participants acquire new skills and experiences that are valued in the labor market. However, public jobs programs are usually costly, thus raising concerns about their cost-effectiveness. Quasi-experimental research in [Peru](#), [Bolivia](#), [Argentina](#), and [Colombia](#) have found that workfare programs are associated with increased earnings and in some cases increased labor supply during program participation. However, evidence on the mid- and long-term effects of these programs is limited. [One study](#) assessed the mid-term impacts of the Peruvian intervention in a regression discontinuity design. In particular, it found no impact on total labor supply for the overall group of beneficiaries. However, program participation was associated with an increased likelihood of working in the informal rather than formal sector.

Randomized evaluations are scarce, but available evidence still suggests limited benefits of workfare programs on longer-term labor market prospects. For example, one study in [Ivory Coast](#) showed that fifteen months after participating in a workfare program, its beneficiaries had higher saving stocks but were no better in terms of employment and had only small gains in earnings. Future research would benefit from identifying mechanisms that could drive positive lasting impacts of workfare programs. For example, the [Colombian study](#) showed that skill formation might play an important role in mediating longer-term effects. This result suggests complementing workfare programs with skills training courses as a promising approach. This is a topic requiring further research.

Workfare programs are usually implemented to affect the economic infrastructure of the location where it is based. Nevertheless, evidence on their general equilibrium effects remains scarce. One piece of evidence comes from a study in [India](#), which shows that the introduction of a workfare program is associated with decreased private sector employment and increased private sector wages, suggesting a crowd-out effect. Future research would provide valuable insights by estimating the impact of workfare programs on aggregate outcomes such as consumption, prices, firm entry, and job creation.

Crime

Crime disproportionately affects low and middle-income economies, particularly [LAC countries](#). Crime represents a burden to society since it implies direct monetary costs, such as [public and private prevention](#), indirect monetary costs, such as [asset devaluation](#), and non-monetary costs, by [decreasing human capital accumulation](#), for example.

Research has shown that crime reflects on labor markets as well. For example, the increase of drug-related violence in [Mexico](#) has been estimated to decrease self-employed men's earnings and women's labor supply. Labor market conditions should also influence the likelihood that people engage in criminal activity. Using very detailed microdata of workers and judicial cases in Brazil, two recent

studies showed that job loss was associated with increased probability of criminal prosecution for both [violent, economically motivated crimes](#) and [domestic violence](#).

Extensive literature in the US has studied the effects of two classes of labor market interventions to reduce criminality: (a) summer employment programs targeted at disadvantaged youth; and (b) transitional jobs programs for people recently released from prison.

1. **Summer jobs:** [Summer employment programs in several US cities reduced youth's engagement in criminal activities](#), despite having limited effects on earnings and employment after the program year. A governmental program taking place in [New York](#) and placing youth aged 14–21 into entry-level jobs reduced incarceration and mortality rates by 10 percent and 18 percent, respectively. A similar program in [Boston](#) decreased violent crimes by 35 percent and property crimes by 29 percent. There is suggestive evidence that these results were driven by youth improving their conflict resolution skills. Further research would benefit from testing additional mechanisms behind these effects.
2. **Transitional jobs:** [Transitional job programs in the US have been shown to create useful short-term work opportunities for former inmates, which may lead to critical indirect impacts such as reducing recidivism](#). However, similar to summer youth employment programs, they have limited effects on long-term employment prospects. [One study in the US](#) assessed the impacts of two programs that provided temporary paid jobs to former prisoners and encouraged them to obtain jobs outside of the program through training and bonus payments. Both interventions significantly increased employment during the program period, but this effect vanished after participants left the program. While one program reduced recidivism, the other did not, and it is unclear why. Further research would benefit from investigating which features of transitional job programs are most effective in reducing criminal behavior and improving employment outcomes for formerly incarcerated people.

There have been few opportunities outside the US to test the effects of labor market interventions on criminal activity. One of the few experiments in this area assessed the effects of a program that provided agricultural training and capital inputs to high-risk men in postwar [Liberia](#). Men who complied with the program increased their income and shifted their portfolio of work activities away from illicit resource extraction on the intensive but not the extensive margin. Moreover, the program led to a reduction in mercenary interest. This result was driven by participants who received a small cash transfer, which was essentially conditional on not leaving to fight. Such a result may indicate that programs such as sustained cash-for-work could help deter crime.

It would be beneficial for the literature if future research rigorously investigates whether employment and job training programs targeting populations with an opportunity for crime can effectively reduce criminal activity in low- and middle-income countries.

Mental Health

[Mental health conditions account for 20 percent of all disabilities worldwide and cost more than 1 trillion USD annually.](#) Contrary to widely held preconceptions, these are not diseases of affluence. [Depression and anxiety are more prevalent among the poor and may contribute to poverty and poverty traps.](#) One potential channel behind this link is the relationship between mental health and labor market success. In [Brazil](#), decomposition analyses suggest that employment status is the main contributor to socio-economic inequalities in the prevalence of depression.

Mental Health Treatment and the Labor Market

Observational studies from [Denmark](#), [Finland](#), and the [US](#), showed that after a diagnosis of mental illness, employment rates and incomes fell by as much as half, relative to people who did not have a mental illness. Evidence from quasi-experimental research suggests that this link may be causal. In particular, studies from [Denmark](#) and the [US](#) showed that increasing access to medication to treat various mental illnesses increased earnings and in some cases reduced workplace absenteeism. Substantial experimental evidence exists that treatment of mental illnesses increases employment in low- and middle-income countries. [A metaanalysis aggregating results from 31 RCTs showed a positive average effect, especially when pharmacological and psychological treatments are combined.](#) For example, in a sample of 495 depressed adults in [India](#), individuals receiving behavioral activation therapy reported being able to work 2.3 days per month on average, relative to patients receiving standard care. However, the impact on work days faded within 12 months. More research investigating the longer-term effects of mental health treatment on labor market outcomes would be valuable. Further research would also benefit from assessing broader labor market outcomes, like administrative or standardized survey data on wages and earnings, rather than self-reported measures, commonly used in clinical trials.

Workplace Mental Health Interventions

Mental health is an increasingly important topic in the workplace with common disorders, most notably depression and anxiety, now recognized as the leading cause of sick leave and long-term work disability in several countries. However, [widespread uptake of workplace mental health interventions has not occurred, and there is a remarkably limited consensus about the effectiveness of such interventions.](#) One strand of the literature assesses the impact of reducing workplace stressors. In particular, there is some evidence on the effects of increasing employee control. [Findings from observational studies suggest that flexible working interventions are likely to have a positive effect on employee mental health and wellbeing.](#) Methodological limitations are a concern, though. Findings from randomized evaluations are more scarce. [One study assessed the effects of home working in a Chinese Call Center.](#) Allowing work from home improved workers' performance, reduced burnout and decreased negative attitudes. In an [Indian garment factory](#), enhancing worker voice through a technology enabling anonymous communication with the employer also increased performance but had no effects on mental health. Future research would benefit from testing ways to identify and influence other work

environment factors, like time pressure, reward and recognition, that may affect the well-being of employees.

Another set of studies targets early workplace interventions focused on workers who report stress-related symptoms. [Workplace stress management programs have shown substantial benefits in symptom reduction, but evidence on whether this translates to improvements in labor market outcomes is limited.](#) Most of these studies did not collect data on labor market performance, and those who did so have not found effects on self-reported measures of productivity and absenteeism. Future research would benefit from investigating broader labor market outcomes. Moreover, previous research has assessed mostly short-term programs. Although these interventions have been shown to be effective for psychological outcomes in the short term, it might be that productivity gains are only visible after prolonged exposure to this type of program. This is a topic requiring further research. Finally, future studies could target scalable prevention interventions. One possibility is using health tech solutions for employees suffering stress-related symptoms. Several companies worldwide have implemented well-being programs based on digital tools to handle employees' mental health issues. Despite their popularity, there is no robust evidence of the effectiveness of such programs.

Labor Market Shocks and Mental Health

A different strand of the literature studies the effects of labor market conditions on mental health. Two studies show that local labor market deterioration in the US due to [plant closures](#) and [trade liberalization](#) increased fatal drug overdoses. In Austria, two studies showed that mass layoffs increased the use of psychotropic drugs and hospitalizations due to mental disorders among [dismissed workers](#) and those [surviving a mass layoff](#).

Evidence suggests that social welfare programs can counteract these negative effects. A cash transfer program in [Indonesia](#) reduced the impact of negative agricultural productivity shocks on suicide rates. In [Austria](#), extending unemployment benefits reduced the prescription of opioids and antidepressants to female workers. In the context of massive labor market transformations that might disproportionately affect the poor, future research would benefit from testing alternative interventions to protect the mental health of workers exposed to harmful labor market shocks. Examples include offering social insurance and welfare, skills training, job transition programs, and psychotherapy.

OPEN RESEARCH QUESTIONS

Informality

1. Is reducing the recurring costs of being formal (removing taxes) more effective than reducing the cost of becoming formal (improving registration processes)?
2. How can auditing be more effective and cost-effective in helping firms to formalize?

3. Should policymakers target firms that benefit most from formalization? How do we identify these firms?
4. Should we encourage informal firms to become formal at all? Or should we encourage firms to be born formal?

Social Protection

1. What is the effect of cash transfers on the quality of jobs that individuals accept?
2. How different designs of cash transfer programs can affect incentives to informality?
3. Can cash transfers spur informal labor markets?
4. How can policymakers design Unemployment Insurance such that it provides the support people need without reducing labor market incentives?
5. How workfare interventions can be better designed to have lasting impacts on earnings and employment?
6. What are the general equilibrium effects of workfare programs? How does it affect aggregate variables such as job creation and prices?

Crime

1. Most youth summer jobs programs rigorously evaluated are concentrated in entry-level jobs at daycare centers and summer camps. What would be the effect of a program that promotes a higher skill formation, such as junior careers in the technology sector?
2. Most youth summer jobs programs have a short duration, up to 6 or 7 weeks. What would be the effect of programs that promote extended jobs for disadvantaged youth?
3. What are the main mechanisms that drive crime reduction in summer youth programs: incapacitation, increase in income, probability of having a job in the future, or other mechanisms?
4. What is the effect of programs that give job opportunities to people who were formerly in prison in the context of a middle-income country?
5. What features of transitional job programs for people who were formerly in prison have the most effects?

Mental health

1. What are the main mechanisms behind the effects of mental health treatment programs on labor outcomes: higher productivity, changed beliefs, distorted preferences, or other mechanisms?

2. Evaluations of mental health interventions typically measure only short-term employment impacts. Do the effects on labor market outcomes hold in the long run?
3. Clinical studies usually evaluate patient-reported and limited measures of employment outcomes. What are the effects on broader labor market outcomes identified through administrative or standardized survey data on wages and earnings?
4. Mental health interventions in low- and middle-income countries have been shown to have similar or larger effects on employment than economic interventions such as cash transfers and job training programs. However, we know little about the complementarity between these programs. In particular, improved mental health could increase the economic returns of economic programs by improving productivity. What are the effects of combining economic and mental health interventions?
5. What are the effects of prevention strategies in the workplace that target psychosocial risk factors (such as job control, job demands, job insecurity, organizational culture)?
6. What are the most effective design features of social welfare policies to offset the mental health consequences of adverse labor market shocks?