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EnterpRISING WOMEN: A DECADE OF LEARNING FROM ETHIOPIA'S WOMEN ENTREPRENEURSHIP DEVELOPMENT PROJECT (WEDP)

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Over the past ten years, Ethiopia has reshaped the landscape for supporting women entrepreneurs. Beginning in 2012 the first ever women-entrepreneur focused line of credit was established through the [Women Entrepreneurship Development Project \(WEDP\)](#).¹

WEDP provides finance and business training for growth-oriented urban women entrepreneurs in Ethiopia with an aim to boost business earnings and employment.

Over the ten years since inception, WEDP has expanded to operate across 18 Ethiopian cities, registering 60,000 women entrepreneurs into the program. As of February 2024, WEDP has provided more than 25,000 loans, and business training to over 30,000 women entrepreneurs.

WEDP has also contributed to a wealth of learning and innovation, including research in partnership with the World Bank's Gender Innovation Lab (GIL)², and the Innovations in Financing Women Entrepreneurs (IFWE) project supported by Global Affairs Canada (GAC). In this brief we highlight key results from impact evaluations that were embedded into the WEDP operation and provide details of some of the innovations being tested.

This Results Brief is a product of the World Bank Africa Gender Innovation Lab (GIL) and Finance, Competitiveness and Innovation (FCI) Global Practice. The authors would like to thank Global Affairs Canada (GAC) and the World Bank's Umbrella Facility for Gender Equality (UFGE) for funding. We thank the Ethiopian Entrepreneurship Development Institute (EDI), the Development Bank of Ethiopia (DBE), Yohannes Solomon, Tsedey Asheber, Yemsrach Kinfe, Tewodros Tassew, Mengistu Bessir, Salman Alibhai, Francesco Strobbe, Rachel Coleman, Kenno Itana, Assefa Abba and Abraham Hailemariam for their contributions to WEDP over the years. We also thank Sakina Shibuya and Rajdev Brar for excellent research assistance and numerous partners who supported the research in Ethiopia. The Gender Innovation Lab (GIL) conducts impact evaluations of development interventions in Sub-Saharan Africa, seeking to generate evidence on how to close gender gaps in earnings, productivity, assets, and agency. The impact objective of GIL is increasing take-up of effective policies by governments, development organizations, and the private sector to address the underlying causes of gender inequality in Africa, particularly in terms of women's economic and social empowerment. The Lab aims to do this by producing and delivering a new body of evidence and developing a compelling narrative, geared towards policymakers, on what works and what does not work in promoting gender equality.

¹ <https://projects.worldbank.org/en/projects-operations/project-detail/P122764>

² <https://www.worldbank.org/en/programs/africa-gender-innovation-lab>

MOTIVATION

Growth-oriented women-owned enterprises in Ethiopia face several skills and capital constraints, and often lack the sort of financing they need to thrive.³ Many women entrepreneurs fall into the so-called “missing middle” trap, whereby their financing needs are not met by commercial banks nor by microfinance institutions. High minimum loan sizes and collateral requirements restrict women’s access to loans from commercial banks; and microfinance institutions (MFIs) primarily cater to micro-firms with group lending schemes that provide smaller-sized loans. There are many entrepreneurs who want to grow their businesses but cannot because they lack sufficient collateral. Even for those with collateral, some are not able to get large enough loans for the investments they desire. These are potentially missed opportunities to enable the growth of women-owned enterprises.

HOW WEDP WORKS

WEDP was designed to address both financial and human capital constraints faced by women entrepreneurs in Ethiopia. WEDP’s line of credit involves a market “up-scaling” operation where the **Development Bank of Ethiopia (DBE)** acts as a wholesale lender and MFIs and banks act as retailers offering larger, individual loans. Women entrepreneurs register for WEDP through government-operated one-stop-shops (OSS) located in targeted Ethiopian cities. WEDP registered firms can then apply for loans through MFIs and banks and/or take business trainings across multiple training institutions.

Women apply for individual **loans** for investment through MFIs and banks supported by WEDP, and/or entrepreneurship training through several **training** providers.

WHO ARE WEDP CLIENTS?

Women entrepreneurs who register with WEDP are “growth-oriented” entrepreneurs typically in their thirties and forties (average age of 34), 62% are married, 80% have children, and the majority (78%) have completed secondary education or higher. Women entrepreneurs need to have a business license and be in operation for at least one year to register for the WEDP project. Firms have an average of 2-3 employees and the most common business sectors include: retail (49%), café/restaurant (16%), beauty salon (5%) and wholesale (5%).



“You can get loans for small businesses, but it is hard to get a larger amount.”

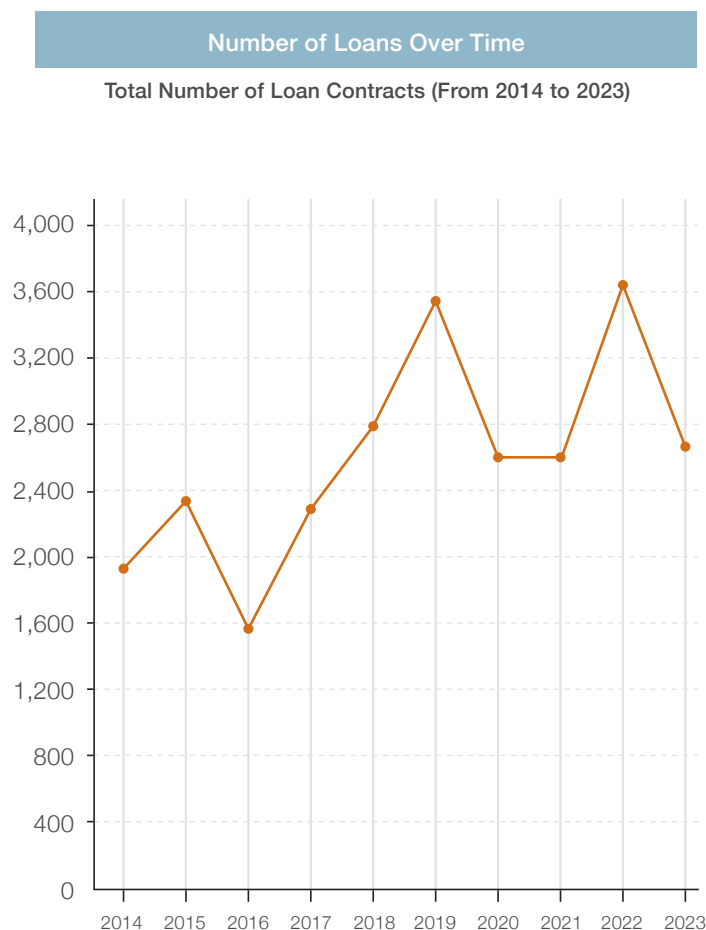
- Owner of a women’s clothing shop who applied for a 500,000 Birr WEDP loan

WEDP NUMBER OF BENEFICIARIES

As of February 2024, a total of 25,758 loans have been issued to WEDP entrepreneurs, of which 32% went to repeat borrowers (i.e. firms that borrowed more than one WEDP loan from 2014-2023); and 30,337 firms have taken a business training (15% of entrepreneurs have taken more than one business training).

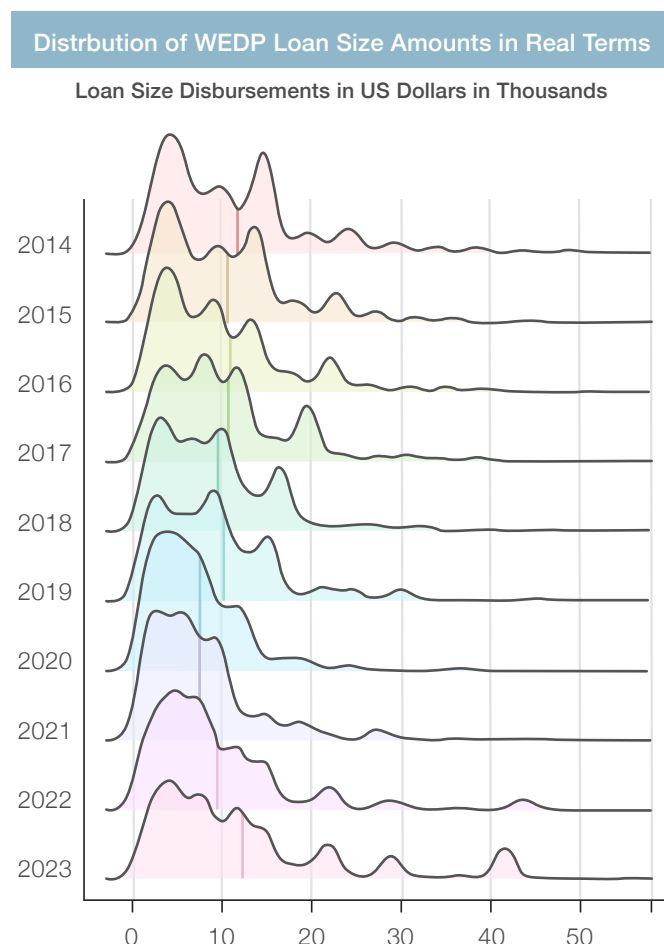
FIGURE 1: LOAN COUNTS AND LOAN SIZES PER YEAR OF WEDP OPERATION (2014 TO 2023)

PANEL A



Notes: Number of loan contracts sourced from WEDP Management Information System (MIS) downloaded February 2024. Data is presented for each year from 2014 to 2023. Data shows the number of WEDP loans reported by MFIs and banks for each year of operation.

PANEL B



Notes: Loan disbursement data sourced from WEDP Management Information System (MIS) downloaded February 2024. Data is presented for each year from 2014 to 2023. Amounts are inflation adjusted and converted from Ethiopian Birr to US Dollars using CPI and exchange rate data from <https://data.worldbank.org>. Vertical line shows the mean loan amount per WEDP loan for each year.

Figure 1 presents data from the WEDP Management Information System (MIS) which links the realtime information from OSS registration databases with loan and training information reported by MFIs and training institutes. In Panel A, we show the number of WEDP loans distributed per year where every year the WEDP MFIs and banks disbursed on average 2,500 loans to female business owners. In Panel B, we show the distribution of loan sizes in real dollar terms per year and the vertical line presents the average loan size indicating approximately \$10,000 per borrower every year. This loan size was remarkably consistent over the ten years of WEDP's

operation despite large exchange rate fluctuations. The slight reduction in loan sizes seen during COVID-19 and a conflict has since returned to pre-COVID levels.⁴ The majority of WEDP clients are new borrowers with 66% of clients never taking a business loan prior to the program. WEDP loan sizes are an increase of approximately 8x times over pre-WEDP borrowing.⁵ WEDP disbursed \$250 million USD in loans to female entrepreneurs as of February 2024 with extremely healthy repayment rates.

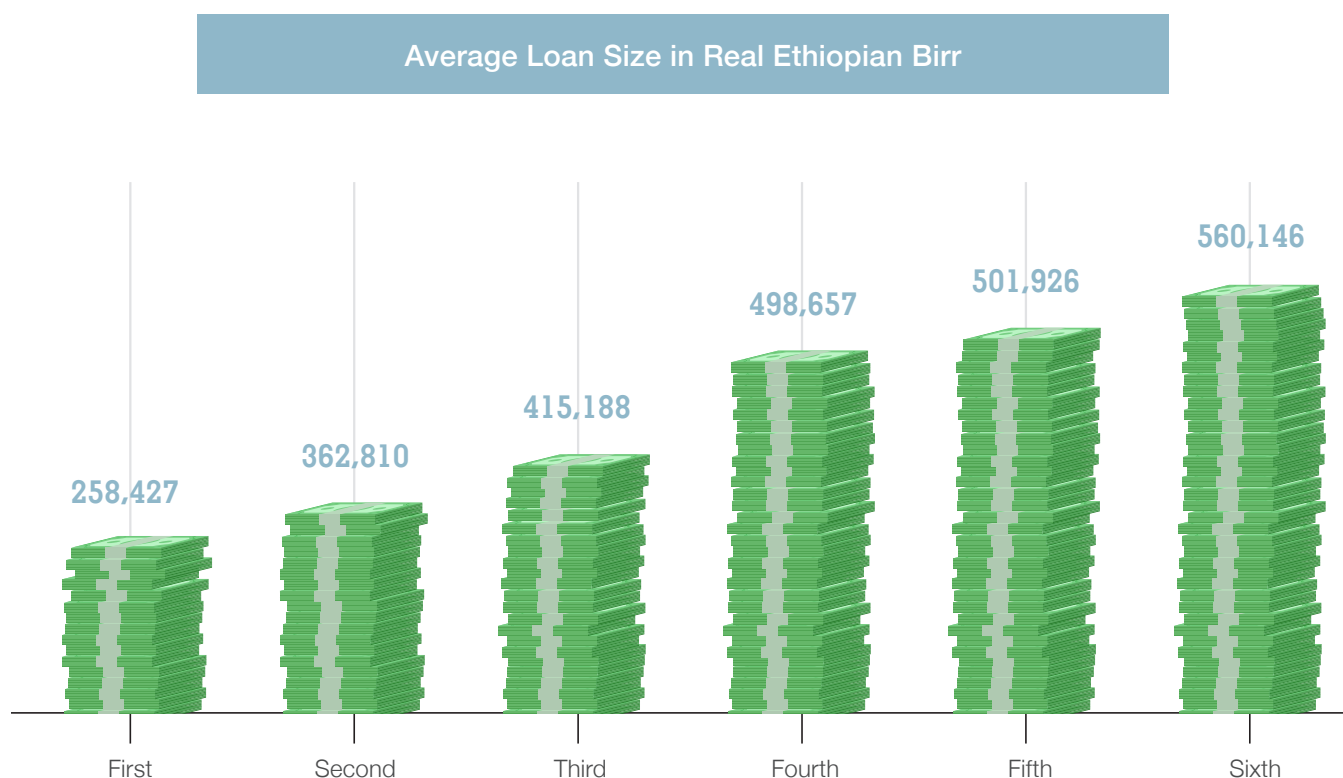
⁴ Note Panel B that presents loan size data winsorized values at the 99th percentile at the high level and cropped the graph at USD 50,000. However, the max loan size was recorded to be larger.

⁵ Statistic self-reported by participants in the impact evaluation of the first WEDP cohort.

REPEAT BORROWERS SUGGEST SCALING UP OVER TIME

Figure 2 shows that among repeat borrowers, the more times a firm borrowed through WEDP, the higher the loan size for each subsequent loan received, on average i.e., the average size of the 2nd, 3rd, 4th, 5th or 6th loan was higher than the previous loan (shown in real Ethiopian Birr). WEDP firms borrowing repeatedly receive progressively larger loans where the average real ETB loan sizes increase for each subsequent loan with a cap of approximately ETB 500,000.

FIGURE 2: PROGRESSIVELY HIGHER LOAN SIZES FOR WEDP REPEAT BORROWERS



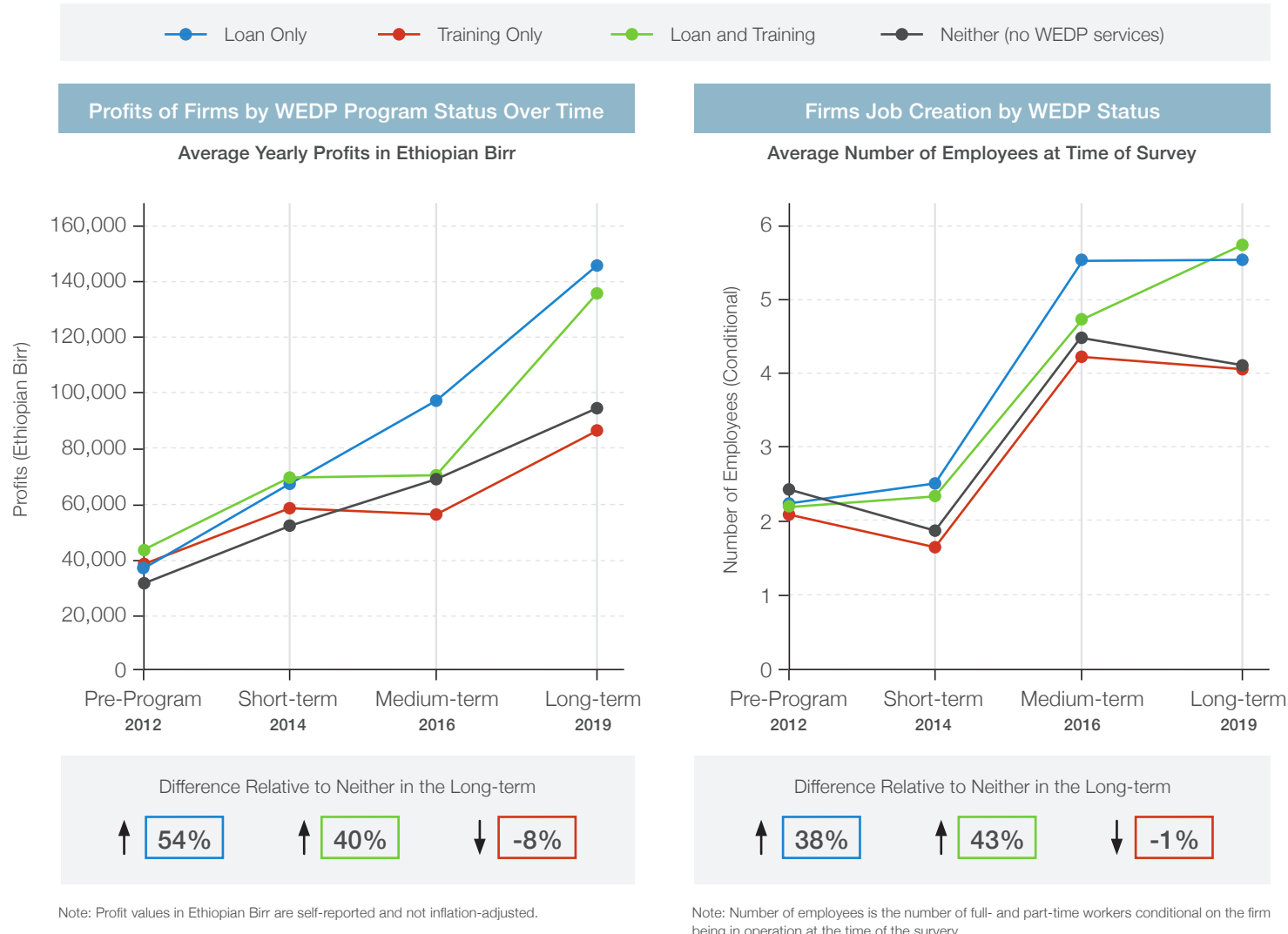
IMPACT EVALUATION OF THE FIRST WEDP COHORT

Beginning in October 2014, an enterprise survey was conducted for the first 2,369 WEDP registered clients who were resurveyed again in 2016 and 2019. Over a five-year study period we find 31% of firms receive a WEDP loan, 41% receive WEDP training, of which 18% received both a WEDP loan and training, and 28% received no WEDP services. In Figure 3 we show the trends in profits and number of employees of those who received a WEDP loan (blue and green), versus training (red) and neither (black) over the study period.⁶ Women entrepreneurs who received a WEDP loan made higher profits and hired more employees than firms that did not receive loans in the medium- and long-term. For example, when looking at the comparison of those entrepreneurs who received a loan only versus the group that received no WEDP services, we see 54% higher profits and 38% more employees. However, while Figure 3 presents simple mean differences, to provide causal evidence, we conduct an impact evaluation that compares women-owned businesses who received a WEDP loan to a matched comparison group who did not receive a loan. We find that firms with a WEDP loan make approximately 30% higher profits and hire 50% more employees than a matched comparison of firms who did not receive WEDP loans.⁷

⁶ Note, after five years, 27% had closed their business and exited entrepreneurship. Receiving a WEDP loan reduced that likelihood by 4 percentage points (not shown in Figure 3).

⁷ Alibhai, Aly Salman; Buehren, Niklas; Papineni, Sreelakshmi. 2018. Better loans or better borrowers: impact of meso-credit on female-owned enterprises in Ethiopia (English). Working paper, no. WPS 8511 World Bank Group.

FIGURE 3: TREND GRAPHS OF FIRM PROFITS AND JOB CREATION BY WEDP PROGRAM STATUS



WEDP INNOVATIONS

1. LOWERING COLLATERAL

Technical Assistance to MFIs: WEDP technical assistance provided training to MFIs' management and staff. As of February 2024, approximately 2,500 MFI staff were trained on individual lending and risk management practices.

Collateral Alternatives: WEDP microfinance institutions were encouraged to recognize new forms of collateral such as vehicles, personal guarantees, and even business inventory, to secure loans. Many WEDP clients who do not possess adequate collateral have to source collateral for loans from their social networks e.g., from husbands, parents, parents-in-law, and siblings who provide physical property that is used as collateral. By recognizing other forms of collateral and improving loan appraisal techniques, WEDP has helped MFIs reduce

collateral requirements from an average of 200% of the value of a loan (2013) to 125% (2018).

2. CRISIS RESPONSE

During the COVID-19 crisis and conflict WEDP provided a Rescue Facility Fund to support extensions on WEDP loan grace periods and tenor during the crisis period. A total of 3,500 WEDP borrowers across 12 MFIs benefitted from the rescue facility.

3. INNOVATIONS IN FINANCIAL PRODUCTS

WEDP is piloting innovative loan products that utilize alternative sources of data for appraisal to help MFIs manage risk and reduce collateral requirements. Through WEDP's \$10m Innovative Finance Window, MFIs can access additional liquidity for loans that leverage innovative techniques, such as psychometrics, cashflow-based lending, and digital working capital loans.

Example: Psychometric Credit Scoring⁸

Psychometric (personality) data from loan applicants are used to predict likelihood of loan repayment to reduce the risk of lending to “thin file” clients with little credit history. The psychometric test for WEDP clients was designed by an international vendor who provides the quiz and produces a credit score that the WEDP MFI can use to inform lending decisions.

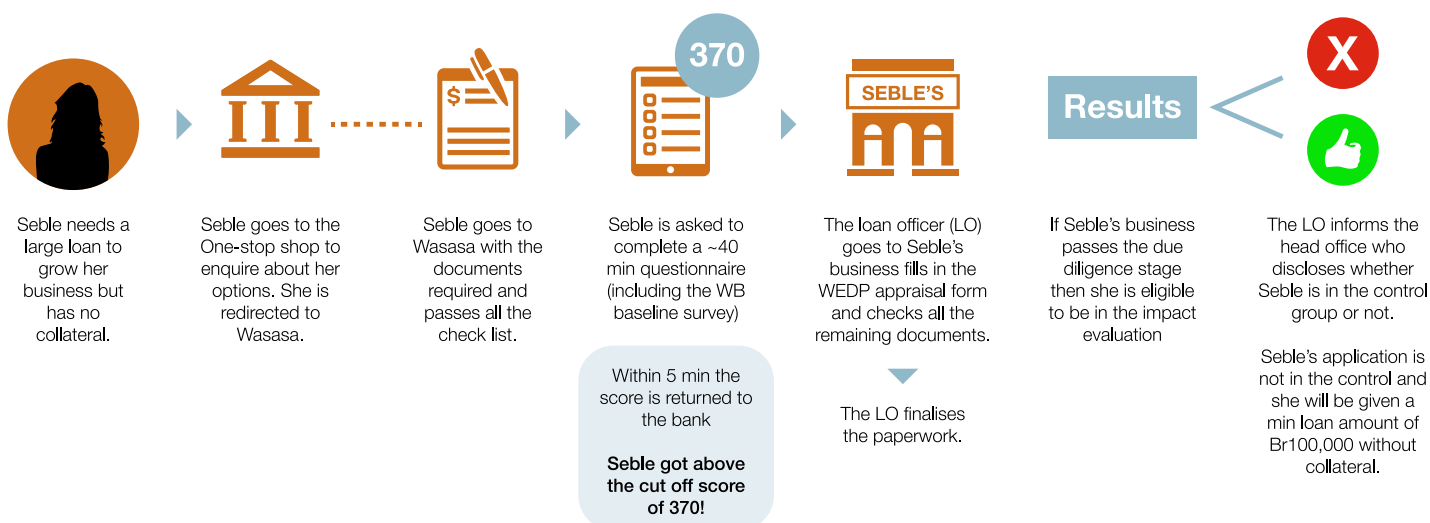
Potential borrowers take an interactive, tablet-based test consisting of business scenarios, puzzles, and questions.



The quiz assesses potential borrowers' traits such as fluid intelligence, business acumen, conscientiousness, risk-aversion, and honesty. These traits are then combined via machine learning into a model to predict credit risk.⁹

A study with Wasasa Microfinance, located in Oromia in Ethiopia, was conducted for 357 women entrepreneurs who were registered with WEDP from 2018-2021. A randomized controlled trial impact evaluation randomly assigned 131 firms who scored high enough on the test - half into a treatment group that were offered an uncollateralized loan and half to a control group that were not offered a loan. The “WEDP-X” loans were individual-liability and worth up to US\$7,500. Loans were labelled “WEDP-X” to distinguish them from the WEDP portfolio since these loans were uncollateralized and screened through psychometric testing.¹⁰ Findings suggest the loans led to a reduction in the likelihood of firm closure during the coronavirus pandemic and conflict in Ethiopia: 33% of firms closed in the control group and 17% of firms closed in the loan treatment group after 3 years. There were large positive impacts on access to finance whereby assignment to the treatment group doubled the likelihood that a woman had accessed a formal loan from any bank or MFI for their business (from 42% to 90%). Women assigned to the control group were often unable to access financing from other sources, despite having

Process Flow for Psychometrics Impact Evaluation with Wasasa MFI



⁸ Alibhai, Salman; Cassidy, Rachel; Goldstein, Markus; and Papineni, Sreelakshmi. 2021. *Evening the Credit Score? Impact of Psychometric Loan Appraisal for Women Entrepreneurs (English)*. Working paper; no. WPS 10230; World Bank.

⁹ Alibhai, Salman; Buehren, Niklas; Coleman, Rachel; Goldstein, Markus; Strobbe, Francesco. 2018. *Disruptive Finance: Using Psychometrics to Overcome Collateral Constraints in Ethiopia*. World Bank.

¹⁰ <https://blogs.worldbank.org/en/african/credit-line-times-designing-covid-19-rescue-facility-ethiopian-firms>



the same creditworthiness as those women randomly assigned to the loan offer. While firms were profitable there was no evidence of an impact of the loans on profit growth.

As a result of the pilot with Wasasa Microfinance several financial institutions are planning to adopt psychometric credit scoring to support MSME lending which is being scaled-up as part of the Innovating Financing for Women Entrepreneurs (IFWE) project. IFWE includes additional innovations such as exploring alternatives to loan financing, such as equity or revenue-based products, support to address gender imbalances within financial institutions, and innovations in how they assess lending risk and determine loan size.

4. INNOVATIONS IN BUSINESS TRAINING

WEDP has developed a core business training curriculum and is partnering with 35 training providers – public and private technical and vocational (TVET) colleges as well as nonprofit organizations – across the country. Through IFWE, there has been innovations on both training content and delivery with a focus on establishing digital, scalable, low-variable-cost solutions that can readily be

implemented by governments and development partners. For example, financial heuristics training and mindset-focused entrepreneurship training has been offered to WEDP clients.

Example: Phone-Based Financial Heuristics Training

In partnership with Ideas42,¹¹ the World Bank's Africa Gender Innovation Lab (GIL) piloted a financial heuristics or "rules-of-thumb" business training. The training was designed for small-scale female retailers and delivered via phone using prerecorded messages and interactive voice response (IVR) technology. A pilot study of the training was provided to 3,000 WEDP entrepreneurs in the retail and trade sector across five cities in Ethiopia from 2021-2022. Overall, 70% of women who enrolled in the training completed it. A randomized controlled trial impact evaluation shows that the intervention improved business practices whereby financial practices increased by 24 percent and inventory management by 13 percent eight months after completing the training. There was limited evidence in the short-run of the training leading to higher profits.¹²

¹¹ <https://www.ideas42.org/project/financial-management-training-mobile-phones/>

¹² Abebe, Girum; Asheber, Tsedey; Hailemicheal, Adiam Hagos; Weis, Toni. 2023. *Phone-Based Financial Heuristics Training for Female Retailers in Ethiopia*. World Bank.



Example: Mindset-Oriented Business Trainings

Psychology-focused business training that cultivates self-confidence and self-efficacy, a desire to accomplish, and risk-taking behavior are central to the development of an ‘entrepreneurial mindset’ that can encourage behaviors that lead to business growth. A randomized controlled trial evaluation of two mindset-oriented business trainings with WEDP clients in Ethiopia was carried out between 2016-2018. A classroom-based training provided by the NGO Digital Opportunity Trust (DOT) in the city Mekelle had positive impacts on entrepreneur’s socioemotional skills and firm profits in the short-run. A personal initiative (PI) training that takes an action-oriented approach to learning did not lead to higher profits among trained firms in the capital city, Addis Ababa. However, the characteristics of the trainer seemed to matter for influencing the socioemotional skills of the training participants.¹³

As part of IFWE, several other business services and skills programs are being piloted among WEDP clients. For example, a training program involving entrepreneurs’ husbands¹⁴, as well as a stress management training¹⁵. WEDP has also introduced remote training options, including phone-based financial heuristics training, a mentorship platform¹⁶ and a mobile app-based ‘mini-MBA’ program. These initiatives aim to reach entrepreneurs who are unable to participate in classroom-based trainings with greater potential for scale.

As WEDP turns 10 years old, the learning and innovation continues. WEDP has proven that the “missing middle” is a viable and bankable segment and MFIs have started gearing resources towards addressing this target group by devoting their own funds to finance WEDP clients.

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¹³ Alibhai, Salman; Buehren, Niklas; Frese, Michael; Goldstein, Markus; Papineni, Sreelakshmi; Wolf, Kathrin. 2019. *Full Esteem Ahead? Mindset-Oriented Business Training in Ethiopia*. Working Paper No. 8892. World Bank.

¹⁴ Hailemicheal, Adiam Hagos; Papineni, Sreelakshmi; Weis, Toni Johannes. 2023. *Incorporating Spousal Support into a Mindset-focused Business Training for Women in Ethiopia* (English). World Bank Case Study.

¹⁵ <https://www.who.int/publications/i/item/9789240003927>

¹⁶ Friedson-Ridenour, Sophia; Edey, Kinf. 2023. *Helping Female Entrepreneurs Access Digital Platforms: The Importance of a Tech-Plus-Touch Approach and Other Lessons Learned - Case Study 1*. Gender Innovation Lab; January 2023.

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