

ASSESSING PRIVATE SECTOR CONTRIBUTIONS TO JOB CREATION: IFC OPEN SOURCE STUDY



THEME: ACCESS TO FINANCE

Measuring jobs from micro, small, and medium-size enterprises financed by IFC client financial institutions

An analysis of more than 3,100 enterprises that received small and medium-size enterprises (SME) loans from 34 IFC client financial institutions in 25 countries found that the size of loans is a reasonable proxy for enterprise employees, sales, and assets. These data allowed IFC to estimate that 23 million micro, small, and medium-size enterprises (MSMEs) financed by IFC client financial institutions provided about 106 million jobs in the end of 2011. This is a conservative estimate based on an estimated range of 80 and 202 million. These numbers rise to more than 26 million MSMEs providing 100–250 million jobs when the loans to MSMEs by financial institution clients that do not focus on this market segment are included.

Survey and Methodology

In fiscal year 2012 IFC conducted “The SME and Women-owned SME Baseline Survey” to determine the share of female-owned SMEs financed by IFC’s client banks and to learn more about other characteristics of these firms, **including employment.**

IFC surveyed 34 banks in 25 countries in all six regions, which account for about 10 percent of Financial Markets Department MSME reach reporting portfolio.¹ For each bank surveyed, 90–100 SME loans were randomly selected (with roughly 30 or more in each MSME category) and reviewed to get detailed information on the enterprises that received financing. The analysis included the number of employees, annual sales, total assets, percentage of female ownership, women in top management, sector of operations, and other data.²

This note compares firm-level employment data with IFC’s definition of MSMEs. It also summarizes findings on jobs provided by the SMEs surveyed and estimates the jobs provided by MSMEs financed through IFC’s network of client financial institutions worldwide, using a portfolio extrapolation method.

IFC’s Definition of Micro, Small, and Medium-size Enterprises

IFC’s definition of MSMEs is based on three indicators: number of employees, annual sales, and total assets.

Enterprises need to meet two of these three criteria to be classified as MSMEs (Table 1). Because IFC’s financial market clients usually cannot consistently report on these criteria for MSME borrowers, IFC uses **MSME loan size proxies** to track lending to MSMEs from financial institutions. The proxies are based on the loan amount enterprises received at origination.

Findings on jobs provided by SMEs financed by IFC client banks

Firm-level employment data were available for 1,864 enterprises—about 60 percent of the sample, or 66,000 jobs. More than 10,100 jobs, about 15 percent, were at female-owned SMEs, which accounted for 18 percent of the sample.⁴

The SMEs that received “small” loans of \$10,000–100,000 at origination had on average 23 employees, with a median of 13 (Figure 1). SMEs receiving “medium” size loans of \$100,000–\$2 million had on average 68 employees, with a median of 35. Enterprises receiving “micro” loans of \$1,000–10,000 had on average 10 employees, with a median of 6.⁵

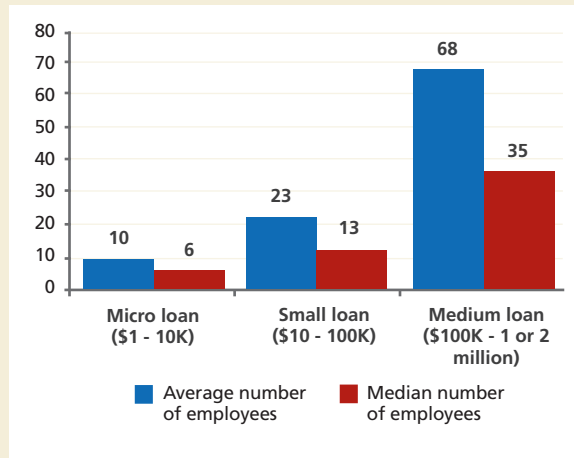
The medians for employment were lower than the averages for each loan size bucket, showing that most enterprises are much smaller than the average shows. The medians represent the underlying characteristics of the supported enterprises better because they minimize the effects of outliers.

Table 1: IFC’s Definitions and Loan Size Proxies for Micro, Small, and Medium-size Enterprises

INDICATOR / SIZE OF THE ENTERPRISE	MICRO ENTERPRISE	SMALL ENTERPRISE	MEDIUM-SIZE ENTERPRISE
Number of Employees	< 10	10 < 50	50 – 300
Total Assets	< \$100,000	\$100,000 < \$3 million	\$3 million < \$15 million
Annual Sales	< \$100,000	\$100,000 < \$3 million	\$3 million < \$15 million
MSME Loan size proxy	< \$10,000	\$10,000–\$100,000	\$100,000–\$1 or \$2 ³ Million



Figure 1: Employment Averages and Median Measures per Loan Size



Employment in these enterprises corresponded well with IFC’s definition of MSMEs (Table 2). The “micro” loan proxy showed employment closer to the upper bound of the definition—which is expected because financial institutions focused on SMEs focus on larger enterprises than do microfinance institutions. For the “small” loan proxy, average and median employment were well within the definition (toward the lower bound). For “medium” size loans, average employment was within the range of the medium-size definition, but median employment was lower, falling under the definition used for “small enterprise.” So firms receiving financing from IFC clients of financial institutions leaned toward slightly smaller firms.

Further, only 15 percent of companies that IFC would classify as SMEs based on their loan sizes had more than 100 employees, and just over 1 percent had more than 300 employees. Comparing the other components of the IFC definition of MSMEs (sales and assets) against firm data also showed a good fit, with similar features as described above.

IFC reached 23 million MSMEs through its investments in financial institutions in the end of 2011. These MSMEs provided an estimated 106 million jobs in developing countries.

The sample from 34 banks in 25 countries allowed for a portfolio extrapolation of the results to the entire IFC portfolio of financial intermediaries. The 23 million MSME loans provided by IFC-supported financial institutions at the end of 2011 supported MSMEs providing about 106 million jobs.

This analysis assumes that one loan represents one firm and does not account for double counting if firms have multiple loans from the same or other financial institutions.

Significant differences between average and median measures indicated a wide and uneven distribution of employment data, so the extrapolation was applied based on ranges across financial institutions instead of simple averages. These ranges were based on 25–75 average percentiles across the banks surveyed (Table 3). The estimated range of employment was 4–10 employees for micro firms, 11–21 for small firms, and 27–104 for medium-size firms.⁷ A lower employment range (1–2 employees) was applied for micro loans provided by specialized microfinance institutions flagged micro loans, which were not covered by this survey.

Based on the total MSMEs reached, an estimated 80–202 million jobs were provided with a median estimated employment of 106 million jobs (Table 4). The 3.3 million SMEs employed about 60 million or 56 percent of the workers, while the 20 million micro firms provided 46 million (44 percent). If financial institutions not focused on MSMEs are also considered, the estimated range of jobs provided by the 26.3 million MSMEs supported increases to 101–254 million jobs.

Regardless of whether the upper (202 million) or lower bound (80 million) of the employment range is used, SMEs provided most jobs (61–66 percent).

Table 2: Employment Data and IFC’s Definition of Micro, Small, and Medium-size Enterprises

FIRM SIZE	IFC MSME LOAN SIZE PROXY	IFC MSME DEFINITION (NUMBER OF EMPLOYEES)	AVERAGE NUMBER OF EMPLOYEES FROM THE SURVEY	MEDIAN NUMBER OF EMPLOYEES FROM THE SURVEY
Micro	< \$10,000	<10	10	6
Small	\$10,000-\$100,000	10-50	23	13
Medium	\$100,000 -\$1,000,000 or \$2,000,000 ⁶	50-300	68	35

Table 3: Ranges of Average Number of Employees for Banks by Loan Sizes

PERCENTILES	MICRO LOANS (\$1-\$10K) ⁸	SMALL LOANS (\$10-\$100K)	MEDIUM LOANS (\$100K-\$1M OR \$2M)
10%	3	6	22
25%	4	11	27
(Median) 50%	6	13	35
75%	10	21	104
90%	21	46	118



Employment Information for Borrowers is not Regularly Tracked by Financial Institutions

From the 34 financial institutions surveyed, about 60 percent had employment data available. More than three-quarters of these banks had employment information only in their credit files, usually in loan applications. For the rest, credit officers helped the data gaps on client information.

But there was still a lot of missing employment information due to the lack of requirements to record employment or difficulties in collecting such information. The banks also did not track changes in employment information after issuing loans. In summary, at present, many financial institutions are incapable of reporting data on their borrowers' employment easily because it is usually kept outside of electronic systems, not updated regularly, or not recorded at all.

Table 4: Estimated number of jobs provided by MSMEs supported by IFC client FIs in CY11

TYPE OF FI ⁹	# OF "MICRO" LOANS (MILLION)	# OF "SMALL" LOANS (MILLION)	# OF "MEDIUM" LOANS (MILLION)	TOTAL (MILLION)
Number of MSME loans provided by IFC's FI Clients (Million)				
MSME flagged FIs	19.7	2.5	0.8	23.0
<i>o/w Micro flagged FIs</i>	<i>16.1</i>	<i>0.6</i>	<i>0.0</i>	<i>16.8</i>
Non-MSME FIs	2.5	0.7	0.1	3.3
Total	22.2	3.2	0.9	26.3
Estimated employment provided by these firms (Million)				
MSME flagged FIs	31-68	27-50	22-84	80-202
<i>o/w Micro flagged FIs</i>	<i>16-32</i>	<i>7-13</i>	<i>1.2-4.7</i>	<i>24-50</i>
Non-MSME FIs	10-25	8-14	3.3-13	21-52
Total	41-93	35-64	25-97	101-254
Median – MSME FIs	46	32	28	106

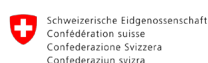
** The extrapolation was also done for non-MSME flagged FIs, assuming the same employment averages as observed in SME portfolios.

- ¹ IFC annually collects information about the loans provided by IFC funded financial institutions, with special focus on MSME loans (also known as 'IFC's MSME reach').
- ² In some cases the SME portfolio did not contain any or enough loans in the 'micro' size category (for the purposes of this survey loans from \$1K-10K), so the sampling size was smaller.
- ³ \$2 million is the cutoff in a small number of more advanced developing countries.
- ⁴ Based on more than 51 percent ownership by women.
- ⁵ This survey mainly covers SME-oriented financial institutions and their SME portfolios, so employment averages for "micro" loans are higher than they would be in institutions focused on microfinance, which also tend to have even smaller loans.
- ⁶ The \$2 million limit is used for advanced developing countries (Argentina, Brazil, Chile, China, Colombia, India, Korea, Mexico, Morocco, Peru, Russia, South Africa, Thailand, Tunisia, Turkey, and all EU accession countries—Poland, Hungary, Czech Republic, Slovakia, the Baltics, and Slovenia)
- ⁷ The ranges were also applied to the non-MSME flagged financial institutions (13 percent of total reach).
- ⁸ The survey only included \$1,000-10,000 loans at origination due to SME nature of the sample, and excluded loans below \$1,000 as those primarily represent traditional micro loans.
- ⁹ IFC flags its client FIs as "Micro Enterprise", "Small Enterprise", "Medium Enterprise", or "non-MSME" depending on the FI lending profile (distribution of the majority of loans by number), or based on the profiles of the projects that IFC funds with these FIs.

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