Loans and Grants

the European Union

Technical Report for the Youth Employment in sub-Saharan Africa Toolkit



Technical reports are intervention-specific summaries is based on relevant studies for sub-Saharan Africa contained in the Youth Employment Evidence and Gap Map (EGM). This report is prepared by Ashrita Saran, Director, Evaluation and Evidence Synthesis, Global Development Network and Howard White, Director, The Research and Evaluation Centre. The meta-analysis was performed by Ashrita Saran.

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About this technical report

This technical report is one of a series of technical reports being produced to document the evidence base for interventions to increase youth skills and employment in sub-Saharan Africa. The report is based on relevant studies for sub-Saharan Africa contained in the Youth Employment Evidence and Gap Map (EGM).

The purpose of this report is to inform the content of the What Works for Youth Employment in sub-Saharan Africa Toolkit. This report provides results from both the quantitative evidence from impact evaluations and the qualitative evidence from process evaluations. The former is the basis for the impact rating and the latter the lessons from implementation. The critical appraisal of the studies, which was undertaken for the EGM, provides the basis for the confidence in study findings.

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Abbreviations

AfDB	African Development Bank
AoAV	Action on Armed Violence
BRN	Big Results Now
EGM	Evidence and Gap Map
EU	European Union
ICT	Information and Communication Technology
ILO	International Labour Office
JICA	Japan International Cooperation Agency
LYCI	Lesotho Youth Credit Initiative
MGLSD	Ministry of Gender, Labour and Social Development
MSME	Micro, Small, and Medium-sized Enterprises
OR	Odds Ratio
PAJE-NIETA	Projet d'Appui aux Jeunes Entrepreneurs
PSP	Private Service Provider
RCT	Randomized Controlled Group
SMD	Standardized Mean Difference
UNDP	United Nations Development Programme
UNESCO	United Nations Education, Scientific and Cultural Organization
UNICEF	United Nations Children Fund
UNIDO	United Nations Industrial Development Organization
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development

WHO	World Health Organization
WINGS	Women's Income Generating Support
WRN	Work Ready Now
YEIM	Youth Entrepreneurship and Innovation Multiplier
YEN	Youth Employment Network
YEOP	Youth Employment and Opportunities Project
YEP	Youth Employment Programme
YES-JUMP	Youth Employment Support - Jobs for the Unemployed and Marginalised
	Young People
YLP	Youth Livelihood Programme
YOP	Youth Opportunities Programme
YouWIN	Youth Enterprise With Innovation in Nigeria

Plain language summary

What is this report about?	This technical report summarises the evidence in English of the effects of loan and grants on skills, employment and earnings for young people.
What are loan guarantees and grants?	Loan and grant programmes take various forms, including loans, direct cash transfers (conditional and unconditional), start-up grants and in-kind startup kits. They are often targeted at specific groups, such as youth, women, or small business owners. This family of instruments also includes loan guarantees which allow individuals, such as unemployed youth, to borrow when they might not otherwise qualify for financing.
In what context are loans and grants programme implemented?	Loans and grant programmes are implemented in various contexts, tailored to the specific needs and challenges of different populations and regions. They target some of the most vulnerable and marginalized individuals, aiming to lift them out of poverty through small-scale income- generating activities.
	Programmes in regions with significant rural populations and agricultural economies, aim to improve livelihoods through support for agricultural and rural enterprises.
	Initiatives in urban settings often target young women or youth in poor neighbourhoods, helping them launch branded franchise businesses like salons or mobile food carts.
What are the main design choices?	Design choices include (i) the size of loans; (ii) whether to provide a one-off disbursement or a line of credit; (iii) the terms and conditions for loans, including a possible grace period; (iv) delivery mechanism, including use of mobile money; (v) permitted purpose of funds; (vi) designing for sustainability, such as revolving funds.
How are loans and grants expected to work?	Loans and grants interventions overcome the credit constraint faced by youth by: (i) grants and in-kind contributions such as starter kits which do not require repayment: (ii) group lending creates joint liability; and (iii) loan guarantees provided to financial institutions remove the risk of loans to young entrepreneurs.

	The loans and grants received are expected to enhance youth employment by enabling youth to establish or expand businesses, increase productivity, generate jobs, and creating multiplier effects.
What sort of activities do loans and grants programmes support?	In addition to proving loans and cash grants, loans and grants programmes also support in-kind contributions such as starter kits that do not require repayment. There may be additional aspects of loan and grants interventions such as support to business plan development
Implementation issues	Implementation challenges include delays due to bureaucratic processes, coordination issues among stakeholders, and inadequate funding. Ensuring the long- term effect and sustainability of programmes is a key concern. This includes addressing issues such as financial sustainability, scaling up successful models, and embedding programmes within broader economic and social development strategies.
The effects of loans and grants	Overall, loans and grants have a small but significant effect on employment, material welfare, and programme attendance. But there is a small negative effect on youth earnings, emotional state and business performance. There are substantial variations in effectiveness, which are associated with two facts: (i) loans and grants combined with other interventions have a substantially larger effect than loans and grants alone for employment, skills, and earnings; (ii) the effect is larger for females only than in mixed sex groups.
Cost analysis	The cost-effectiveness of loan and grant programs in sub- Saharan Africa varies based on design, implementation, and outcomes, with programs like YouWIN! and WINGS demonstrating that while initial costs may be high, the long-term benefits and targeted support for vulnerable populations can ultimately justify these investments.
How strong is the evidence base?	There is medium confidence in the evidence of effects (13 impact evaluations) and medium confidence in findings from implementation evidence (four process evaluations).

Implications for research	Loans and grants for young people need to be more rigorously evaluated. Given the time required for the effect of loans and grants to materialize, longitudinal studies are required to assess their long-term effects on youth employment and economic outcomes.
Implications for policy and practice	The evidence supports the continuation of targeted approach to loans and grants programmes in combination with other interventions such as business skills training.

What are loans and grants programmes?

Loan and grant programmes provide financial support to individuals, businesses, or organisations. These programmes include loans, direct cash transfers (both conditional and unconditional), startup grants, and in-kind startup kits.

This family of instruments also includes loan guarantees which allow individuals, such as unemployed youth, to borrow when they might not otherwise qualify for financing (Kagan, 2019). For instance, the African Development Bank (AfDB) 's *Youth Entrepreneurship and Innovation Multiplier* (YEIM) programme offers loan guarantees to financial institutions to encourage increased lending to youth-owned businesses.

Loans and grant programmes are implemented in different settings with the design tailored to different populations. The Women's Income Generating Support (WINGS) Programmes in Uganda (Blattman et al., 2013) target some of the most vulnerable and marginalised individuals, aiming to lift them out of poverty through small-scale income-generating activities. Programmes in regions with significant rural populations and agricultural economies, such as the Skills for Youth Employment and Rural Development Programme in Zimbabwe (Zulu, 2015), aim to improve livelihoods through support for agricultural and rural enterprises. Initiatives in urban settings, such as a franchise programme in Nairobi, Kenya (Brudevold-Newman et al., 2017), target young women in poor neighbourhoods, helping them launch branded franchise businesses like salons or mobile food carts. Many programmes aim to encourage innovation and job creation among young entrepreneurs by providing lines of credit for investment purposes to support the establishment of new businesses and the expansion of existing ones (McKenzie, 2017). Several programmes implemented in regions affected by war and conflict aim to support economic recovery and stabilisation by providing financial support to vulnerable populations to help them rebuild their lives and livelihoods (Müller et al., 2019).

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How are loans and grants programmes expected to work?

Loans and grant programmes are designed to provide financial resources to youth, enabling them to start or expand businesses, thereby contributing to increased youth employment. New or growing businesses generate jobs and create production and consumption multiplier effects. The rationale for interventions providing loans is to overcome credit constraints, as banks are reluctant to lend to SMEs on account of uncertainty and the lack of a track record or collateral from young entrepreneurs.

In addition, loan repayment can impose a burden on cash flow when a business first starts, and so is still growing its customer base. Grants or startup kits overcome this early cash flow constraint.

However, economic theory suggests that entrepreneurs in developing countries are credit constrained. That is, they cannot access capital even though they have viable business proposals. This constraint applies particularly to youth who are not in a position to have established a business track record and lack collateral to guarantee loans.

Loans and grants overcome this credit constraint in various ways:

- Loans and grants provide the capital needed to start or grow a business. They may cover both investment costs and materials, that is working capital.
- Grants and in-kind contributions such as starter kits do not require repayment.
- Group lending creates joint liability, with the group promising to pay being the guarantee, so no additional collateral is required.
- Loan guarantees provided to financial institutions remove the risk of loans to young entrepreneurs.

There may be additional aspects of loan and grants interventions which buttress the theory of change. For example, support to business plan development or financial management will improve business skills.

Loans and grants programmes may also operate in areas where regular financial institutions are absent - such as conflict and post-conflict settings – and reach out to financially excluded populations such as youth with limited formal education.

What are examples of loans and grants programmes in sub-Saharan Africa including design features?

Design features of loans and grants programmes

Design features, including the average size of loans, type of support, one-off disbursements vs. lines of credit, and the purpose of loans and grants, may act as moderators which affect programme effectiveness and sustainability.

From these, we can identify the following information about design features:

- Average size of loans: The average size of loans and grants in various programmes ranged from approximately USD 150 in the WINGS programme in Uganda (Blattman et al., 2013) to up to USD 57,000 in the YouWiN! Programme (McKenzie, 2017), with most programmes offering between a few hundred to a few thousand dollars. Loans which are too small may be insufficient to start a viable business.
- **Type of support**: The type of support included loans, in-kind grants, and cash grants, with loans being offered by PRIDE Microfinance (Fiala, 2014) and the YLP in Uganda (Bukenya et al., 2019), in-kind grants involving starter kits for salons or mobile food carts in Nairobi (Brudevold-Newman et al., 2017), and various microenterprises in Mali (USAID, 2022) and cash grants ranging from individual startup grants by WINGS in Uganda to conditional and cash transfers conditional on business-performance milestones YouWiN in Nigeria (McKenzie, 2017), cash grants in Kenya (Domenella et al., 2021), and the *Youth Startup Business Grant Program* in South Sudan (Müller et al., 2019).
- One-off disbursement or line of credit: Most programmes provided one-off loans or cash grants. These one-time disbursements are designed to provide immediate financial support for specific purposes, such as starting or expanding a business, purchasing equipment, or covering training costs. In contrast, a line of credit offers a flexible source of funds that beneficiaries can draw upon as needed, up to a

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predetermined limit, allowing entrepreneurs to access funds over time as their business grows or as they encounter new opportunities or challenges. For example, YLP in Uganda offered startup credit to help beneficiaries establish or expand income-generating activities. Successful proposals received an average amount of US\$2,500. This line of credit allowed youth to access funds as needed, providing more flexibility compared to a one-time grant (Bukenya et al., 2019) and the YouWiN! provided conditional cash transfers of up to US\$ 57,000 paid in four tranches (McKenzie, 2017).

- Loans terms and conditions: new businesses will not have the cash flow to repay loans immediately so the terms and conditions may accommodate this. The loans made under YLP in Uganda did not charge interest for the first year (Bukenya et al., 2019).
- Delivery mechanism: cash may be distributed to clients or they have to collect it from a central facility. In one case – *GiveDirectly* in Rwanda – mobile money was used to transmit funds.
- Purpose of loans and grants: The purpose of programmes varied, with some focusing on providing working capital to establish or expand small-scale income-generating activities, such as the WINGS programme in Uganda (Blattman et al., 2013) and the *GiveDirectly* programme in Rwanda (McIntosh & Andrew, 2022), while others aimed to offer initial capital for new business ventures, like the Kenya YEOP (Domenella et al., 2021). YouWiN! provided lines of credit for investment purposes, and YOP in Uganda offered cash grants for vocational training and materials.
- Sustainability: Design features to improve sustainability include setting up a revolving fund (YLP, Uganda) and giving institutional development support to savings groups (*PAJE-NIETA*, Mali).

Details of the programme are listed in Table 1.

Table 1: Examples of loans and grants interventions

The Women's Income Generating Support (WINGS) programme, which operated from 2009 to 2012, was designed to provide economic empowerment to some of the most vulnerable women in Northern Uganda, a region heavily affected by war and conflict. The average monthly income of the survey participants was about \$11 in purchasing power parity (PPP), with an average savings of just under \$6 PPP. The programme offered an individual start-up grant of approximately US\$ 150 to 1,800 young women, which was roughly 13.6 times the average monthly income. These grants were one-off disbursements intended to help establish or expand small-scale income-generating activities, which could range from petty trading, small crafts, agriculture, or other microenterprises (Blattman et al., 2013).

The Youth Opportunities Programme (YOP) in Uganda was an initiative aimed at providing economic opportunities for young people aged 16 to 35 who had some level of formal education in the year 2008 with an average saving of US\$ 8.91. The programme focused on empowering youth to enter skilled trades by offering cash grants to groups of young individuals. The grants were substantial, with each group applying for roughly US\$ 400 per person, an amount that slightly exceeded their annual incomes at the time. If selected, the groups would receive a one-time cash grant totalling approximately US\$ 8,000, which was deposited into a community bank account. The groups were then responsible for using the funds to hire vocational trainers, purchase start-up tools and materials, and set up their members as individual tradespersons. The programme was designed to give the youth autonomy over their projects, with minimal supervision or follow-up after the initial grant was provided (Blattman et al., 2018).

The Action on Armed Violence (AoAV) programme in Liberia provided capital inputs, such as farm tools and supplies for vegetable farming or animal husbandry, at a cost of US\$ 125 for high-risk men in conflict-affected areas. Men received the first half of the inputs upon graduation and the second half several weeks later, provided that AoAV could locate them and confirm they had initiated farming or animal raising. Additionally, graduates from region were given US\$ 50 in cash. A total of 1,123 men were included in the sample. The Bong training site accommodated 350 men and 50 women, while the Sinoe site accommodated 175 men and 25 women. Training ran from November 2009 to February 2010 in Bong and September to December 2009 (Blattman et al., 2016).

A micro-franchise programme in Nairobi targeted young women aged 16 to 19 in three of the city's poorest neighbourhoods. These women were provided with a one-off cash grant equivalent to US\$ 239 and in-kind starter kits to launch branded franchise businesses, either salons or mobile food carts. The programme operated for 22 months. The purpose of the financial support was to provide working capital and essential tools to existing entrepreneurs on an individual basis, enabling them to establish and operate their businesses successfully (Brudevold-Newman et al., 2017)

The Youth Livelihood Programme (YLP) in Uganda was a five-year initiative aimed at improving the employment prospects of unemployed young people between the ages of 18 and 30. Under YLP, support is given to youth in groups called Youth Interest Groups (YIGs) of 10 to 15 members. The programme provided start-up credit to help beneficiaries establish or expand income-generating activities. YIGs project funds are disbursed directly from the District Projects Fund Account to the

individual YIGs project accounts managed by the Youth Project Management Committees (YPMCs). Successful YIGs can receive up to US\$ 3,470. YIGs are expected to pay back the funds in a period not exceeding three years as follows: loans are interest free in the first 12 months, while unpaid funds after one year attract a service fee of 5% per year. There is no requirement for physical assets/collateral; instead members of the YIGs co-guarantee each other. The YLP was implemented by the Ministry of Gender, Labour and Social Development (MGLSD) and targeted unemployed youth in Uganda (Bukenya et al., 2019; Blattman et al., 2019).

A study in Uganda aimed to assess the effect of a loan and grant programme that included loans ranging from US\$ 180 to 220, which were approximately 1.5 times the monthly profits of the average business, and a cash grant of US\$ 200. The programme offered both loan and cash grant options, with loans provided by a local microfinance organization, PRIDE Microfinance and the loans were guaranteed by the International Labour Organisation (ILO). Loans were provided with an interest rate of 20% and 50% collateral. The purpose of the financial support was to provide working capital for existing entrepreneurs organized in groups, explicitly targeting 1,550 microenterprise owners who expressed interest in expanding their businesses and receiving training and loans (Fiala, 2014).

The Kenya Youth Employment and Opportunities Project (KYEOP), initiated between June 2019 and March 2020, aimed at enhancing employment prospects and earning opportunities for vulnerable youth in Kenya. The project was implemented by the Government of Kenya (GoK) with an eligible population of young people aged 18-29 years who have low levels of formal education. The forms of support offered through the self-employment programme included a business grant of approximately US\$ 360 to provide the youth with initial capital to start or grow their business ventures (Domenella et al., 2021).

Youth Employment Support - Jobs for the Unemployed and Marginalised Young People (YES-JUMP) in Kenya and Zimbabwe supported financing for youth by building the capacity of Micro Finance Institutions, NGOs and youth-led saving and credit cooperatives (SACCOs) to offer financial services to young entrepreneurs who have followed the Start and Improve Your Business modules. SACCOs promote democratic business institutions that allow youth members to make decisions on major issues like loan interest rates, repayment periods, and collateral to make loans more accessible to young entrepreneurs

The Youth Enterprise With Innovation in Nigeria (YouWiN!) programme was a business plan competition designed to encourage innovation and job creation among young entrepreneurs in Nigeria. It aimed to support the establishment of new businesses and the expansion of existing ones. The programme offered conditional cash transfers of up to US\$ 57,000, which were provided payments in four tranches, with first tranche of 10% of total amount, second tranche of 45% payable for the acquisition of physical and working capital and third and fourth grant were made conditional on employment (firm specific employment trigger of 5.5 workers) and sales turnover (40% of the first-year annualised turnover goal) (McKenzie, 2017).

The Youth Startup Business Grant Programme in South Sudan, a joint effort by the World Bank and the Ministry of Commerce, planned to provide unconditional cash grants of US\$ 1,000 to 1,200 youth randomly selected from a pool of 6,000 applicants, with over 60% going to young women. The grant was intended to promote entrepreneurship though participants were free to choose how to use it. The programme was terminated on account of the deteriorating security situation (Müller et al., 2019).

GiveDirectly in Rwanda provided cash transfers directly to poor households. The purpose of the grant was to provide working capital to targeted youth in Rwanda. The grants were unconditional cash transfers ranging from US\$ 350-750 to support the economic activities and income-generating opportunities. Mobile phone technology was used to transfer money to targeted youths, which facilitated the efficient and secure delivery of these grants. The cash transfers in this programme were made in two tranches: the first tranche constituted 40% of the total transfer amount and the second tranche, which made up the remaining 60%, was sent one month after the first (McIntosh & Andrew, 2022).

The *Projet d'Appui aux Jeunes Entrepreneurs (PAJE-NIETA)* initiative in Mali offered in-kind support in the form of starter kits for income-generating activities, with an average value of US\$130. These kits included essential equipment and materials needed to launch microenterprises, such as improved seeds, ploughs, and watering cans for market gardening, basic equipment and protective gear for soap-making, and tables, benches, and cooking utensils for small restaurants. The purpose of the kits was to provide working capital and essential tools to existing entrepreneurs on an individual basis. To ensure the long-term sustainability of these savings groups, the programme adopted the Private Service Provider (PSP) approach focused on building the capacity of local service providers to offer ongoing support and services to the savings groups, thereby embedding the initiative within the local community and economy (USAID, 2022).

What has been the implementation experience of loans and grants programmes?

Here, we show the key implementation challenges from process evaluations, providing insights into the practical difficulties faced on the ground and the steps needed to overcome them. This section explores the various implementation challenges encountered in different projects, including delays in project initiation, coordination failures, and the misuse of funds, along with their implications for the overall success of the programmes. Ensuring these programmes' long-term effect and sustainability requires addressing these issues head-on. Implementation challenges include delays due to bureaucratic processes and problems of coordination. Project delays are critical in implementing loans and grants programmes, often leading to missed targets and incomplete activities. These delays can be attributed to various factors, including:

- A Japan International Cooperation Agency (JICA)- funded project in Kenya experienced a six-month delay in signing the technical cooperation agreement, which postponed the project. Bureaucratic administrative procedures and slow financial disbursement led to the delay. (Karuga, 2012, high confidence).
- The Skills for Youth Employment and Rural Development programme in Zimbabwe began nine months late due to delays in programme approval, infrastructure setup, and staff recruitment, affecting the overall implementation timeline (Zulu, 2015, medium confidence).

Coordination challenges among stakeholders can significantly effect the effectiveness of loans and grants programmes. These challenges include:

• In the *Skills for Youth Employment and Rural Development Programme* in Zimbabwe, there was confusion over the nature of microfinance loans, leading to adjustments and affecting disbursement and repayment processes. Based on initial communication from ILO, some district structures, crafts persons, and youth understood expected grants not loans. The change in the design of the modalities of the microfinance scheme hindered the implementation of the project. The applied

microfinance model was group-based, but the master crafts persons worked individually so a joint liability model was inappropriate (Zulu, 2015, medium confidence).

- The Lesotho Youth Credit Initiative (LYCI) through the YEP faced implementation issues due to poor working relationship and resultant coordination issues between the staff of the micro-lending institution, Moliko, and YEP trainers. A tense situation between the two meant that trainees suffered as they faced conflicting demands from both ends (Morojele, 2009, high confidence).
- The implementation of the UN Development Assistance Plan (UNDAP) in Tanzania suffered from conflicting demands and unclear roles between the ILO and the United Nations Development Programme (UNDP). This situation underscores the need for clear communication and defined roles among stakeholders to ensure the smooth execution of projects (Kundi, 2015, medium confidence).

The lack of government commitment to projects often manifested in shifts in priorities due to new initiatives or unforeseen circumstances.

- In Tanzania, the introduction of new government priorities, such as the Big Results Now (BRN) initiative, led by the Tanzanian government, led to a reallocation of focus away from previously planned activities under the ILO-UNDAP Programme. As a result, some government institutions deprioritized these activities, leading to failures in their implementation. This shift in priorities highlights the importance of aligning project goals with broader government initiatives to ensure continued support and successful outcomes (Kundi, 2015, medium confidence).
- Additionally, the unforeseen emergence of the COVID-19 pandemic had a profound effect on project budgets and donor funding, potentially causing delays in the execution of certain activities, such as job and opportunities fairs (Kimote, 2023, high confidence).
- One of the studies also reported misusing funds by one of the microfinance institutions. Another microfinance provider in the same project discontinued collaboration and paid back the capital (Zulu, 2015; medium confidence).

The effects of loans and grants programmes

Overview

Loans and grants have a small positive effect on employment, material welfare and programme attendance. However, small negative effect on youth earnings, emotional state and business performance were found. These findings are based on meta-analysis, which averages the effect across all studies (see Figure A1.1 in the Annex).

The average effect from meta-analysis is commonly reported as a standardised mean difference (d), which is the difference in the mean in outcomes between treatment and control, divided by the standard deviation of the outcome. Rather than d, we report (Hedge's) g, which includes a small adjustment to d to account for bias in small samples. A g of less than 0.1 is considered a small effect, 0.1-0.2 is moderate and above 0.2 is a large effect.

The meta-analysis averaging across all effect sizes (reported more fully in Annex 1) finds that loans and grants have a statistically significant moderate effect on employment (g=0.14). A larger effect size is observed when combining loans and grant interventions with business training, which suggests that multi-component interventions may be more effective than single interventions (see Figure A1.2 in Annex 1).

There is also a positive effect on material welfare (g=0.10) and programme attendance (g=0.075), with a slightly smaller effect on youth earnings (g=-0.09) However, these findings have low confidence because of concerns about the included studies and the small number of included studies for the business and material well-being outcomes.

For employment, we test the sensitivity of the findings by using a different approach, which gives a larger, but still small, effect size g=0.11.

The effect size can be translated into an absolute and relative change in employment (see Annex 2 for details of the calculation) and the larger average effect size for youth

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employment (g=0.14). The average effect size for the effect on employment of g=0.14 is equivalent to a 12.5% increase compared to the control group. This statistic can also be converted into the number needed to treat which is 16; for every 16 youth receiving loans and grants, one additional person gains employment. This finding underscores these financial interventions' modest but significant effect on youth employment outcomes.

Findings by study

 Table 2: Studies of loans and grants programmes in sub-Saharan Africa

There are 13 nane	rs (impact evaluation	s) on the	offort	ivon	s of	Inang	and	σra	ntc	
Study	Intervention	Findings	encet	wen	 , 0,	100115	unu	5.0	1115	

programpostualiti	theps by dies me pooleg n	experimental study designs g the details of which are
<i>underemployed yo</i> listed in Table 2.	ouths in Northern Ugan	da
Blattman et al. (2011)	265 treatment group received an unconditional a lump sum cash transfer US\$ 7108 (in 2008 market exchange rates). The average transfer size was (US\$374) per member—more than 20 times the average monthly income.	Two years after treatment: Average earning in treatment group increased by 50% compared to the control group. Treatment group had an 481% increase in asset acquisitions and 150% increase in asset stock relative to the control group.
Blattman et al. (2014)	265 treatment group received an unconditional a lump sum cash transfer US\$ 7108 (in 2008 market exchange rates). The average transfer size was (US\$374) per	Four years after treatment: Average earning in treatment group increased by 38% and 11% more consumption compared to the control group. The control group experienced growth in their business assets of 38% from the two to four-year survey, while the treatment group experienced a decline in their business assets of 19%.

	1	
	member—more than 20 times the	
	average monthly	
	income.	
	meonie.	
Blattman et al.	265 treatment	Nine years after treatment: Average earning in
(2018)	group received an	treatment group increased by 12% compared to the
	unconditional a	control group but the findings are insignificant.
	lump sum cash	The program's effect on educational expenditures,
	transfer US\$ 7108	while statistically significant in logarithmic terms,
	(in 2008 market	translated to a substantial relative increase of 11–15
	exchange rates).	percent (US\$17–23) in 2010 and 2012. Additionally,
	The average	the intervention led to a significant growth in shorter-
	transfer size was (US\$374) per	term health expenditures by 23 percent (about US\$4),
	(033374) per member—more	although this effect diminished to near zero after four years.
	than 20 times the	years.
	average monthly	
	income.	
Calderone (2017)	265 treatment	Four years after treatment: The finding showed that
	group received an	the programme significantly increased spending on
	unconditional a	education by 11–15 percent (equivalent to US\$17–23)
	lump sum cash	in both the short and long term (two and four years
	transfer US\$ 7108	post-intervention). The program also led to an overall
	(in 2008 market	increase of six percent in subjective education-related
	exchange rates).	outcomes, with men experiencing a larger increase of
	The average transfer size was	eight percent. Men who received the grant saw their total educational expenditures rise by 21–24 percent
	(US\$374) per	(US\$32) over both two and four years, primarily due
	member—more	to increased spending on their children and other
	than 20 times the	family members. In contrast, women who received
	average monthly	the grant did not alter their family spending habits but
	income.	did increase their expenditures for non-family
		members by 90–95 percent after two years.
Women's Income G	Generating Support (WI	NGS) cash grant programme in Uganda
Blattman et al.	Individual start-up	The programme has a substantial effect on the
(2013)	grant to women of	monthly cash income of participants that increased by
	US\$150 (13.6 times	98% compared to the control group, and there was a
	the average	33% increase in household spending, wealth, and the
	monthly income	accumulation of durable assets among the treated.
	and in 2009 market	Savings tripled for the treated group, from USD16.36
	exchange rates).	to USD 68.22. Both groups reported a reduction in
Blattman et al.	Individual start un	psychological distress over time. The programme had a significant positive large effect
(2014)	Individual start-up grant to women of	for employment outcomes (SMD=0.86) and business
(2014)	US\$ 150 (13.6	survival (SMD=0.84). The treatment group had higher
	times the average	earnings (94% increase) than the control group. The
	anies the average	sammes is no mercase, than the control group. The

	portion of people working in non-farm businesses
	ibles from 39% to 80%, work hours increase from
	to 25 hours a week, compared to the control
	up. The program had a significant effect on assets
_	
	consumption. The program had a larger effect on
	n's durable assets and non-durable consumption
	npared to women's.
	WINGS program led to substantial increases in all
	ome measures by 46%. This includes a 66%
-	ease in monthly cash earnings relative to the
_	trol group, although this amounts to USD 5.19 in
	olute terms. Durable consumption assets rose by
	6, and non-durable consumption increased by 29%
	tive to the control group. Food security improved
_	htly as a result of these income and enterprise
	reases, with the percentage of times going hungry
	he past week falling from 20% to 10%. Savings
mo	re than tripled, increasing to USD 54.
Action on Armed Violence's (AoAV), in-kind gra	nt programme providing capital inputs such as
farm tools and supplies in Liberia	
Blattman et al. 1800 Individual The	study finds positive programme effects on form
	study finds positive programme effects on farm
(2016) from war-affected em	ployment and profits over a year after the
(2016) from war-affected em areas were inte	ployment and profits over a year after the ervention. The programme resulted in an 11%
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(2016)from war-affected areas were provided with a incr start-up grant of uS\$ 150 (30 times the average monthly income and in 2009 market exchange rates).empty after exchange rates).Livelihood Programme (YLP), cash grant programe (2019)Under YLP, support is given to youth in incr groups called Youth (2015) of 10 to 15 on it members in the form of start-up emptyThe is given to 15 on it members in the beind form of start-up empty	ployment and profits over a year after the ervention. The programme resulted in an 11% rease in income for the participants over a year er the intervention.
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	(YIGs) of 10 to 15	The program had a modest positive effect (ATE 0.034)
	members in the form of start-up credits. Successful YIGs can receive up to US\$3,470.	on asset accumulation, but the effect is not statistically significant, suggesting that the effect is minimal or uncertain. The effect on assets varied by gender, with males experiencing a slight increase in asset index and females experiencing a slight
	10 0353,470.	decrease.
Microfranchise and	d grant programme in k	I
Brudevold- Newman et al. (2017)	Women were provided with a one-off cash grant equivalent to US\$239 and in-kind starter kits to launch branded	The grant programme substantially increased total hours worked, adding 6.8 hours per week (38% more). The grant programme led to an increased weekly income of US\$ 3.2 per week (56% more) as compared to the franchise programme, which did increase weekly income by US\$ 1.6 (30%). No income effect was found in the long run.
	franchise businesses, either salons or mobile food carts	
Kenya <i>Youth Empl</i> e	oyment and Opportunit	ies Project (KYEOP) grant programme in Kenya
Domenella et al. (2021)	Business grant of approximately US\$360 to provide the youth with initial capital	Statistically significant positive effects were found on employment (measures as business survival and new business start-up). These youth were 90% more likely to report their business as their main source of income. Nearly 80% of survey youth who received business grants reported a negative effect on income during the first round of the survey. Additionally, more than 40% expressed a lack of confidence in maintaining their living standards and stress levels. Nearly 20% of respondents even reported further negative changes in income beyond the initial declines.
Microenterprise pr	ogramme providing bo	th cash grant and loan in Uganda
Fiala (2014)	Loans ranging from US\$180 to 220, which were approximately 1.5 times the monthly profits of the average business, and a cash grant of	Findings revealed that female-owned enterprises showed a significant negative effect on income and business performance than the control group and initial benefits for women without nearby families diminishing by nine months. Evidence suggested that family pressure on women can deflect the use of grants or credit for non-business purposes. For male-owned enterprises, employing family
	US\$200	members significantly increased profits by 56%. However, these business improvements did not significantly change household spending on child health, general savings, or consumption.
Subsidised transpo	rt experiment program	me (to work) in Ethiopia

Franklin et al. (2016)	Transport subsidies in the form of cash US\$1.5 per week.	Overall the transport subsidy program has a positive effect with a 7% probability of permanent employment after four months and increased number of hours worked in the treatment group, but it does not affect wages or income. However, there was a negative effect on temporary work among the treated individuals.
GiveDirectly cash g	grant programme in Rw	anda
McIntosh & Andrew (2022)	Unconditional cash transfers ranging from US\$350-750.	Cash grant led to significant improvements in productive assets for beneficiaries. However, over the longer term, the benefits were insignificant. On average, the cash transfers have been effectively utilized to generate substantial additional income, allowing outflows to increase by 65 to 120% of the transfer amount while preserving the majority of the transfer in the form of asset values after nearly four years. However, the fact that investments that more than double the value of productive assets result in only a 20% increase in consumption at the endline suggests that the return on these assets is low. For the key business outcomes of sales and profits, the effect is negative across all treatments, Similarly, core business outcomes such as the number of customers, daily sales, and monthly profits typically exhibit weak negative effects, which are stronger at the endline than at the midline.
Youth Enterprise W	Vith Innovation in Niger	ia (YouWiN!) grant programme in Nigeria
McKenzie (2017)	Conditional cash transfers of up to US\$57,000, which were provided payments in four tranches, with first tranche of 10% of total amount, second tranche of 45% payable for the acquisition of physical and working capital and third and fourth grant were made conditional on employment (firm specific employment trigger	The findings show that that providing grants to early- stage ventures resulted in considerably higher rates of survival (more than 20% than controls), profits and sales (23%), and employment (10%), highlighting its promise for entrepreneurial development. These effects remain significant after 4 years, even during the economic crisis, although the magnitudes were smaller.

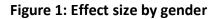
of 5.5 workers) and	
sales turnover (40%	
of the first-year	
annualised	
turnover goal)	

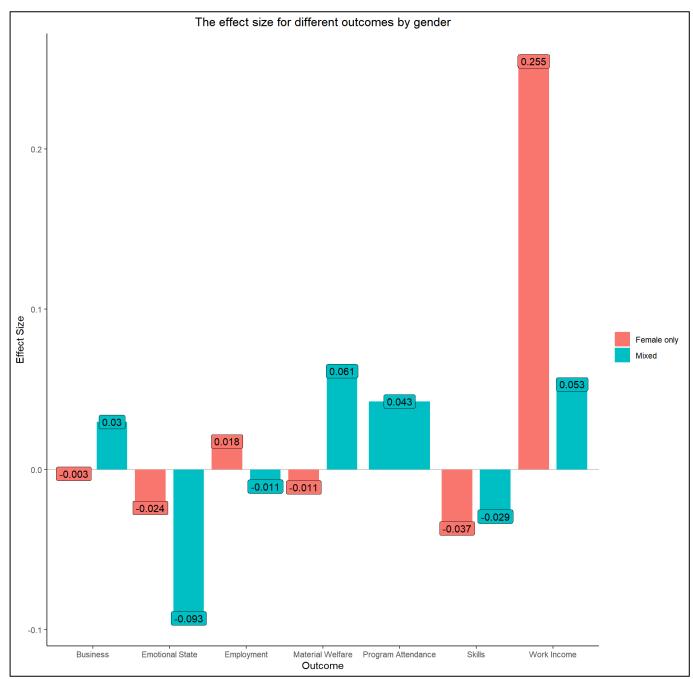
Examining the variation in effect sizes

There is substantial variation in the effects between studies.

Loans and grants have varied effects on different outcomes depending on gender. While some effects are positive, such as labour income for women and material well-being for the mixed group, other effects are negative, such as emotional state and skills development.

Overall, programmes delivered exclusively to females had a larger effect than those delivered to both males and females, suggesting that targeted interventions are more effective for women in the context of youth employment outcomes. This finding aligns with the broader understanding that gender-specific programmes can be more effective due to their tailored nature, addressing the unique challenges, needs, and barriers that women may face in the labour market (Figure 1).





Source: Authors' analysis

Notes: The X-axis represents different outcome categories, including Business, Emotional State, Employment, Material Welfare, Program Attendance, Skills, and Work Income. The Y-axis represents the size of the effect. The bar graph in the chart is divided into two colours: Red represents Female only and Blue-green represents Mixed gender

Evidence supporting the causal chain

The evidence supporting the causal chain of loans and grants programs on youth employment is robust. Key findings from the Benin Youth Employment project indicate that grant recipients perceived the grants as substantial financial support intended for business investment, leading to detailed reports of investments in items for resale, equipment, and workshop rent or construction. The study also found that there was no evidence of grants being diverted to support others due to social pressures, and recipients worked harder to make their investments successful. However, market volatility was a significant challenge, leading to business failures, but strategies such as diversification and saving part of the grant were employed to manage risk. The study concludes that the lack of positive effect on profits was not due to a lack of planning or freedom in investment choices but may be related to the uncertain payoffs of investments, the role of women's businesses in meeting household needs, and the effect of life events on business trajectories (World Bank, 2023). Additionally, the YES-JUMP project reported that a total of 2,956 jobs were created, surpassing the project target by 47.8%, largely due to the broad-based and effective "buyin" of the project, the participatory approach, additional funding by the ILO, and effective technical and administrative support (Karuga, 2012).

The YLP programme highlighted that while implementers focused on disbursing loans and recovering funds, complementary activities for capacity building were given less emphasis, suggesting that novice entrepreneurs need guidance and nurturing for their investments to be productive. The youth indicated that they needed training in marketing, value addition, price determination, financial management, bookkeeping, and post-harvest handling. These findings collectively support the causal chain that loans and grants programs can positively effect youth employment when coupled with appropriate capacity-building measures (Bukenya et al., 2019).

In the YEEP programme, gender played a significant role in the outcomes, with 65.8% of women who received start-up kits creating their own businesses or engaging in incomegenerating activities, compared to 57.1% of men. These new businesses and incomegenerating activities not only contributed to the economic growth of the targeted locations but also created job opportunities. Notably, 17% of survey respondents had employed 273

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youths either on a full-time or part-time basis, with the number of employees ranging between 1 to 25. This indicates that the program not only facilitated entrepreneurship but also stimulated job creation, thereby supporting the causal chain linking loans and grants to youth employment and economic growth (Kimote, 2023).

Cost analysis

The cost-effectiveness of loan and grant programs in sub-Saharan Africa is discussed in only a few studies and it varies depending on the specific design, implementation, and outcomes of the programs. For instance, the first round of a *YouWIN! programme* distributed US\$58 million in grants, with an administrative cost of \$2 million. By the end of the third year, it directly generated 7,027 jobs in treated firms, resulting in a cost per job created of US\$8,538. This figure is relatively high compared to other job creation policies in developing countries. However, the cost-effectiveness should be evaluated in the context of the program's long-term effect, the quality of jobs created, and the targeted population (MacKinzie, 2017).

Micro-franchising one-off cash transfers can be a relatively cost-effective means of income support for vulnerable young women. These transfers provide immediate financial assistance, helping recipients meet basic needs and improve their living conditions. The cost-effectiveness of such programs lies in their ability to target specific populations with high levels of vulnerability, ensuring that resources are directed where they are most needed. This approach emphasizes the importance of direct income support as a critical intervention for improving the well-being of at-risk populations (Brudevold-Newman, 2017).

The *WINGS* program, as reported by Blattman et al. (2013), initially did not appear to be cost-effective. However, the monthly cash earnings treatment effect suggests a permanent increase in monthly income, consistent with four-year evidence from a similar program in Uganda. This implies an annual perpetuity of about USD 45.19 which is approximately 10% of the per-person program cost of USD 462. This suggests a "payback" period of ten years, indicating that the program may become cost-effective in the long term.

In summary, the cost-effectiveness of loan and grant programs in sub-Saharan Africa depends on various factors, including the program design, the targeted population, and the long-term effect. While some programs may have higher initial costs, their long-term benefits and targeted support for vulnerable populations can make them cost-effective interventions.

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Implications of study findings

The overall findings from the summary of the studies of the effectiveness of loans and grants in sub-Saharan Africa are that there are positive effects of the programmes on employment, material welfare and programme attendance. However, a small negative *Implications for policy and practice* effect was found on earnings, pusiness performance and emotional well-being. The negative effect could be attributed to the lack of business skills, loan repayment burden and

inadequate and lack of long-term support.

• Policymakers and practitioners should focus on implementing multi-component

programmes that address financial and skills barriers to employment. This includes Based on this evidence, runders should support further high-quality studies of the developing comprehensive models that address the holistic needs of beneficiaries, effectiveness of intervention programmes on loans and grants in sub-Saharan Africa. The
Practitioners should implement targeted programmes for women, as these have been evaluations provide some insights for design and implementation: found to have larger effects on youth employment outcomes. This could involve creating separate tracks or components within existing programmes that address the specific needs of female participants.

• Included studies noted effect on psychological distress. Programmes should consider including components that address mental health support for participants.

Implications for research

 The larger effect size observed when combining loans and grant interventions with business training suggests that multi-component interventions may be more effective.
 Future research should explore the optimal combination of interventions and their longterm effect. Factorial designs are the most appropriate design for this purpose.

- Given that the effects of loans and grants may take time to materialise, longitudinal studies are needed to assess the long-term effects of these interventions. This will provide a more comprehensive understanding of their effect on youth employment and economic outcomes.
- Investigating the effectiveness of different types of support (loans, in-kind grants, cash grants), loan size, and individual versus group lending will be useful. Research should explore which type of support is most beneficial for different groups (e.g., women, youth, rural populations) and in various economic sectors.
- Process evaluations highlight the need to strengthen gender mainstreaming to prevent unintended consequences, such as gender-based violence, and highlight the importance of incorporating gender analysis into programme design and evaluation. Future research should explore best practices for gender-sensitive programme implementation and monitoring.

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Annex 1 Results of meta-analysis

This annex presents the forest plots from the included studies for this report. In Figure A1.1-A1.4 each horizontal line in a forest plot shows the 95% confidence interval for effect size (Hedges' g) for a specific outcome, with the meta-analysed effect size represented by the diamond at the bottom of the figure. If the horizontal line crosses the vertical line, then that study finds no significant effect. The red dotted line intersects all confidence intervals horizontally. It's labelled the "Prediction interval" and indicates where true effects might lie if new studies were conducted under similar conditions.

The I² and Q statistics are measures of heterogeneity, the extent of variation in effect sizes between studies. Where there is substantial variation (as in Figure A1.1), then it is useful to conduct further analysis to understand the sources of that variation, which is presented in the subgroup analysis.

The forest plots show that loans and grants have a statistically significant but moderate effect on employment (g=0.14), skills (g=0.10) and material welfare (g=0.11) (Figure A1.1 &ff); However, there is low confidence in these findings because of concerns about the included studies and the small number of included studies for the business and material wellbeing outcomes.

The forest plots for all estimates are given in Figures A.1.1 to A.1.3. In the forest plot, each horizontal line is the 95% confidence interval for the effect from one study, with the point in the middle showing the estimated standard mean difference (i.e. the difference in means between treatment and control divided by the standard deviation of the outcome) as measured by Hedge's g.

Figure A1. 1: Effect of study-level effect of loans and grants on youth employment

Emplo	byment	Hedge's g	Weigh
Study		with 95% CI	(%)
Experimental			
Anderson (2022), consulting		03 [-0.12, 0.18]	3.52
Anderson (2022), insourcing	0.0	07 [-0.08, 0.22]	3.52
Anderson (2022), outsourcing	0.	11 [-0.04, 0.26]	3.52
Anderson (2022), training	0.0	05 [-0.10, 0.20]	3.52
Blattman (2014), WINGS	0.:	30 [0.17, 0.42]	3.74
Blattman (2014), assignment to 2 follow-ups		07 [-0.03, 0.16]	3.98
Blattman (2014), assignment to either treatment		44 [0.34, 0.53]	3.96
Blattman (2014), effect of group dynamics		02 [-0.07, 0.11]	3.98
Blattman (2014), marginal effect of 3-5 follow-ups		05 [-0.04, 0.14]	3.98
Blattman (2014) B, YOP cash transfer		28 [0.19, 0.37]	3.99
Blattman (2016), 2 visits		07 [-0.02, 0.17]	3.97
Blattman (2016), 5 visits	0.0	09 [-0.00, 0.18]	3.97
Blattman (2016), group training		40 [0.31, 0.49]	3.97
Blattman (2016), no group training		29 [0.19, 0.39]	3.92
Blattman (2018), received YOP grant	-0.4	08 [-0.16, 0.01]	4.00
Blattman (2019), job offer		03 [-0.07, 0.14]	3.88
Blattman (2019), start up	-0.	00 [-0.11, 0.11]	3.81
Brudevold-Newman (2017), grant treatment	0.0	09 [-0.06, 0.24]	3.52
McIntosh (2022), GiveDirectly	0.0	07 [-0.09, 0.23]	3.41
McIntosh (2022), GiveDirectly, combined	0.0	08 [-0.08, 0.25]	3.40
McIntosh (2022), GiveDirectly, large	0.	12 [-0.05, 0.29]	3.36
McIntosh (2022), GiveDirectly, lower	0.	13 [-0.03, 0.28]	3.48
McIntosh (2022), GiveDirectly, middle	0.	12 [-0.06, 0.30]	3.30
McIntosh (2022), GiveDirectly, upper	0.	10 [-0.08, 0.27]	3.29
McKenzie (2017) B, Grant, existing firms	0.:	32 [0.16, 0.49]	3.38
McKenzie (2017) B, Grant, new firms		70[0.57, 0.84]	3.65
Müller (2019), Youth Startup Business Grant Program	-0.0	04 [-0.13, 0.05]	3.99
Test of $\theta_i = \theta_j$: Q(26) = 235.23, p = 0.00	• 0.	14 [0.08, 0.21]	
Overall	• 0.	14 [0.08, 0.21]	
Heterogeneity: τ^2 = 0.03, I^2 = 88.27%, H^2 = 8.53			
Test of $\theta_i = \theta_j$: Q(26) = 235.23, p = 0.00			
Test of θ = 0: z = 4.31, p = 0.00			
Test of group differences: $Q_b(0) = 0.00$, p = .			
5	0.51		
andom-effects REML model			

Employment

Notes: CI = confidence interval; p = prob value. I^2 , H^2 , τ^2 , and Q are all measures of heterogeneity. Test of Θ =0 is a test that none of the effect sizes are significantly different from 0, and z the significance test for that statistic. See explanation of figure in the text.

Source: Authors' analysis

Figure A1. 2: Effect of study-level effect of loans and grants on youth employment by intervention design

Employment

Study	Hedge's g with 95% Cl	Weight (%)
multi-component		
Blattman (2014), WINGS	0.30 [0.17, 0.42]	3.74
Blattman (2014), assignment to 2 follow-ups	0.07 [-0.03, 0.16]	3.98
Blattman (2014), assignment to either treatment	0.44 [0.34, 0.53]	3.96
Blattman (2014), effect of group dynamics	0.02 [-0.07, 0.11]	3.98
Blattman (2014), marginal effect of 3-5 follow-ups	0.05 [-0.04, 0.14]	3.98
Blattman (2016), 2 visits	0.07 [-0.02, 0.17]	3.97
Blattman (2016), 5 visits	- 0.09 [-0.00, 0.18]	3.97
Blattman (2016), group training	0.40 [0.31, 0.49]	3.97
Blattman (2016), no group training	0.29 [0.19, 0.39]	3.92
Brudevold-Newman (2017), grant treatment	0.09 [-0.06, 0.24]	3.52
Müller (2019), Youth Startup Business Grant Program -	-0.04 [-0.13, 0.05]	3.99
Test of $\theta_i = \theta_j$: Q(10) = 114.20, p = 0.00	0.16 [0.06, 0.26]	
single		
Anderson (2022), consulting	- 0.03 [-0.12, 0.18]	3.52
Anderson (2022), insourcing	- 0.07 [-0.08, 0.22]	3.52
Anderson (2022), outsourcing	0.11 [-0.04, 0.26]	3.52
Anderson (2022), training	- 0.05 [-0.10, 0.20]	3.52
Blattman (2014) B, YOP cash transfer	0.28 [0.19, 0.37]	3.99
Blattman (2018), received YOP grant	-0.08 [-0.16, 0.01]	4.00
Blattman (2019), job offer	0.03 [-0.07, 0.14]	3.88
Blattman (2019), start up	-0.00 [-0.11, 0.11]	3.81
McIntosh (2022), GiveDirectly	- 0.07 [-0.09, 0.23]	3.41
McIntosh (2022), GiveDirectly, combined	- 0.08 [-0.08, 0.25]	3.40
McIntosh (2022), GiveDirectly, large	0.12 [-0.05, 0.29]	3.36
McIntosh (2022), GiveDirectly, lower	- 0.13 [-0.03, 0.28]	3.48
McIntosh (2022), GiveDirectly, middle	0.12 [-0.06, 0.30]	3.30
McIntosh (2022), GiveDirectly, upper	0.10 [-0.08, 0.27]	3.29
McKenzie (2017) B, Grant, existing firms	0.32 [0.16, 0.49]	3.38
McKenzie (2017) B, Grant, new firms	— <mark>—</mark> — 0.70 [0.57, 0.84]	3.65
Test of $\theta_i = \theta_j$: Q(15) = 119.32, p = 0.00	0.13 [0.04, 0.22]	
Overall	0.14 [0.08, 0.21]	
Heterogeneity: $\tau^2 = 0.03$, $I^2 = 88.27\%$, $H^2 = 8.53$		
Test of $\theta_i = \theta_j$: Q(26) = 235.23, p = 0.00		
Test of θ = 0: z = 4.31, p = 0.00		
Test of group differences: Q _b (1) = 0.16, p = 0.69		
5 0	.5 1	
Random-effects REML model		

Random-effects REML model *Source*: Authors' analysis

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Figure A1. 3: Effect of study-level effect of loans and grants on business performance

Business

Study	Hedge's g with 95% Cl	Weight (%)
Experimental		
Anderson (2022), consulting	-0.03 [-0.18, 0.12]	2.79
Anderson (2022), insourcing	0.11 [-0.04, 0.26]	2.79
Anderson (2022), outsourcing	0.09 [-0.06, 0.24]	2.79
Anderson (2022), training	0.07 [-0.08, 0.22]	2.79
Blattman (2014), WINGS	0.66 [0.48, 0.84]	2.51
Blattman (2014), Assigned to follow-up × Autonomy	0.01 [-0.14, 0.16]	2.77
Blattman (2014), Assigned to follow-up × Future orientation	-0.11 [-0.27, 0.04]	2.77
Blattman (2014), assigned to any follow-up	-0.01 [-0.16, 0.14]	2.77
Blattman (2014), assignment to 2 follow-ups	0.08 [-0.01, 0.17]	3.33
Blattman (2014), assignment to either treatment	0.11 [0.01, 0.22]	3.25
Blattman (2014), effect of group dynamics	0.12 [0.03, 0.21]	3.33
Blattman (2014), marginal effect of 3-5 follow-ups	-0.03 [-0.12, 0.07]	3.33
Blattman (2014) B, YOP cash transfer	0.37 [0.27, 0.46]	3.35
Blattman (2016), 2 visits	-0.01 [-0.10, 0.08]	3.33
Blattman (2016), 5 visits	0.03 [-0.06, 0.13]	3.33
Blattman (2016), group training	0.01 [-0.08, 0.11]	3.33
Blattman (2016), no group training	0.10 [-0.01, 0.20]	3.20
Blattman (2018), funded, did not train	0.16 [0.07, 0.25]	3.37
Blattman (2018), funded, trained, not practicing in 2012	0.14 [0.05, 0.23]	3.37
Blattman (2018), funded, trained, practicing in 2012	0.04 [-0.05, 0.13]	3.37
Blattman (2018), not funded	0.11 [0.02, 0.20]	3.37
Blattman (2018), received YOP grant	0.20 [0.11, 0.29]	3.37
Blattman (2018), treatment	-0.01 [-0.10, 0.08]	3.37
Brudevold-Newman (2017), grant treatment	0.03 [-0.12, 0.18]	2.78
Domenella (2021), Assigned Grants	0.12 [0.04, 0.20]	3.42
Domenella (2021), Assigned Grants and Any Form of BDS	0.06 [-0.03, 0.14]	3.37
Fiala (2014), grant	0.02 [-0.08, 0.13]	3.22
Fiala (2014), grant and training	0.03 [-0.07, 0.14]	3.22
Fiala (2014), Ioan	0.02 [-0.07, 0.12]	3.30
Fiala (2014), loan and training	0.03 [-0.07, 0.13]	3.24
McKenzie (2017) B, Grant, existing firms		2.81
McKenzie (2017) B, Grant, new firms	- 0.22 [0.05, 0.38]	2.67
Test of $\theta_i = \theta_j$: Q(31) = 161.67, p = 0.00	0.10 [0.05, 0.15]	
Overall 🔷	0.10 [0.05, 0.15]	
Heterogeneity: $\tau^2 = 0.02$, $I^2 = 85.21\%$, $H^2 = 6.76$		
Test of $\theta_i = \theta_j$: Q(31) = 161.67, p = 0.00		
Test of θ = 0: z = 3.93, p = 0.00		
Test of group differences: $Q_b(0) = -0.00$, p = .		
5 0	.5 1	

Random-effects REML model *Source*: Authors' analysis

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Figure A1.4: Effect of study-level effect of loans and grants on business performance by intervention design

Business

Study		Hedge's g with 95% Cl	Weight (%)
multi-component			
Blattman (2014), WINGS		0.66 [0.48, 0.84]	2.51
Blattman (2014), Assigned to follow-up × Autonomy		0.01 [-0.14, 0.16]	2.77
Blattman (2014), Assigned to follow-up × Future orientation		-0.11 [-0.27, 0.04]	2.77
Blattman (2014), assigned to any follow-up		-0.01 [-0.16, 0.14]	2.77
Blattman (2014), assignment to 2 follow-ups		0.08 [-0.01, 0.17]	3.33
Blattman (2014), assignment to either treatment		0.11 [0.01, 0.22]	3.25
Blattman (2014), effect of group dynamics		0.12 [0.03, 0.21]	3.33
Blattman (2014), marginal effect of 3-5 follow-ups	-	-0.03 [-0.12, 0.07]	3.33
Blattman (2016), 2 visits		-0.01 [-0.10, 0.08]	3.33
Blattman (2016), 5 visits		0.03 [-0.06, 0.13]	3.33
Blattman (2016), group training	-	0.01 [-0.08, 0.11]	3.33
Blattman (2016), no group training		0.10 [-0.01, 0.20]	3.20
Brudevold-Newman (2017), grant treatment		0.03 [-0.12, 0.18]	2.78
Domenella (2021), Assigned Grants		0.12 [0.04, 0.20]	3.42
Domenella (2021), Assigned Grants and Any Form of BDS		0.06 [-0.03, 0.14]	3.37
Fiala (2014), grant		0.02 [-0.08, 0.13]	3.22
Fiala (2014), grant and training	-	0.03 [-0.07, 0.14]	3.22
Fiala (2014), Ioan		0.02 [-0.07, 0.12]	3.30
Fiala (2014), loan and training	-	0.03 [-0.07, 0.13]	3.24
Test of $\theta_i = \theta_j$: Q(18) = 63.47, p = 0.00	•	0.06 [0.01, 0.12]	
single			
Anderson (2022), consulting		-0.03 [-0.18, 0.12]	2.79
Anderson (2022), insourcing		0.11 [-0.04, 0.26]	2.79
Anderson (2022), outsourcing		0.09 [-0.06, 0.24]	2.79
Anderson (2022), training		0.07 [-0.08, 0.22]	2.79
Blattman (2014) B, YOP cash transfer		0.37 [0.27, 0.46]	3.35
Blattman (2018), funded, did not train		0.16 [0.07, 0.25]	3.37
Blattman (2018), funded, trained, not practicing in 2012		0.14 [0.05, 0.23]	3.37
Blattman (2018), funded, trained, practicing in 2012		0.04 [-0.05, 0.13]	3.37
Blattman (2018), not funded		0.11 [0.02, 0.20]	3.37
Blattman (2018), received YOP grant		0.20 [0.11, 0.29]	3.37
Blattman (2018), treatment		-0.01 [-0.10, 0.08]	3.37
McKenzie (2017) B, Grant, existing firms		0.53 [0.38, 0.68]	2.81
McKenzie (2017) B, Grant, new firms		0.22 [0.05, 0.38]	2.67
Test of $\theta_i = \theta_j$: Q(12) = 75.78, p = 0.00	•	0.15 [0.07, 0.23]	
Overall	•	0.10 [0.05, 0.15]	
Heterogeneity: $\tau^2 = 0.02$, $I^2 = 85.21\%$, $H^2 = 6.76$			
Test of $\theta_i = \theta_j$: Q(31) = 161.67, p = 0.00			
Test of θ = 0: z = 3.93, p = 0.00			
Test of group differences: $Q_b(1) = 3.30$, p = 0.07			
-	5 0 .5	1	

Random-effects REML model *Source*: Authors' analysis

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Figure A1.5: Effect of study-level effect of loans and grants on income (wages and earnings)

Income

111	come		
Study		Hedge's g with 95% Cl	Weight (%)
Experimental			. ,
Blattman (2014), WINGS	_	-0.08 [-0.24, 0.08]	3.55
Blattman (2014), Assigned to follow-up × Autonomy		-0.01 [-0.16, 0.14]	3.66
Blattman (2014), Assigned to follow-up × Future orientation		0.04 [-0.11, 0.20]	3.66
Blattman (2014), assigned to any follow-up		0.16 [0.01, 0.30]	3.86
Blattman (2014), assignment to 2 follow-ups		0.00 [-0.09, 0.09]	5.04
Blattman (2014), assignment to either treatment		0.03 [-0.06, 0.12]	5.04
Blattman (2014), effect of group dynamics		0.01 [-0.09, 0.10]	5.04
Blattman (2014), marginal effect of 3-5 follow-ups		0.03 [-0.07, 0.12]	5.04
Blattman (2014) B, YOP cash transfer		0.10 [0.01, 0.19]	5.11
Blattman (2016), 2 visits		0.08 [-0.01, 0.18]	5.03
Blattman (2016), 5 visits		0.11 [0.02, 0.21]	5.02
Blattman (2016), group training		0.18 [0.09, 0.27]	5.04
Blattman (2016), no group training		0.16 [0.07, 0.26]	5.04
Blattman (2018), received YOP grant		0.21 [0.12, 0.30]	5.14
Blattman (2019), job offer		0.08 [-0.01, 0.18]	4.98
Blattman (2019), start up		0.02 [-0.08, 0.12]	4.82
Brudevold-Newman (2017), grant treatment		0.08 [-0.05, 0.22]	4.03
Domenella (2021), Assigned Grants		- 0.30 [0.22, 0.38]	5.32
Domenella (2021), Assigned Grants and Any Form of BDS		— 0.32 [0.24, 0.40]	5.32
McIntosh (2022), GiveDirectly		0.02 [-0.14, 0.19]	3.42
McIntosh (2022), GiveDirectly, combined		0.01 [-0.16, 0.17]	3.42
McIntosh (2022), GiveDirectly, large		0.04 [-0.13, 0.20]	3.42
Test of $\theta_i = \theta_j$: Q(21) = 86.69, p = 0.00	•	0.09 [0.05, 0.14]	
Overall	•	0.09 [0.05, 0.14]	
Heterogeneity: $\tau^2 = 0.01$, $I^2 = 73.36\%$, $H^2 = 3.75$			
Test of $\theta_i = \theta_j$: Q(21) = 86.69, p = 0.00			
Test of θ = 0: z = 4.19, p = 0.00			
Test of group differences: $Q_{\rm b}(0)$ = -0.00, p = .			
	2 0 .2	.4	
Random-effects REML model			

Source: Authors' analysis

Figure A1.6: Effect of study-level effect of loans and grants on income (wages and earnings) by intervention design

Income		
Study	Hedge's g with 95% Cl	Weigh (%)
multi-component		(70)
Blattman (2014), WINGS	-0.08 [-0.24, 0.08]	3.55
Blattman (2014), Assigned to follow-up × Autonomy	-0.01 [-0.16, 0.14]	3.66
Blattman (2014), Assigned to follow-up × Future orientation	0.04 [-0.11, 0.20]	3.66
Blattman (2014), assigned to any follow-up	0.16 [0.01, 0.30]	3.86
Blattman (2014), assignment to 2 follow-ups	- 0.00 [-0.09, 0.09]	5.04
Blattman (2014), assignment to either treatment	0.03 [-0.06, 0.12]	5.04
Blattman (2014), effect of group dynamics		5.04
Blattman (2014), marginal effect of 3-5 follow-ups	0.03 [-0.07, 0.12]	5.04
Blattman (2016), 2 visits	0.08 [-0.01, 0.18]	5.03
Blattman (2016), 5 visits	0.11 [0.02, 0.21]	5.02
Blattman (2016), group training	0.18 [0.09, 0.27]	5.04
Blattman (2016), no group training	0.16 [0.07, 0.26]	5.04
Brudevold-Newman (2017), grant treatment	0.08 [-0.05, 0.22]	4.03
Domenella (2021), Assigned Grants	0.30 [0.22, 0.38]	5.32
Domenella (2021), Assigned Grants and Any Form of BDS		5.32
Test of $\theta_i = \theta_j$: Q(14) = 75.04, p = 0.00	0.10 [0.04, 0.16]	
single		
Blattman (2014) B, YOP cash transfer -	0.10 [0.01, 0.19]	5.11
Blattman (2018), received YOP grant	0.21 [0.12, 0.30]	5.14
Blattman (2019), job offer	0.08 [-0.01, 0.18]	4.98
Blattman (2019), start up	0.02 [-0.08, 0.12]	4.82
McIntosh (2022), GiveDirectly	0.02 [-0.14, 0.19]	3.42
McIntosh (2022), GiveDirectly, combined	0.01 [-0.16, 0.17]	3.42
McIntosh (2022), GiveDirectly, large	0.04 [-0.13, 0.20]	3.42
Test of $\theta_i = \theta_j$: Q(6) = 10.57, p = 0.10	0.08 [0.02, 0.14]	
Overall	• 0.09 [0.05, 0.14]	
Heterogeneity: $r^2 = 0.01$, $I^2 = 73.36\%$, $H^2 = 3.75$		
Test of $\theta_i = \theta_j$: Q(21) = 86.69, p = 0.00		
Test of θ = 0: z = 4.19, p = 0.00		
Test of group differences: $Q_b(1) = 0.17$, p = 0.68		
2 0	.2 .4	

Source: Authors' analysis

Figure A1.7: Effect of study-level effect of loans and grants on material welfare outcomes

Study		Hedge's g with 95% CI	Weight (%)
Experimental			
Blattman (2014), WINGS		0.33 [0.15, 0.50]	2.56
Blattman (2014), Assigned to follow-up × Autonomy	_	-0.04 [-0.19, 0.12]	2.85
Blattman (2014), Assigned to follow-up × Future orientation	_	0.24 [0.09, 0.40]	2.84
Blattman (2014), assigned to any follow-up		-0.04 [-0.15, 0.08]	3.37
Blattman (2014), assignment to 2 follow-ups		0.07 [-0.02, 0.16]	3.64
Blattman (2014), assignment to either treatment		0.44 [0.35, 0.53]	3.62
Blattman (2014), effect of group dynamics		0.11 [0.02, 0.20]	3.63
Blattman (2014), marginal effect of 3-5 follow-ups		0.03 [-0.06, 0.12]	3.64
Blattman (2014), treatment, added impact of group dynamics component		0.01 [-0.15, 0.16]	2.84
Blattman (2014) B, YOP cash transfer		0.12 [0.03, 0.20]	3.68
Blattman (2016), 2 visits		0.01 [-0.09, 0.10]	3.63
Blattman (2016), 5 visits		0.02 [-0.07, 0.11]	3.63
Blattman (2016), group training	_	0.30 [0.21, 0.39]	3.63
Blattman (2016), no group training		0.28 [0.19, 0.37]	3.63
Blattman (2018), received YOP grant		0.09 [-0.00, 0.17]	3.68
Blattman (2019), job offer		-0.00 [-0.13, 0.13]	3.11
Blattman (2019), start up		0.04 [-0.09, 0.18]	3.11
Calderone (2017), YOP treatment		0.05 [-0.04, 0.14]	3.68
Domenella (2021), Assigned Grants		0.19 [0.10, 0.29]	3.59
Domenella (2021), Assigned Grants and Any Form of BDS		0.21 [0.11, 0.30]	3.58
Fiala (2014), grant		-0.01 [-0.14, 0.12]	3.19
Fiala (2014), grant and training		-0.01 [-0.13, 0.12]	3.19
Fiala (2014), loan		0.02 [-0.11, 0.15]	3.11
Fiala (2014), loan and training		0.00 [-0.12, 0.13]	3.19
McIntosh (2022), GiveDirectly	T	0.16 [-0.01, 0.32]	2.70
McIntosh (2022), GiveDirectly, combined		0.17 [0.00, 0.33]	2.68
McIntosh (2022), GiveDirectly, large		0.12 [-0.05, 0.29]	2.63
McIntosh (2022), GiveDirectly, lower		0.12 [-0.05, 0.28]	2.68
McIntosh (2022), GiveDirectly, middle		0.16 [-0.02, 0.33]	2.55
McIntosh (2022), GiveDirectly, upper		0.21 [0.03, 0.38]	2.54
Müller (2019), Youth Startup Business Grant Program		-0.02 [-0.12, 0.07]	3.60
Test of $\theta_1 = \theta_2$: Q(30) = 143.08, p = 0.00	•	0.11 [0.06, 0.15]	
Overall	•	0.11 [0.06, 0.15]	
Heterogeneity: $\tau^2 = 0.01$, $I^2 = 77.69\%$, $H^2 = 4.48$			
Test of $\theta_i = \theta_j$: Q(30) = 143.08, p = 0.00			
Test of θ = 0: z = 4.78, p = 0.00			
Test of group differences: $Q_b(0) = -0.00$, p = .		7	
Random-effects REML model	2 0 .2 .4	6	

Source: Authors' analysis

Figure A1. 8: Effect of study-level effect of loans and grants on material welfare outcomes by intervention design

Material we	libeing		
Study		Hedge's g with 95% CI	Weight (%)
multi-component			(70)
Blattman (2014), WINGS		0.33 [0.15, 0.50]	2.56
Blattman (2014), Assigned to follow-up × Autonomy		-0.04 [-0.19, 0.12]	2.85
Blattman (2014), Assigned to follow-up × Future orientation		0.24 [0.09, 0.40]	
Blattman (2014), assigned to any follow-up		-0.04 [-0.15, 0.08]	3.37
Blattman (2014), assignment to 2 follow-ups		0.07 [-0.02, 0.16]	3.64
Blattman (2014), assignment to either treatment		0.44 [0.35, 0.53]	3.62
Blattman (2014), effect of group dynamics		0.11 [0.02, 0.20]	3.63
Blattman (2014), marginal effect of 3-5 follow-ups		0.03 [-0.06, 0.12]	3.64
Blattman (2014), treatment, added impact of group dynamics component		0.01 [-0.15, 0.16]	2.84
Blattman (2014), a visits		0.01 [-0.09, 0.10]	3.63
Blattman (2016), 5 visits		0.02 [-0.07, 0.11]	3.63
Blattman (2016), group training		0.30 [0.21, 0.39]	3.63
Blattman (2016), no group training		0.28 [0.19, 0.37]	3.63
Domenella (2021), Assigned Grants		0.19 [0.10, 0.29]	3.59
Domenella (2021), Assigned Grants and Any Form of BDS		0.21 [0.11, 0.30]	3.58
Fiala (2014), grant		-0.01 [-0.14, 0.12]	3.19
Fiala (2014), grant and training		-0.01 [-0.13, 0.12]	3.19
Fiala (2014), Ioan		0.02 [-0.11, 0.15]	3.11
Fiala (2014), loan and training		0.00 [-0.12, 0.13]	3.19
Müller (2019), Youth Startup Business Grant Program		-0.02 [-0.12, 0.07]	3.60
Test of $\theta_i = \theta_j$: Q(19) = 134.75, p = 0.00		0.11 [0.04, 0.17]	
single			
Blattman (2014) B, YOP cash transfer		0.12 [0.03, 0.20]	3.68
Blattman (2018), received YOP grant		0.09 [-0.00, 0.17]	3.68
Blattman (2019), job offer		-0.00 [-0.13, 0.13]	3.11
Blattman (2019), start up		0.04 [-0.09, 0.18]	3.11
Calderone (2017), YOP treatment		0.05 [-0.04, 0.14]	3.68
McIntosh (2022), GiveDirectly		0.16 [-0.01, 0.32]	2.70
McIntosh (2022), GiveDirectly, combined		0.17 [0.00, 0.33]	2.68
McIntosh (2022), GiveDirectly, large		0.12 [-0.05, 0.29]	2.63
McIntosh (2022), GiveDirectly, lower		0.12 [-0.05, 0.28]	2.68
McIntosh (2022), GiveDirectly, middle		0.16 [-0.02, 0.33]	2.55
McIntosh (2022), GiveDirectly, upper		0.21 [0.03, 0.38]	2.54
Test of $\theta_i = \theta_j$: Q(10) = 7.36, p = 0.69	•	0.09 [0.06, 0.13]	
Overall	•	0.11 [0.06, 0.15]	
Heterogeneity: $\tau^2 = 0.01$, $I^2 = 77.69\%$, $H^2 = 4.48$		-	
Test of $\theta_i = \theta_i$: Q(30) = 143.08, p = 0.00			
Test of $\theta = 0$: z = 4.78, p = 0.00			
Test of group differences: $Q_b(1) = 0.13$, p = 0.71			
$1000 \text{ or group unificiences. } \mathbf{w}_{0}(1) = 0.10, p = 0.71$			
	2 0 .2 .4	.6	

Material wellbeing

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Notes: CI = confidence interval; p = prob value. I^2 , H^2 , τ^2 , and Q are all measures of heterogeneity. Test of Θ =0 is a test that none of the effect sizes are significantly different from 0, and z the significance test for that statistic. See explanation of figure in the text

Random-effects REML model *Source*: Authors' analysis

Figure A1.9: Effect of study-level effect of loans and grants on psychological outcomes

Study		Hedge's g with 95% Cl	Weight (%)
Experimental			
Blattman (2014), WINGS		0.09 [-0.05, 0.23]	5.68
Blattman (2014), treatment, added impact of group dynamics component		— 0.19 [0.02, 0.36]	4.59
Blattman (2014) B, YOP cash transfer		0.06 [-0.03, 0.15]	7.55
Blattman (2016), group training		-0.11 [-0.20, -0.02]	7.45
Blattman (2016), no group training		-0.12 [-0.21, -0.03]	7.45
Blattman (2018), received YOP grant		0.02 [-0.07, 0.11]	7.69
Blattman (2019), job offer		0.06 [-0.07, 0.19]	6.02
Blattman (2019), start up		0.03 [-0.08, 0.13]	6.91
Domenella (2021), Assigned Grants	-	0.06 [-0.02, 0.15]	7.76
Domenella (2021), Assigned Grants and Any Form of BDS		0.07 [-0.02, 0.15]	7.76
McIntosh (2022), GiveDirectly, combined	_	0.21 [0.05, 0.38]	4.68
McIntosh (2022), GiveDirectly, large		— 0.18 [0.00, 0.35]	4.51
McIntosh (2022), GiveDirectly, lower		0.13 [-0.02, 0.28]	5.18
McIntosh (2022), GiveDirectly, middle		— 0.18 [0.01, 0.36]	4.43
McIntosh (2022), GiveDirectly, upper		— 0.19 [0.01, 0.36]	4.45
Müller (2019), Youth Startup Business Grant Program		-0.05 [-0.13, 0.03]	7.89
Test of $\theta_i = \theta_j$: Q(15) = 43.04, p = 0.00	•	0.06 [0.01, 0.11]	
Overall	•	0.06 [0.01, 0.11]	
Heterogeneity: $\tau^2 = 0.01$, $I^2 = 66.95\%$, $H^2 = 3.03$			
Test of $\theta_i = \theta_j$: Q(15) = 43.04, p = 0.00			
Test of θ = 0: z = 2.19, p = 0.03			
Test of group differences: $Q_b(0) = -0.00$, p = .	2 0 .2	.4	
Random-effects REML model			

Psychological

Random-effects REML model *Source*: Authors' analysis

Figure A1. 10: Effect of study-level effect of loans and grants on psychological outcomes by intervention design

Psycholog	lical		
Study		Hedge's g with 95% Cl	Weigh (%)
multi-component			. ,
Blattman (2014), WINGS		0.09 [-0.05, 0.23]	5.68
Blattman (2014), treatment, added impact of group dynamics component		0.19 [0.02, 0.36]	4.59
Blattman (2016), group training		-0.11 [-0.20, -0.02]	7.45
Blattman (2016), no group training		-0.12 [-0.21, -0.03]	7.45
Domenella (2021), Assigned Grants		0.06 [-0.02, 0.15]	7.76
Domenella (2021), Assigned Grants and Any Form of BDS		0.07 [-0.02, 0.15]	7.76
Müller (2019), Youth Startup Business Grant Program		-0.05 [-0.13, 0.03]	7.89
Test of $\theta_i = \theta_j$: Q(6) = 23.77, p = 0.00	-	0.01 [-0.07, 0.09]	
single			
Blattman (2014) B, YOP cash transfer		0.06 [-0.03, 0.15]	7.55
Blattman (2018), received YOP grant		0.02 [-0.07, 0.11]	7.69
Blattman (2019), job offer		0.06 [-0.07, 0.19]	6.02
Blattman (2019), start up		0.03 [-0.08, 0.13]	6.91
McIntosh (2022), GiveDirectly, combined	· · · · · · · · · · · · · · · · · · ·	0.21 [0.05, 0.38]	4.68
McIntosh (2022), GiveDirectly, large	_	0.18 [0.00, 0.35]	4.51
McIntosh (2022), GiveDirectly, lower		0.13 [-0.02, 0.28]	5.18
McIntosh (2022), GiveDirectly, middle		0.18 [0.01, 0.36]	4.43
McIntosh (2022), GiveDirectly, upper		0.19 [0.01, 0.36]	4.45
Test of $\theta_i = \theta_j$: Q(8) = 9.73, p = 0.28	•	0.09 [0.04, 0.13]	
Overall	•	0.06 [0.01, 0.11]	
Heterogeneity: $\tau^2 = 0.01$, $I^2 = 66.95\%$, $H^2 = 3.03$			
Test of $\theta_i = \theta_j$: Q(15) = 43.04, p = 0.00			
Test of θ = 0: z = 2.19, p = 0.03			
Test of group differences: $Q_b(1) = 2.89$, p = 0.09	· · · · · · · · · · · · · · · · · · ·		
	2 0 .2	.4	
Random-effects REML model			

Psvchological

Random-effects REML model

Source: Authors' analysis

Figure A1.11: Effect of study-level effect of loans and grants on skills

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Sk	iΠ	le
UN N	ш	13

Study	Hedge's g with 95% CI	Weight (%)
Experimental		
Anderson (2022), consulting	0.14 [-0.01, 0.29]	3.91
Anderson (2022), insourcing	0.12 [-0.03, 0.27]	3.96
Anderson (2022), outsourcing	0.18 [0.03, 0.33]	3.94
Anderson (2022), training	0.14 [-0.01, 0.29]	3.91
Blattman (2014), assignment to 2 follow-ups	-0.01 [-0.10, 0.08]	5.54
Blattman (2014), assignment to either treatment	0.25 [0.16, 0.34]	5.53
Blattman (2014), effect of group dynamics	0.05 [-0.05, 0.14]	5.54
Blattman (2014), marginal effect of 3-5 follow-ups	0.02 [-0.07, 0.11]	5.54
Blattman (2014), treatment, added impact of group dynamics component	0.00 [-0.13, 0.14]	4.32
Blattman (2014) B, YOP cash transfer	0.09 [0.00, 0.18]	5.68
Blattman (2018), received YOP grant	0.22 [0.11, 0.34]	4.93
Brudevold-Newman (2017), grant treatment	0.05 [-0.10, 0.20]	3.97
Domenella (2021), Assigned Grants	0.05 [-0.02, 0.13]	6.14
Domenella (2021), Assigned Grants and Any Form of BDS	0.05 [-0.02, 0.13]	6.14
McIntosh (2022), GiveDirectly, combined	0.14 [-0.03, 0.31]	3.56
McIntosh (2022), GiveDirectly, large	0.05 [-0.12, 0.22]	3.43
McIntosh (2022), GiveDirectly, lower	0.12 [-0.04, 0.28]	3.69
McIntosh (2022), GiveDirectly, middle	0.06 [-0.11, 0.24]	3.35
McIntosh (2022), GiveDirectly, upper	0.06 [-0.12, 0.24]	3.36
McKenzie (2017) B, Grant, existing firms	0.33 [0.17, 0.49]	3.66
McKenzie (2017) B, Grant, new firms	0.31 [0.17, 0.46]	4.04
Müller (2019), Youth Startup Business Grant Program	-0.07 [-0.15, 0.01]	5.85
Test of $\theta_i = \theta_j$: Q(21) = 62.59, p = 0.00	0.10 [0.06, 0.14]	
Overall 🔶	0.10 [0.06, 0.14]	
Heterogeneity: $\tau^2 = 0.01$, $I^2 = 66.90\%$, $H^2 = 3.02$		
Test of $\theta_i = \theta_j$: Q(21) = 62.59, p = 0.00		
Test of θ = 0: z = 4.53, p = 0.00		
Test of group differences: $Q_b(0) = 0.00$, p = .	4 .6	
Random-effects REML model		

Source: Authors' analysis

Figure A1. 13: Effect of study-level effect of loans and grants on skills by intervention design

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Study		Hedge's g with 95% CI	Weight (%)
multi-component			
Blattman (2014), assignment to 2 follow-ups		-0.01 [-0.10, 0.08]	5.54
Blattman (2014), assignment to either treatment		0.25 [0.16, 0.34]	5.53
Blattman (2014), effect of group dynamics		0.05 [-0.05, 0.14]	5.54
Blattman (2014), marginal effect of 3-5 follow-ups		0.02 [-0.07, 0.11]	5.54
Blattman (2014), treatment, added impact of group dynamics component		0.00 [-0.13, 0.14]	4.32
Brudevold-Newman (2017), grant treatment	·	0.05 [-0.10, 0.20]	3.97
Domenella (2021), Assigned Grants	+	0.05 [-0.02, 0.13]	6.14
Domenella (2021), Assigned Grants and Any Form of BDS	-	0.05 [-0.02, 0.13]	6.14
Müller (2019), Youth Startup Business Grant Program		-0.07 [-0.15, 0.01]	5.85
Test of $\theta_i = \theta_j$: Q(8) = 28.28, p = 0.00	•	0.05 [-0.01, 0.10]	
single			
Anderson (2022), consulting		0.14 [-0.01, 0.29]	3.91
Anderson (2022), insourcing		0.12 [-0.03, 0.27]	3.96
Anderson (2022), outsourcing		0.18 [0.03, 0.33]	3.94
Anderson (2022), training	_	0.14 [-0.01, 0.29]	3.91
Blattman (2014) B, YOP cash transfer		0.09 [0.00, 0.18]	5.68
Blattman (2018), received YOP grant		0.22 [0.11, 0.34]	4.93
McIntosh (2022), GiveDirectly, combined		0.14 [-0.03, 0.31]	3.56
McIntosh (2022), GiveDirectly, large		0.05 [-0.12, 0.22]	3.43
McIntosh (2022), GiveDirectly, lower		0.12 [-0.04, 0.28]	3.69
McIntosh (2022), GiveDirectly, middle		0.06 [-0.11, 0.24]	3.35
McIntosh (2022), GiveDirectly, upper		0.06 [-0.12, 0.24]	3.36
McKenzie (2017) B, Grant, existing firms		0.33 [0.17, 0.49]	3.66
McKenzie (2017) B, Grant, new firms	_	0.31 [0.17, 0.46]	4.04
Test of $\theta_i = \theta_j$: Q(12) = 16.43, p = 0.17	•	0.15 [0.11, 0.20]	
Overall	•	0.10 [0.06, 0.14]	
Heterogeneity: $\tau^2 = 0.01$, $I^2 = 66.90\%$, $H^2 = 3.02$			
Test of $\theta_i = \theta_j$: Q(21) = 62.59, p = 0.00			
Test of θ = 0: z = 4.53, p = 0.00			
Test of group differences: $Q_b(1) = 7.95$, p = 0.00	r	·	
	2 0 .2 .	4 .6	
Random-effects REML model			

Source: Authors' analysis

Annex 2 Calculation of meaningful effect sizes

The SMD can be converted to an odds ratio (OR) using the formula $lnOR = \frac{g \pi}{\sqrt{3}}$ (Borenstein et al., 2009). Using the OR, a 2x2 table can be created, for which we need an assumption of the share of the control group gaining employment. We assume 50%, which is a commonly observed value in the dataset. We also need to assume the sample size for treatment and control, though the result is not sensitive to that assumption. We assume 100 in each group. With g=0.14 OR=1.29 this gives the 2x2 table:

Table A2.1: 2x2 table to calculate the percentage change in employment

	Employed	Unemployed	Total
Treatment	56.3	43.7	100
Control	50	50	100
The number needed to treat is calculat	ted as the number		absolute
Absolute % change difference in employment between tre	eatment and contro	6.3 ol groups.	
% change (cf comparison rate)		12.6%	
Number need to treat		16	

Annex 3 Critical appraisal

Critical appraisal assesses the confidence in study findings, which can be classified as high, medium, or low. The critical appraisal results—taken from the EGM—inform our overall confidence in the findings reported in the technical report.

Studies	Confidence	Study Design
Blattman et al., 2011	Medium	Impact
Blattman et al., 2013	Low	Impact
Blattman et al., 2014	Medium	Impact
Blattman et al., 2016	Medium	Impact
Blattman et al., 2018	Medium	Impact
Blattman et al., 2019	High	Impact
Brudevold-Newman et al., 2017	High	Impact
Bukenya, 2019	Medium	Impact
Domenella et al., 2021	High	Impact
Fiala, 2014	High	Impact
Franklin, 2016	Medium	Impact
McIntosh, 2022	High	Impact
McKenzie, 2017	High	Impact
Karuga, 2012	High	Process
Kimote, 2023	High	Process
Kundi, 2015	Medium	Process
World Bank, 2023	High	Process

Table A3.1: Critical appraisal of included studies

Table A3.2: Threshold values for critical appraisal

		No. of included studies for effect estimate		
	-	5 or less	6-9	10 or more
Study assessment	Mainly Low	Low	Low	Low
assessment	Medium	Low	Medium	Medum
	Mainly High	Low	Medium	High

Mainly low = At least 60% of studies are rated low

Mainly high = At least 60% of studies are rated high

Medium = any estimate not covered by the above two categories Adjustment for heterogeneity: reduce by one level if $I^2 > 80\%$

Application to this report

Reported effect sizes are from 13 studies (impact evaluations), though effects other than employment are from fewer studies. Six impact evaluation studies are rated "high confidence", six are rated "medium", and one is rated "low confidence". So, the study assessment is "mainly medium and high". Hence, there is medium confidence in our effect estimate because of the medium and high confidence rating of the included studies.

The confidence in qualitative findings is from two process evaluation studies, with one rated as "high" and one rated as "medium," so the overall confidence is medium.