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EBRD, WE-FI, AND CEPR RESEARCH CONFERENCE PROCEEDINGS

FINANCING WOMEN-LED SMES

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EXECUTIVE SUMMARY

How can rigorous evidence be more effectively applied to project design and policy making to improve impact on women-led SMEs? The European Bank for Reconstruction and Development (EBRD), The Women Entrepreneurs Finance Initiative (We-Fi), and the Centre for Economics Policy Research (CEPR) co-organized a 2-day research conference to address this question. The conference brought together academics, practitioners, and policymakers from around the world to discuss new evidence on "financing women-led SMEs".

The event included a keynote from the USAID Chief Economist and founder of IPA, Dean Karlan, and evidence insights from eight research papers on the impact of loans, gender biases in investment and lending, access to markets and networks, and regulatory policies and institutional practices. Key insights from new evidence on women-led SMEs include that women are 33% less likely to use venture capital in male-dominated sectors but are equally likely compared to men to use venture capital in female-dominated sectors (more on page 5); or that a recent regulatory reform that reduced loan loss provisions required for loans granted to women in Mexico led to an increase in the share of personal loans directed to women and improved credit conditions (more on page 9).

The academic sessions were complemented by a session on sex-disaggregated data, a policy-making discussion, and a matchmaking session for researchers and practitioners who want to work together on future research. Rigorous evidence on improving access to finance for women-led SMEs is growing but still scarce, highlighting the importance of strengthening the evidence base across the field. The conference highlighted a strong appetite and opportunity to better enable research-practitioner collaboration to create research that can be applied by policy makers and practitioners to support women entrepreneurs more effectively.

CONFERENCE OVERVIEW

The European Bank for Reconstruction and Development (EBRD), the Women Entrepreneurs Finance Initiative (We-Fi), and the Centre for Economics Policy Research (CEPR) convened the research conference on “Financing Women-Led SMEs” held on October 23 and 34, 2023 at the EBRD Headquarters in London.

The objective of the two-day event was to promote new research and evidence on gender, access to finance, and the “missing middle”, to discuss implications on practice and policymaking, and to strengthen research-practitioner collaboration by creating links between research and operations. This conference also served as a launching pad for [We-Fi’s research agenda](), which aims to catalyze efforts to create new evidence in the areas of debt financing, digital finance, blended finance, bundled services, and sex-disaggregated data.

The event, which attracted approximately 100 participants from academia, international organizations, and the private and public sector, was structured into four main thematic sessions:

1) Impact of Loans;
2) Gender biases in lending and investment;
3) Access to markets and networks; and
4) Regulatory policies and institutional practices.

The following note covers key data points and policy implications from the research papers[1] as well as insights from the keynote and other sessions.

[1] Please note that some papers have not been published yet.

SESSION 1: IMPACT OF LOANS

The Impact of Automated Loans on Mobile Money Agents

How can innovative design features of loans (e.g. alternative credit assessment methods) replace collateral requirements and enable more WSMEs to access loans? Women's ability to access loans is often hindered by collateral requirements, subjective credit assessment, and a lack of confidence to apply for financing. The Impact of Automated Loans on Mobile Money Agents, by Siobhan Herbert and Russell Toth (University of Sydney), explores how digital transaction data from third parties (e.g. mobile money companies) can be used to assess the creditworthiness of mobile money agents. Mobile money companies share agents' historical transaction volumes with commercial banks, enabling credit scoring exclusively based on these volumes, absent collateral. The authors use a policy change to measure the effect of digital loans on liquidity management for mobile money agents in Myanmar.

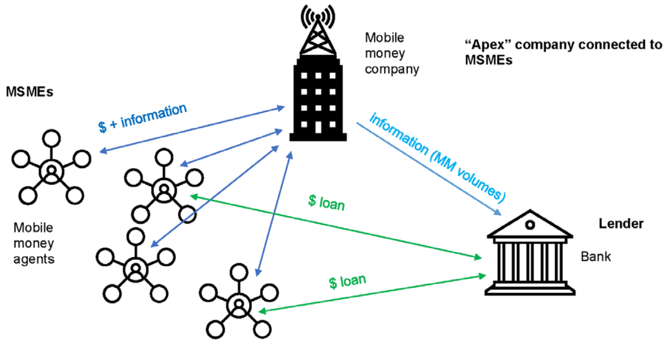

Figure 1:This figure, from work by Herbert and Toth, illustrates the relationships in the innovative value chain lending model.

Results show high take-up and low default rates, even for relatively large loan values, as well as increased mobile money volumes. The study highlights nuanced effects based on gender and transaction volume. Amongst male mobile money agents, there is a positive correlation between mobile money transaction volume and loan impact, in the first month after receiving the loans. Moreover, the loans do not lead to increased transitions amongst male agents already handling the lowest volumes. In contrast, low-volume female agents show persistent increased mobile money volumes, while there is no effect for women with higher volumes.

KEY INSIGHTS AND POLICY IMPLICATIONS:

- **Alternative credit assessment methods:** Integrating digital data sources (e.g., digital transaction volumes) into credit evaluation can enhance access to loans for women who often lack conventional collateral. Digital loans can benefit women since they offer women more privacy than cash and objective decision rules may limit loan officer discrimination.
- **Secure data sharing models:** Encouraging partnerships between mobile money entities and commercial banks to facilitate secure data sharing initiatives is crucial. Policymakers can play an important role in incentivizing the exchange of transactional data from diverse sources, while ensuring data privacy and ethical data-sharing practices.
- **Tailored financial solutions:** Recognizing the nuanced impact on gender and transaction volume, tailored financial and non-financial products and services should be designed based on the needs of the specific target group. For example, digital loans may be particularly effective for low-volume women agents to establish a reputation for reliably having e-money, which can be complemented by specialized training or financial literacy campaigns.

Covid-19 Government-backed Loans and MSMEs Liquidity and Earnings

How do government-guaranteed loans impact access to credit and business outcomes of WSMEs? The COVID-19 pandemic had a significant impact on businesses worldwide. Several governments enacted public guarantee programs, including government-backed commercial loans, which allowed private banks to lend to firms that may not access credit otherwise, including WSMEs. Ongoing research work titled *Covid-19 Government-backed Loans and MSMEs Liquidity and Earnings: Gender results from two RCTs* by Patricia Yañez-Pagans, Maikol Cerda, Maria Paula Gerardino, Paul Gertler, Sean Higgins, Ana Maria Montoya, Eric Parrado, and Raimundo Undurraga examines the effects of government-backed loans during Covid-19 in Chile and Colombia on private credit provision to firms.

Results show that although men-led and women-led firms experience an increase in commercial liquidity (total amount of commercial debt contracted with the formal banking system), it is less pronounced for women-led firms. While men-led MSMEs increased commercial liquidity by approximately 30%, women-led MSMEs experienced an increase of only 13%. Despite the unequal access to credit, significant increases in sales are observed for both women and men-led firms in Chile (no gender differences) with no effects on delinquency rates (Colombia). There were also no significant effects on deposits (used as another proxy for earnings that was available for both countries), which could potentially be due to the pandemic lowering the use of banks for money savings or for transactions and thus making this measure less reliable. Aggregate results hide some underlying heterogeneity. In particular, the largest impacts on commercial liquidity, but also the largest gender gaps were observed in smaller firms as opposed to microenterprises, and firms located outside the capital.

KEY INSIGHTS AND POLICY IMPLICATIONS:

- **Targeted public financial policies:** Study results indicate that despite the wider availability of credit, there are still observed gender gaps, potentially based on discrimination. Setting specific targets for loan disbursement to WSMEs within the public guarantee programs may allow more WSMEs access credit and strengthen the business case for financial intermediaries to serve this sector.
- **Segmented approach:** Recognizing the disparities in loan access and impacts observed in smaller firms and firms located outside capital cities, policymakers should follow a segmented approach to address the various needs of different types of WSMEs and avoid one-size-fits-all solutions. This could involve allocating a part of the public guarantee program funds exclusively for WSMEs in rural areas or smaller-scale businesses.

SESSION 2: GENDER BIASES IN LENDING AND INVESTMENT

Gender Stereotypes and Entrepreneur Financing

How does gender discrimination impact WSMEs' access to venture capital and how can gender biases in investment be reduced? The gender gap in entrepreneur financing can be a result of both demand-side factors (e.g. individual choices and preferences) and supply-side factors (e.g. investor bias). Gender Stereotypes and Entrepreneur Financing by Camille Hebert explores gender differences in these factors at different stages of the entrepreneurship process and in different sectors (male-dominated vs. female-dominated sectors) using French administrative data.

Results show that women entrepreneurs are less likely to receive external equity and VC funding even after conditioning on ability and motivation. This gender gap widens along the entrepreneurship pipeline, especially in sectors where women entrepreneurs do not conform to stereotypical roles. At the funding stage, women entrepreneurs in male-dominated sectors are 26% less likely to use external equity and 48% less likely to access VC funding. This gender gap closes in female-dominated sectors. Self-selection into sectors and gender stereotypes among investors contribute to these disparities. Notably, while women entrepreneurs outperform their male peers with VC backing, nearly two-thirds of the funding gap remains unexplained, particularly pronounced in male-dominated sectors. The study also finds that women entrepreneurs starting in female-dominated sectors are significantly more likely to be women with young children, transitioning from being an employee, and benefiting from their spouse's financial support. Interestingly, the study finds that male entrepreneurs' family situations do not influence the sector choice.

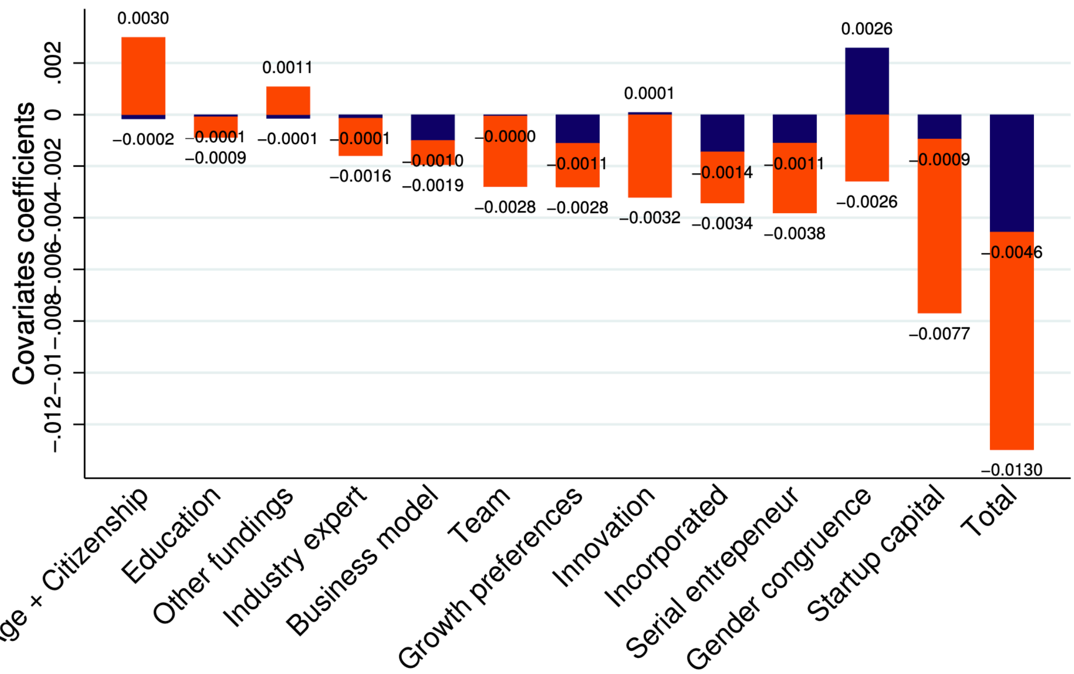

Figure 2: This figure, from work by Hebert, shows that only 1/3 of the difference in mean VC funding between male and female entrepreneurs can be explained by composition effects (using a Oaxaca-Blinder decomposition)(purple bars). The paper further shows that the unexplained variance (orange bars) can be attributed to male-dominated sectors.

KEY INSIGHTS AND POLICY IMPLICATIONS:

- **Support for WSMEs in male-dominated sectors:** Providing women in diverse sectors with the necessary skills, mentorship, and networks can help counteract self-stereotyping and enhance their participation in male-dominated sectors and high-growth entrepreneurship.
- **Mitigating investor bias:** Promoting gender diversity among investors and fostering an environment that values diverse perspectives can help mitigate investor bias.
- **Care support and flexible work arrangements:** Creating supportive policies (incl. childcare support, flexible work arrangements, and parental leave) that accommodate the diverse family situations of women entrepreneurs may encourage more women start or cross-over into more profitable (male-dominated) sectors, potentially reducing the sector-based disparities observed in the study.

Gendered Access to Finance: The role of team composition, idea quality and implementation constraints

How does gender discrimination impact WSMEs' access to loans and how can gender biases in lending be reduced? Gendered Access to Finance: The role of team composition, idea quality and implementation constraints by Vojtech Bartos, Silvia Castro, Kristina Czura, and Timm Opitz explores gender bias and its underlying mechanisms on the supply-side of access to finance. It analyzes whether loan officers in a commercial bank in Uganda evaluate real-life business projects, developed by university students who attended an entrepreneurship academy, differently for male and female entrepreneurs, both as individual entrepreneurs or in entrepreneurial teams.

Each project has a founder and an implementer, whose gender varied by randomly assigning names, holding constant all other aspects of the business proposal.

The results provide evidence of bias against individual women entrepreneurs as opposed to individual men entrepreneurs. Findings also indicate no gender bias for teams of same-gender entrepreneurs, while there is a bias against mixed-gender teams. The bias against women entrepreneurs can be attributed to how loan officers assess implementation constraints rather than business ideas. The result that mixed-gender teams face bias seems to be driven by female loan officers who may have less faith in mixed-gender teams and may be more aware of constraints women entrepreneurs face, such as childcare or risk of gender-based violence in the workplace.

KEY INSIGHTS AND POLICY IMPLICATIONS:

- **Addressing implementation constraints:** Since bias against women entrepreneurs seems to be driven by perceived implementation constraints, focusing on reducing structural barriers to implementation, such as childcare responsibilities and risks of gender-based violence, can be crucial policy measures.
- **Teaming up against bias:** Teaming up seems to counteract the higher barriers that women arguably face. Policies aimed at team creation for start-up enterprises may not only benefit business performance, but can also have an additional benefit of equalizing access to finance.
- **Mixed-gender team success:** Developing targeted support mechanisms and resources (e.g., training programs, mentorship initiatives, or financial incentives) specifically designed for mixed-gender teams may foster collaboration and trust within such teams.

SESSION 3: ACCESS TO MARKETS AND NETWORKS

Can Online Platforms Promote Women-Led Exporting Firms?

How can digital platforms enable access to new markets and financing for WSMEs and improve their business outcomes? Women-led firms are less likely to export than men-led firms. All firms face substantial information barriers to accessing foreign markets. Possible additional barriers for women may be linked to industry choice, preference for flexibility, lower connectivity to useful networks, or less access to formal finance. Can Online Platforms Promote Women-Led Exporting Firms? by Jennifer P. Poole and Christian Volpe Martincus explores how to address the added constraints faced by women. They specifically examine how online business platforms can make trade more gender equal by combining information on firms' participation in ConnectAmericas, a free and purely informational online platform (not transactional) with detailed firm-level export data of Peru.

Results show that participation in the platform is associated with a significantly larger increase in exports for women entrepreneurs than for men-managed firms. Women that use ConnectAmericas increased the value of their exports by 40% relative to non-users while male users increase their exports by 10% relative to non-users. One explication for this result could be that women only sign up once they decide to grow and feel ready to export.

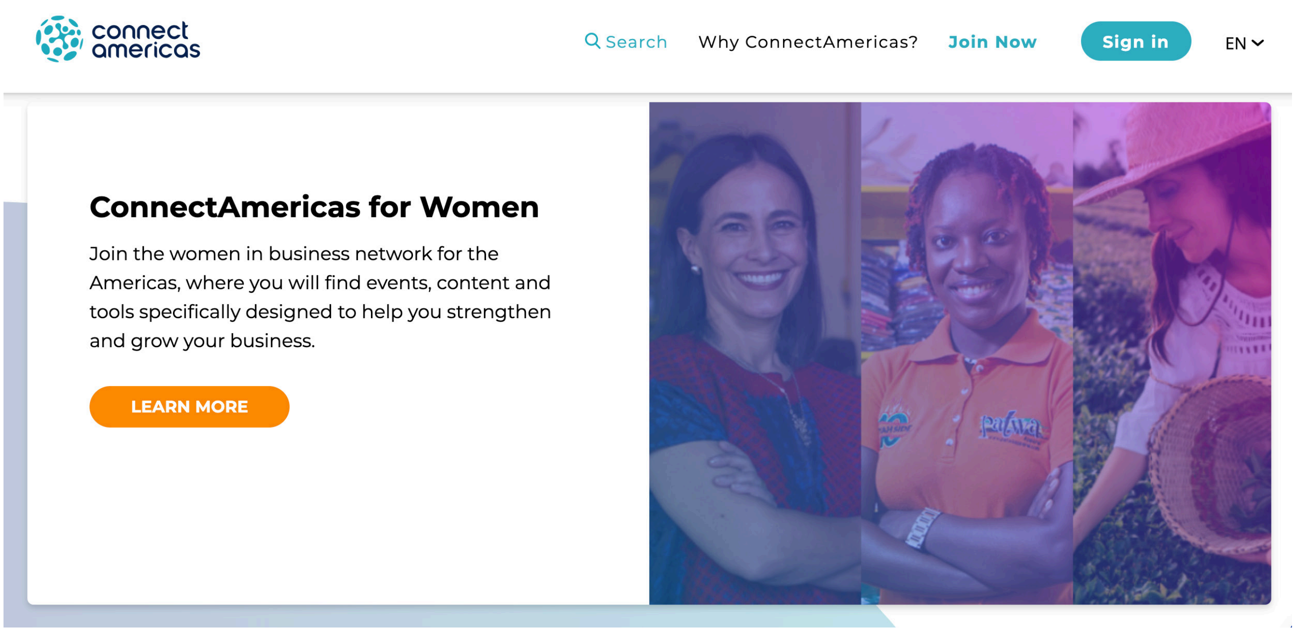

Figure 3: ConnectAmericas Online Platform

KEY INSIGHTS AND POLICY IMPLICATIONS:

- **Online platforms for trade support:** Online business platforms, which reduce the cost of delivering traditional trade support effectively, may be particularly effective to foster connections among women entrepreneurs and established networks, facilitating access to valuable resources and information.
- **Partnerships for wider impact:** Policies that encourage female participation in online environments have the capacity to promote gender equality more broadly. This may involve collaborating with technology companies, trade organizations, and non-profits to ensure widespread access and usability of such platforms.
- **Collection of sex-disaggregated data:** Digital platforms can play a fundamental role in the collection of sex-disaggregated data and data-driven decision-making. A systematic approach to data collection and data-driven decision-making can help platforms leverage their data for commercial and gender outcomes.

Stronger together: Female Export Consortia

How can bundled services (incl. network facilitation) effectively increase WSMEs' firm performance and promote job creation and women's empowerment in the long-term? Women-led firms often lack key factors needed for exporting, such as networks, financing, and scale to overcome fixed costs. Stronger together: Female Export Consortia - Experimental Evidence from Tunisia by Florian Münch, Fabian Scheifele and Amira Bouziri explores the impacts of an intervention in Tunisia providing both business/export training and membership in a consortium, a legally connected group of firms, to cooperate in exporting.

Midline results show that consortia members doubled their regular contact with other women entrepreneurs, gained entrepreneurial confidence, improved management practices, and increased profits. While exports did not increase yet, consortia members are more likely to know Tunisia's trade agreements, have potential foreign clients, and invest in their exporting activities. Firms that had lower entrepreneurial confidence or management practices when they joined the consortia experienced smaller increases in either variable at the midline.

KEY INSIGHTS AND POLICY IMPLICATIONS:

- **Enhanced support for networking and export training:** Comprehensive training that not only focuses on export-related skills but also builds confidence and facilitates networking opportunities can help women-led firms engage in international trade. Special attention should be given to tailoring support for firms with lower entrepreneurial confidence or management practices, as they may require more targeted interventions to maximize their benefits from such programs.
- **Consortium participation:** Encouraging women-led firms to join consortiums could be a strategic policy. This approach might be more cost-effective compared to consulting interventions since collective knowledge is leveraged. Policymakers could allocate resources and design programs to facilitate the formation of such consortia and offer incentives for women entrepreneurs to join these groups.

SESSION 4: REGULATORY POLICIES AND INSTITUTIONAL PRACTICES

Can Regulatory Policies Foster Women's Financial Inclusion? The Role of Loan Loss Provisioning

What is the impact of large-scale policy changes on women's access to credit? In July of 2021, a regulatory reform reduced the loan loss provisions required for loans granted to women in Mexico. The reform applied to personal, salary-based, and automotive loans. Can Regulatory Policies Foster Women's Financial Inclusion? The Role of Loan Loss Provisioning by Alejandro Becerra-Ornelas, David Jaume, Thania Hernández, and Martin Tobal studies the effects of this reform and explores whether such regulatory policies can foster women's financial inclusion.

Results show that the reform led to an increase in the share of personal loans directed to women and improved credit conditions by lowering interest rates and increasing loan amounts. The effects are stronger for first-time borrowers and women living in municipalities with higher labor informality. The reform was also associated with a reduction in the probability of defaulting in the year following the credit creation. Moreover, there was an increase in the likelihood of obtaining subsequent personal loans with better credit conditions, indicating that the regulation has had long-lasting effects. No effects could be found for other types of credit for which the reform was also implemented, such as salary-based and automotive loans.

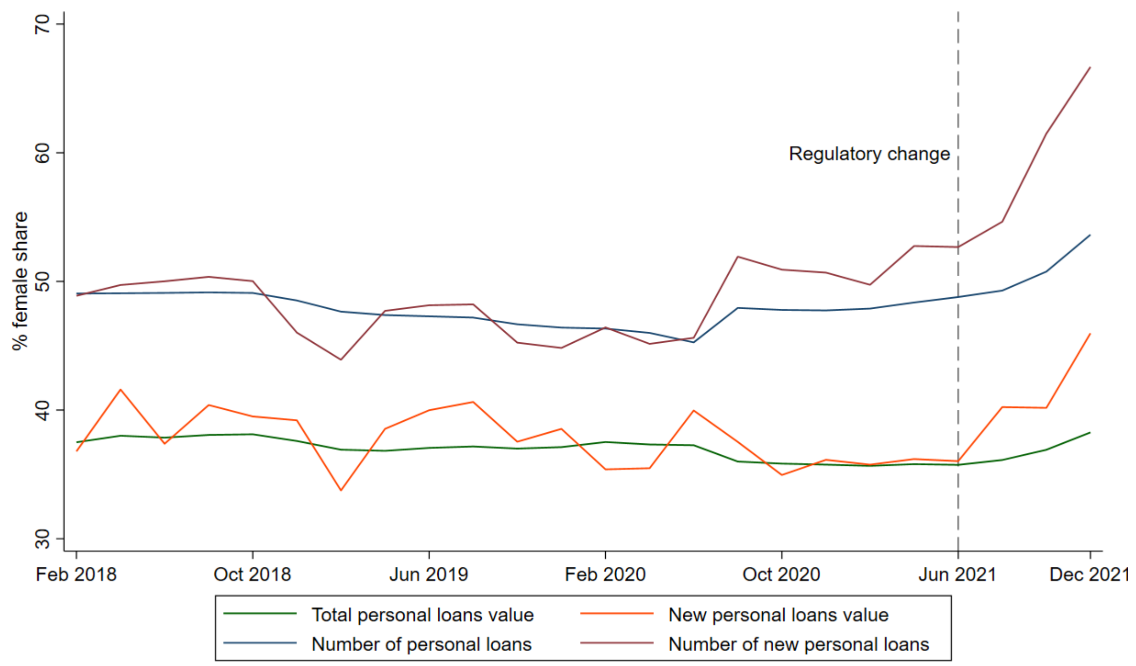

Figure 4: This figure, from work by Becerra-Ornelas, Jaume, Hernández and Tobal, depicts the increase in the share of credit and suggestive increase in the number of loans after the policy reform in July 2021.

KEY INSIGHTS AND POLICY IMPLICATIONS:

- **Loan loss provisions:** Reducing provisions can have a positive effect on fostering financial inclusion for women. These effects are driven by pass through effects on the interest rate and loan amount, which go beyond a one-off improvement in access and credit conditions, and actually increased the likelihood of staying in the credit market. Moreover, this greater inclusion of women into the financial system was not costly in terms of financial stability, as the reform was associated with a reduction in the probability of defaulting in the year following the credit creation.
- **Types of credit:** While acknowledging the positive impact on personal loans, the reform had no economically relevant effects on salary-based and automotive loans. For these types of credit, there is a lower proportion of borrowers that, according to current regulation, have a high ex-ante probability of default and therefore may have benefited from the regulatory change.

Gender Differences In Reaction To Enforcement Mechanisms

How can financial intermediaries adapt their institutional practices to promote financial inclusion for WSMEs? Gender Differences In Reaction To Enforcement Mechanisms: A Large-Scale Natural Field Experiment by Zhengyang Bao and Difang Huang studies whether there are gender-differentiated impacts on rates of overdue payments, from a variety of enforcement mechanisms. The large-scale experiment considers enforcement mechanisms based on social and financial incentives (incl. reminder messages, social pressure, and financial incentives) and tests them on borrowers from a large FinTech lending platform in China.

Results show that all enforcement mechanisms from the platform asking borrowers to repay credit loans on time are effective. All treatments successfully reduce the overdue rate for both male and female borrowers. While financial incentives are effective for both genders, men respond more strongly than women to interest rate-based incentives for on-time payment. Women are more responsive than men to being informed about repayment norms or facing a risk of social sanctions.

KEY INSIGHTS AND POLICY IMPLICATIONS:

- **Gender-responsive messaging:** Policymakers and financial intermediaries should design targeted communication strategies for financial products and services, based on the different behaviors and preferences of men and women.
- **Inclusive lending environment:** FinTech loans are found to significantly enhance credit access for underserved populations, but there is a high delinquency rate. Low-cost deterrence mechanisms that leverage social and financial incentives have the potential to encourage timely repayments and can make those segments more attractive to financial intermediaries.

DATA SESSION AND MATCHMAKING SESSION

Besides the academic sessions, the conference featured a data session and a matchmaking session. The data session focused on showcasing comprehensive data sets and innovative data approaches to collect and analyze data on WSMEs. Michelle Kempis from the Financial Access Initiative research center of New York University presented the use of financial diaries to better understand the financial behavior, dynamics, and challenges of entrepreneurs, who weekly report about all their financial transactions through an app. Some entrepreneurs have started to use the data to calculate the value of the business, while others have shown their data to a bank, in support of a loan application. Leora Klapper, Lead Economist at the World Bank and Founder of the Global Findex database, talked about the Global Findex Database and the importance of measuring how digital payments can benefit entrepreneurs. Finally, Bruno Merlevede from Ghent University presented a comprehensive panel dataset of firm-level data on gender composition.

The matchmaking session aimed to facilitate researcher/practitioner collaboration by pairing academics and practitioners with similar research interests to explore potential research and implementation ideas and opportunities. This session was executed in collaboration with the International Growth Centre (IGC).

KEYNOTE

The conference included a keynote from the USAID Chief Economist and founder of IPA, Dean Karlan. He presented insights from the study Big Loans to Small Businesses: Predicting Winners and Losers in an Entrepreneurial Lending Experiment, which explores how enterprise loans affect the profits of small and medium enterprises in Egypt. Psychometric data reveals that while top performers increased profits by 55%, poor performers saw a similarly sized fall in profits, highlighting the important role of psychometrics in predicting heterogeneity.

When it comes to the effectiveness of capital, training, and a combination of the two, preliminary findings from an ongoing meta-analysis by Dean Karlan, Florian De Bundel, William Pariente, and Christopher Udry suggest that providing capital or training (guidance) alone has limited effects on profits for women-led firms compared to bunding both, albeit with a tradeoff between reach and effectiveness. This implies that providing capital in combination with guidance may be the best choice for risk-averse policymakers.

CONCLUSION

Bringing together researchers with practitioners has yielded valuable insights on how to build the evidence base for WSMEs, strengthen collaboration between research and operations, and promote evidence-based program design and policymaking. Some takeaways from the audience include:

- **More studies focused on women-led SMEs:** The conference highlighted the need for more research specifically focused on women and SMEs. More rigorous impact evaluations are required, as are other types of data and inputs, empathizing the importance of sex-disaggregated data for such research efforts.
- **More long-term studies:** The sufficient duration of studies and evaluation of interventions over longer periods of time should be encouraged to track long-term impacts, and impact dynamics.
- **More coordination:** There is appetite for more effective coordination mechanisms, including meta-analyses – studies that synthesize and analyze existing evidence. Such studies can be particularly valuable for practitioners and policymakers.
- **Incentive structures:** Researchers are interested in having policy impact beyond academic publications, but the academic community rewards innovation and intellectual originality over questions of implementation, replication and context-specific concerns. On the other side, incentives for conducting research and impact evaluations are often missing in non-academic institutions, especially in the private sector.
- **Accessibility of data:** Researchers often struggle to access data from financial intermediaries or international institutions, whose data is often not public. On the other side, practitioners and policy makers often find it difficult to find, access and understand rigorous academic research results.

Feedback loops, which result from improved research-practitioner coordination, play a critical role in ensuring that research addresses the most pressing evidence gaps and that research findings can be effectively applied to practice and policymaking. Formats and opportunities, such as conferences like this one, provide diverse stakeholders with a platform to engage, analyze recent evidence, and discuss future research opportunities. Such engagements can contribute significantly to fostering collaboration, cooperation, and alignment on research and evidence, ultimately improving the impact on WSMEs.