



IMPACT OF ACCESS TO FINANCE ON NANO ENTERPRISES

Baseline Report
January 2023

ACKNOWLEDGEMENTS

Authors

Sharon Buteau, Abhishek Gupta, Varun Hariharan

Editorial Support

Diksha Singh, Ananda Swaroop

Design

Sakthivel Arumugam

This report presents baseline findings from an ongoing evaluation of the impact of access to credit on nano enterprises, commissioned by the Dell Foundation and conducted by LEAD at Krea University (IFMR). The authors would like to thank Geeta Goel, Sharvi Dublish and Nat Malupillai at the Dell Foundation for supporting the research and reviewing the report. We express our gratitude to Shailender Swaminathan, Badal Malick and Santanu Pramanik for providing inputs on the research design.

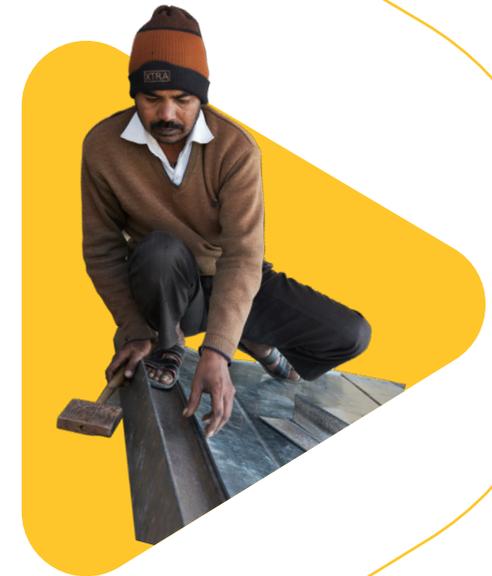
We would like to thank the following individuals for their support in executing the research, and assisting in the drafting and review of the report: Preethi Rao, M P Karthick, John Arun, Mridulya Narasimhan, Debdulal Thakur, Sijo John, Sanjana Vijay, Meenu Jothsna, Vatsima Tripathi, Keerthana Ramaswamy, Nelson Mathews, Sitaram Mukherjee, Pramod Tiwari, Durgesh Pandey, Mahantesh B S, Arul Raj A, Elankumaran E, Avdhut Fadanawis.

We are grateful to our seven partners for their support in conducting this research: Shweta Aprameya and team (Arth Digital), Rahul Gupta and team (Avanti Finance), Alok Mittal and team (Indifi), Sucharita Mukherjee, Puneet Gupta and team (Kaleidofin), Hardika Shah and team (Kinara Capital), Mayur Modi, Deepak Aggarwal and team (Moneyboxx), Sasidhar Thumuluri and team (Sub-K).

We would also like to thank field supervisors and enumerators from LEAD for conducting the data collection. Finally, we express our gratitude to the participants for taking the time to participate in this study.

Opinions stated in this publication are those of the author(s) and do not necessarily reflect the views of the funding organisation.

© LEAD at Krea University (IFMR), 2023.



About LEAD at Krea University



LEAD is an action-oriented research centre of IFMR Society that leverages the power of research, innovation and co-creation to solve complex and pressing challenges in development. Since 2005, LEAD has been at the forefront of financial inclusion and SME research in India. LEAD has strategic oversight and brand support from Krea University (sponsored by IFMR Society) to enable synergies between academia and the research centre.

www.ifmrlead.org

Michael & Susan Dell Foundation



The Michael & Susan Dell Foundation in India is focused on providing opportunities in education and employment to children and youth from low-income communities to help them reach their goals. This focus is driven by investments in education, jobs & livelihood, and financial inclusion. With over \$372 million in investments over the past 16 years, the foundation has impacted the lives of over 37 million children and families in the country.

www.dell.org

Study Partners





Table of Contents

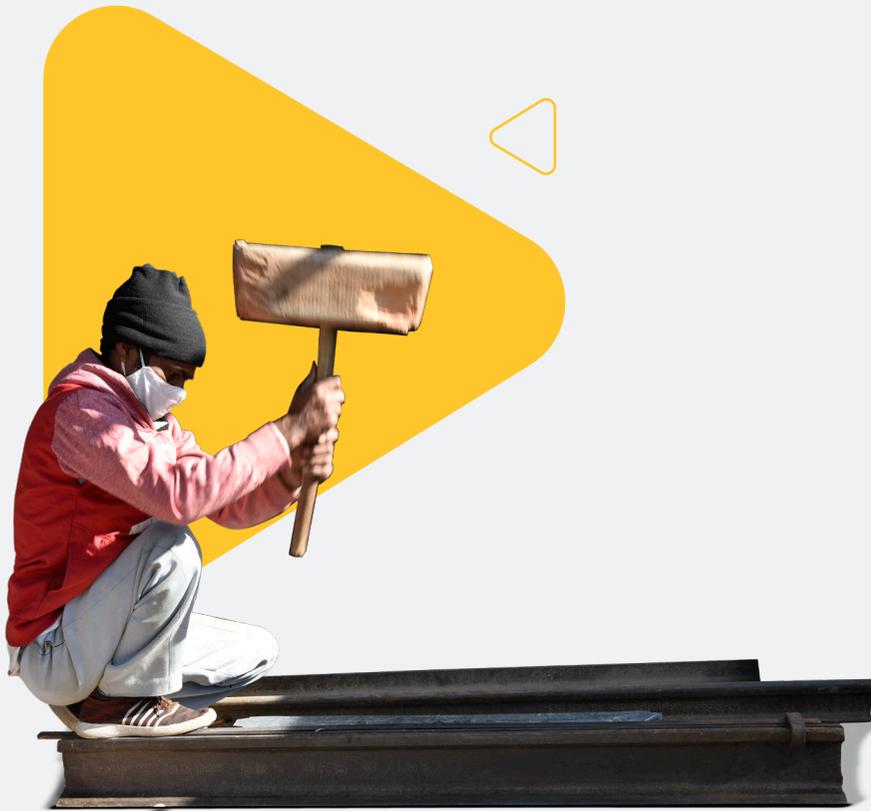
Introduction	6
Segmentation of Nano Enterprises	8
Credit Characteristics	12
Operational Characteristics	15
Economic Characteristics	24

Women-Run Enterprises	28
Next Steps	32
Appendix 1: Definition of Nano Enterprises	34
Appendix 2: Ticket Size Determination for the Study	34



INTRODUCTION

Nano enterprises can be classified as a distinct segment within the Micro, Small and Medium Enterprises (MSMEs) as firms with an annual turnover less than INR 1 crore, characterised by their hyperlocal roots and focus.¹



These are ubiquitous businesses such as kirana shops, tailoring set-ups, tiffin centres, salons, pharmacies, electrical goods shops, wood works, fabrication facilities, repair shops, etc., which are part of any typical urban/semi-urban milieu. Their strength lies in serving hyperlocal needs with agility and overcoming daily vicissitudes to sustain a lower middle class urban living. However, these enterprises do not have the capacity to manage external shocks over an extended period of time without outside support.

Numerous reports in India and globally have found that lack of access to finance is one of the most critical constraints faced by MSMEs.²

Many reports have cited an increase in fixed capital investments and sales as a direct, immediate impact of unlocking access to capital for MSMEs. However, studies have not categorically analysed nano enterprises over a sustained period of time to track the changes that occur in business performance from loan disbursement to loan closure.

The Dell Foundation and LEAD at Krea University have designed a three-year longitudinal study to assess the impact of credit provided to nano enterprises.

The study is executed in partnership with seven Non-Banking Financial Company (NBFC) investees of Dell Foundation.

¹ Dell Foundation [uses](#) this turnover threshold and other characteristics for identifying nano enterprises for its program related investments in India. While the nano enterprise as a term is not used elsewhere often in academic literature or policy discourse, various reports and commentaries make a case for coining it to distinguish it from other MSMEs. See [Appendix 1](#) for more.

² See [here](#) for the literature review carried out prior to this study.

The respondents include randomly selected borrowers on a rolling sample basis from among those who availed loans in the range INR 40 thousand-4 lakh from these NBFCs.³ The tenor of these loans is six to 24 months.⁴ The total sample size for analysis is 2,215, collected from seven states.⁵

Figure 1 Geographic spread of the sample

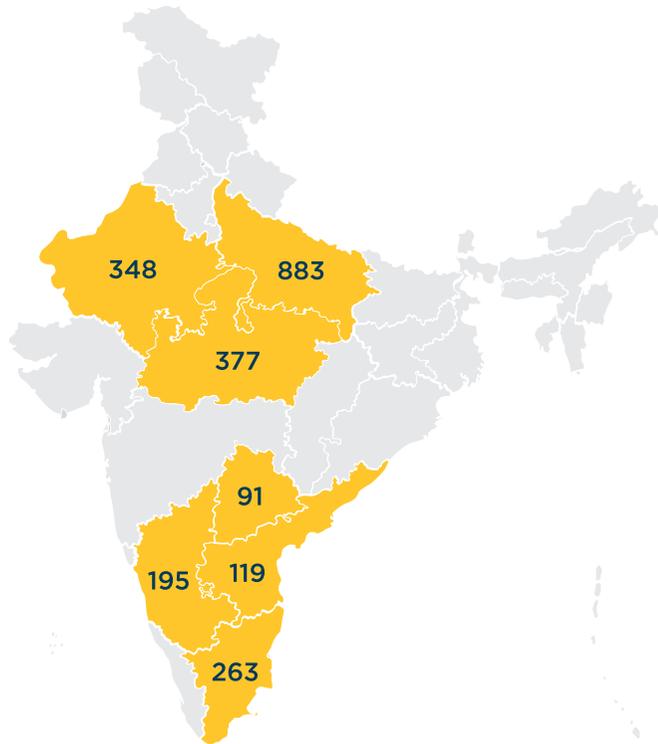
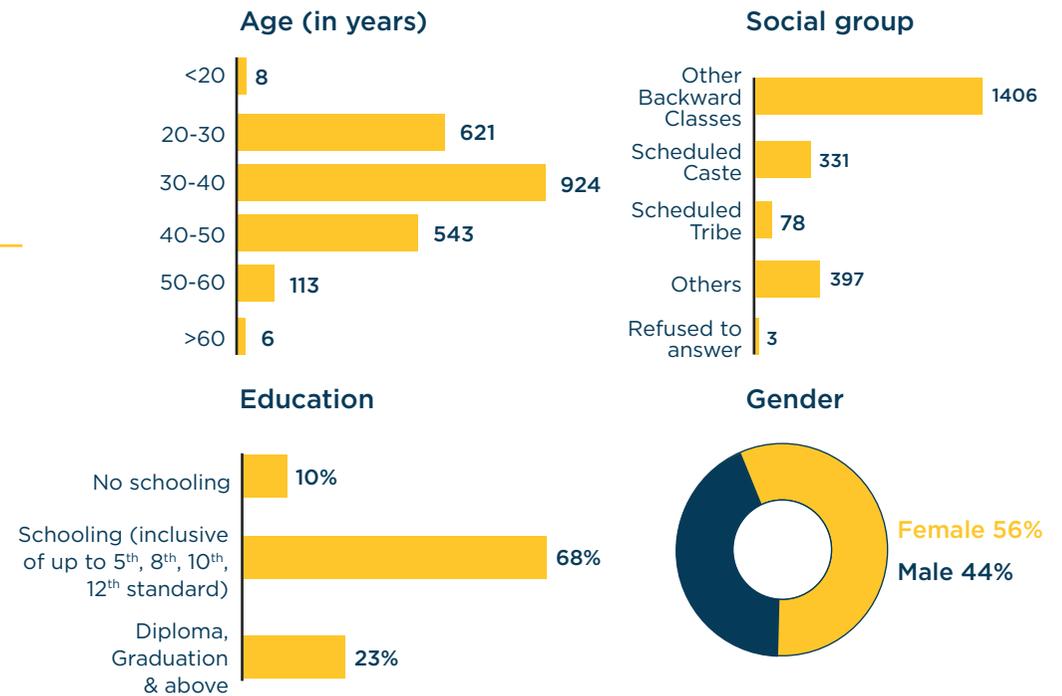


Figure 2 Demographic profile of the borrowers



This report captures the baseline picture of the nano enterprises.

These findings are intended to throw light on the distinct character of these enterprises within the larger MSME space in India. It is expected that the report will help this ubiquitous yet invisible enterprises receive further attention of the donors and investors, financial services industry, and policymakers. The impact of access to credit on these enterprises will be assessed during the endline survey December '23 to May '24.

³ The loan ticket size was derived from loan absorption capacity, based on Dell Foundation's criteria to focus on households with net monthly household income (total income - current loan EMIs) less than INR 25 thousand. See [Appendix 2](#) for more.

⁴ Around 90 per cent of the loans are of a two-year tenor.

⁵ The total sample size was 2,250 from 169 districts. Using [RBI's classification method](#), 26 per cent of the customers are from metro areas (population > 10 lakh), 56 per cent from urban areas (population 1-10 lakh) and 18 per cent from semi-urban areas (population 10k-1 lakh). 21 respondents whose turnover was greater than INR 1 crore have been excluded from the analysis owing to Dell Foundation's focus on enterprises with turnover less than INR 1 crore. 14 respondents who had taken a loan to start a business but had not done so yet are also excluded from the baseline but will be tracked for analysis in midline and endline.

SEGMENTATION OF NANO ENTERPRISES

Equal tertile classes shown in Figure 3 have been considered for the purpose of segmentation and analysis in this report. The median annual turnover of enterprises in the portfolio is INR 5 lakh (see Table 1), which shows that enterprises with turnover less than this are also being served by financial institutions outside of the microfinance fold.

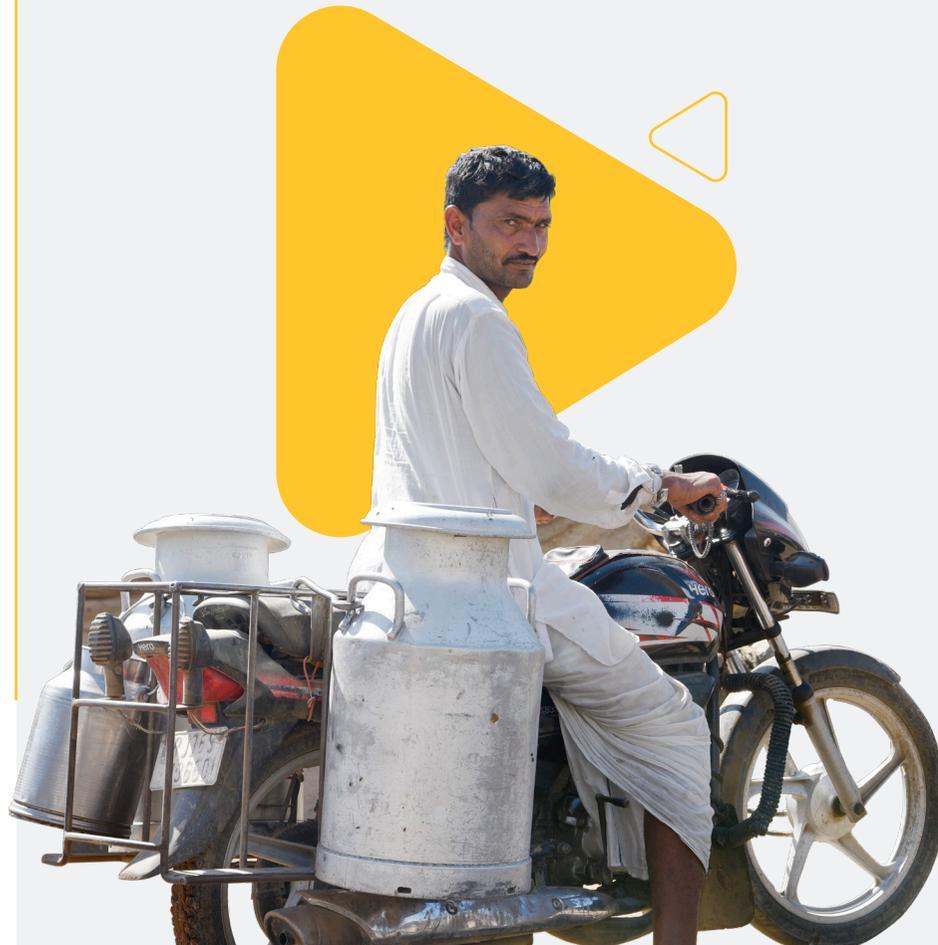


Figure 3 Segmentation of nano enterprises by tertile classes

Segment 1



Turnover INR
≤ 3 Lakh
(33%)

Segment 2



Turnover INR
> 3 - 10 Lakh
(33%)

Segment 3



Turnover INR
> 10 Lakh - 1 Crore
(33%)

Table 1 Segment-wise turnover, household income and enterprise contribution

	Overall turnover (100%)	Turnover INR ≤ 3 Lakh	Turnover INR > 3 - 10 Lakh	Turnover INR > 10 Lakh - 1 Crore
Annual Turnover (Median, INR)	5,00,000	1,50,000	5,50,000	25,00,000
Monthly household income (Median, INR)	40,000	25,000	40,000	80,000
Monthly contribution of nano enterprise to household income (Median)	60%	47%	65%	68%

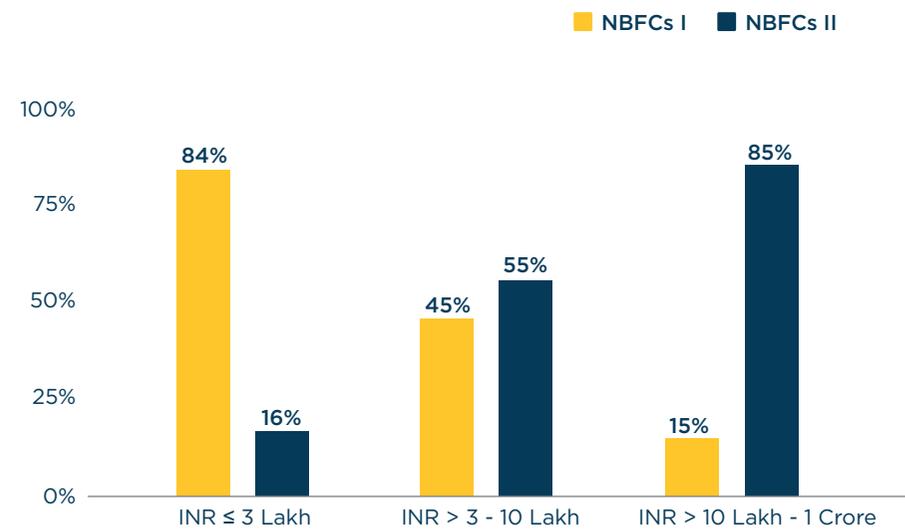
Two kinds of NBFCs are observed to be catering to the nano enterprises:

- **NBFCs I:** Those with a microfinance portfolio, upselling from their joint liability group (JLG) portfolios or carrying out individual lending independently to typical microfinance customers.⁶ There are three such NBFCs in the portfolio with a sample size of 1,097 borrowers.
- **NBFCs II:** Those without a microfinance portfolio or legacy, serving a segment well above the typical microfinance customers. There are four such NBFCs in the portfolio with a sample size of 1,118.

The turnover of a business drives matchmaking between the proprietor and financial institutions serving that segment.

- Majority of the proprietors (~85 per cent) with enterprise annual turnover less than INR 3 Lakh have borrowed from NBFCs I. Whereas it reverses remarkably in a symmetrical manner in the case of proprietors with enterprises annual turnover more than INR 10 Lakh with 84 per cent of them having borrowed from NBFCs II (See Figure 4).

Figure 4 Distribution of borrowers by NBFC type across turnover segments



This baseline report provides thematic insights for 1. Overall sample, 2. Tertile annual turnover segments, 3. Two kind of NBFCs (where relevant).

⁶ RBI has capped microfinance lending to customers with annual income below INR 3 lakh.

SUMMARY OF KEY FINDINGS ACROSS VARIOUS THEMES

Theme	Key findings
 <p data-bbox="271 651 495 683">Access to credit</p>	<ul data-bbox="685 432 2011 730" style="list-style-type: none"> • Nano enterprises with widely varying turnover and household income avail a similar ticket size loan as these are the standard product offered by the NBFCs. • -10 per cent of borrowers are New To Credit (NTC). It rises to -24 per cent if we exclude the microfinance graduated customers of NBFCs I as well as the repeat borrowers of NBFCs II. • More than 80 per cent of borrowers had either bootstrapped through their own savings or received support from family and friends to start their enterprise. • Loans serve as a current account overdraft facility or a credit line, with 70 per cent of the borrowers taking a loan to acquire raw material/inventory or manage cash flows.
 <p data-bbox="282 1031 477 1090">Operational characteristics</p>	<ul data-bbox="685 818 1977 1134" style="list-style-type: none"> • 43 per cent of the enterprises operate in the trade sector, followed by 23 per cent in manufacturing and 17 per cent each in services and livestock. • The median vintage of enterprises is seven years across the three turnover segments. • 33 per cent of the enterprises are run from home, 55 per cent operate from permanent premises outside of home and the remaining 12 per cent from mobile outlets (kiosks, roving vendors, etc.) • 16 per cent of the nano enterprises have Udyam registration. • Overall 57 per cent (N=1,275) of the enterprises either send or receive digital payments, and 60 per cent (N=768) of them do both.
 <p data-bbox="282 1382 477 1441">Economic characteristics</p>	<p data-bbox="667 1209 925 1233">Enterprise finances</p> <ul data-bbox="685 1270 2022 1449" style="list-style-type: none"> • Raw material or inventory is the most common monthly expense head across the nano enterprises which jumps -20X from the lowest to the highest turnover segment while the turnover rises only -13X. • Another important expense head is rent: 1,000 enterprises in the sample pay rent; 71 per cent in the highest turnover segment pay a rent as compared to 26 per cent for the lowest turnover segment.



Employment and wages

- One-third of the enterprises employ paid workers.
- The median number of employees (two) and average wage paid per employee (INR 10,000) is similar across the three segments.
- **90 per cent** of the nano enterprises do not have plans of hiring additional workers in the 'next three months' (from the date of loan disbursement).

Household income

- At an overall monthly median household income of INR 40,000, the nano enterprise households comprise the middle-income group of India; **84 per cent** of households have at least one additional source of income.
- The nano enterprise contributes **60 per cent** to household income overall, rising from **47 per cent** in the lowest turnover segment to **68 per cent** in the highest segment.



Women-run enterprises

- **64 per cent** of enterprises are run by men as compared to **36 per cent** by women. This can be contrasted with the nation-wide picture where only **20 per cent** of microenterprises are run by women (the sample is thus a reflection of Dell Foundation's portfolio construct).
- Within NBFCs I customers, enterprise characteristics of men-run and women-run enterprises are similar:
 - Around **90 per cent** of both men-run and women-run enterprises have a turnover of less than INR 10 Lakh.
 - Less than **20 per cent** in each provide employment.
 - **95 per cent** (N=97) men have a credit history vs **99 per cent** (N=872) women.
- Within NBFCs II customers, there is a wide variation in the business performance and credit profile of men-run and women-run enterprises:
 - **~75 per cent** of women-run enterprises have a turnover less than INR 10 lakhs, whereas less than **34 per cent** of men-run enterprises have a turnover of less than INR 10 Lakh.
 - Only **23 per cent** of women-run enterprises provide employment while **56 per cent** of men-run enterprises do so.
 - **40 per cent** (N=101) of women borrowers and **15 per cent** (N=126) of men borrowers are NTC customers. (This is due to the portfolio construct wherein a particular NBFC offers credit to NTC customers, and not due to enterprise-related factors such as the vintage of the enterprise or age of the entrepreneur.)

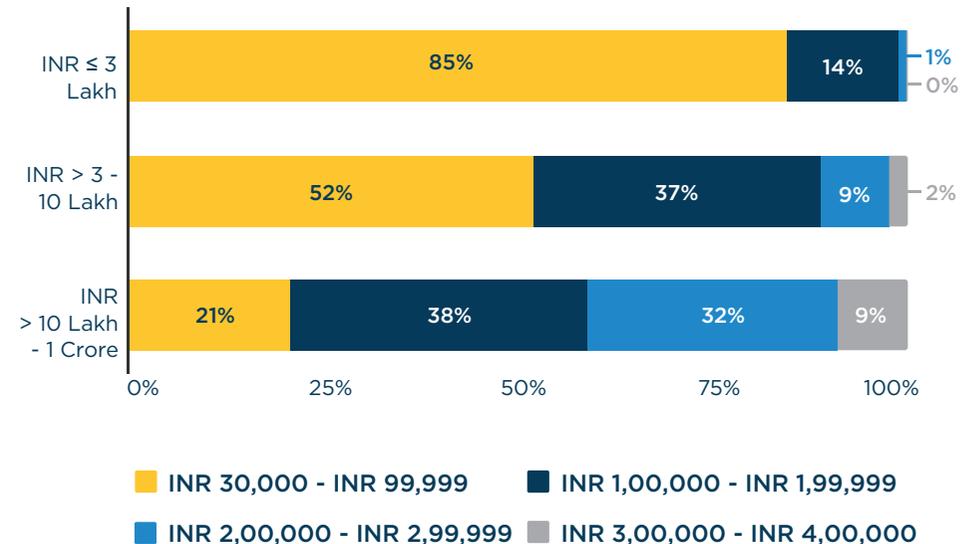
CREDIT CHARACTERISTICS

~60 per cent of the highest turnover segment enterprises (INR 10 Lakh - 1 Crore) avail a low ticket size loan (less than INR 2 lakh) (see Figure 5)⁷. This suggests that either the capital required is low or the financial institutions conservatively sanction a lower amount or both.



► Loan ticket size

Figure 5 Distribution of borrowers by loan ticket size across turnover segments



- Even if other active loans (from various other formal financial institutions) are taken into consideration for the enterprises in the highest turnover segment, the percentage of debt is still comparatively low given the size of those enterprises. The overall formal Debt-To-Income⁸ (DTI) ratio across the nano enterprises in the three segments is in the range of 15–20 per cent (see Table 2), much below the industry standard of 25–33 per cent.⁹

⁷ The median ticket size across the three turnover segments is: INR 52,000 (INR ≤ 3 Lakh); INR 99,000 (INR > 3 - 10 Lakh); INR 1,50,000 (INR > 10 Lakh - 1 Crore).

⁸ a) Income refers to the total household monthly income from all sources and all members of the household. A household is defined as inclusive of all members (extended family or otherwise), living together or otherwise. It thus varies from the typical definition of the household which excludes migrant workers and considers only those people (including non-family members) who ordinarily live together and eat from the common kitchen.

b) Debt does not include rental pay-outs.

⁹ IDFC First Bank | Fullerton India | Credit Mantri.

Table 2 Turnover segment-wise debt-to-income (DTI) ratio of nano enterprise households

Annual turnover	Overall	INR ≤ 3 Lakh	INR > 3 - 10 Lakh	INR > 10 Lakh - 1 Crore
Monthly household income (INR)	40,000	25,000	40,000	80,000
Total Equated Monthly Instalment (EMI) (formal sources, INR)	7,092	5,139	7,300	12,415
DTI	18%	19%	16%	15%

► Interest rate

Interest rate spread differs significantly between NBFCs I and II, and is a reflection of the regulatory cap as well as the distinct type of customers served.

- The interest rates of the two types of NBFCs are starkly different (see Table 3). If we consider 24 per cent annual percentage rate as the reference point (given that hitherto RBI had capped microfinance loans at that rate¹⁰), we find that NBFCs I (with microfinance) have 86 per cent (N=947) of the loans disbursed at rates less than or equal to 24 per cent.¹¹ In contrast, 94 per cent of the loans disbursed by NBFCs II have interest rates higher than 24 per cent.¹²

Table 3 Number of loans and interest rate for NBFCs I and II¹³

Interest rate	NBFCs I	NBFCs II
12 - 24%	947	69
> 24 - 30%	150	531
> 30 - 36%	-	518
Total	1,097	1,118

► Purpose of loan

Loans serve as a current account overdraft facility or a credit line.

- In most cases, the loan was sought to purchase raw material/inventory or for general cash flow management (70 per cent). Credit is thus used for working capital purposes, to replenish supplies and tide over delayed trade receivables.¹⁴

► Other active formal business loans

The presence of other active formal business loans in 30 per cent of the enterprises suggests that multiple loans are required because a single source does not fulfil the requirement. The proprietors thus put together their own financial products.

¹⁰ 24 per cent is considered the benchmark because earlier RBI guidelines on microfinance mandated it as a ceiling, and only removed it in March 2022.

¹¹ Majority of the loans (N=960) with interest rate less than or equal to 24 per cent are in the range of 18-24%. Only 56 customers have interest rates for their loans between 12-18 per cent, offered by two NBFCs from type I.

¹² NBFCs I predominantly (99 per cent, N=969) have existing-to-credit (ETC) borrowers, the majority (85 per cent, N=825) of which are charged an interest rate below 24 per cent. NBFCs II have 20 per cent NTC borrowers, about 70 per cent of which are charged an interest rate higher than 30 per cent. But more than 40 per cent of the ETC borrowers are also charged an interest rate more than 30 per cent in the case of NBFCs II.

¹³ We have not gone into the aspect of risk-based pricing for each NBFC in this report, as it is the outcome of many factors like batch of disbursement (reflection of macroeconomic inflation rate and repo rates), geography (state and district), gender, sector, ticket size, tenure, NBFCs' cost of funds and loan origination strategy, etc. In a subsequent shorter note, we shall deep-dive into this phenomenon, after discussion with the supply-side partners.

¹⁴ The second most frequent response (23 per cent) across the three turnover segments is renovation/reconstruction of the enterprise or buying/renting new/additional premises. Thus, in some cases, the loan allows changes to the enterprise premises, which can presumably help stock more inventory/raw material and cater to more customers at a hyperlocal level.

- There is a lower presence of additional formal business loans in the lowest turnover segment (20 per cent) vis-a-vis the highest turnover segment (45 per cent).
 - » This is related to the initial point (in 'loan ticket size') that ~60 per cent highest turnover segment enterprises avail smaller ticket size loans (less than INR 2 lakhs) from the lenders in the study.
 - » It is also tied to the previous point (in 'purpose of loan') that most loans are used to meet working capital shortfalls, for which the required credit is sourced from multiple sources on a case-by-case basis.
- There is great penetration of formal credit, given that only less than 1 per cent of borrowers have an active or closed loan from moneylenders, either for business or personal use.¹⁵

► Credit score

~90 per cent of the enterprises have a past credit history. But the share of new-to-credit customers rises to 24 per cent if we logically exclude the microfinance graduated customers of NBFCs I as well as repeat borrowers of NBFCs II.

- The credit scores of the borrowers also show a 'prime' character.
 - » Of over 1,000 Existing to Credit (ETC) proprietors with a CRIF High Mark score, 50 per cent are rated 'good' and another 38 per cent 'fair'.
 - » Similarly, of over 600 ETC customers with an Equifax score, more than 65 per cent have a credit score of either 'good', 'very good' or 'excellent'.¹⁶

» And, in the non-microfinance credit rating agency CIBIL, of 179 borrowers, around two-thirds of the borrowers have a [prime](#) or above credit score (more than 730)¹⁷; only 3 per cent are sub-prime (300-680).¹⁸

- The share of new-to-credit (NTC) customers improves to 20 per cent (from ~10 per cent) after excluding NBFCs I. And further, after excluding the repeat customers of NBFCs II, the share of NTC customers rises to 24 per cent. Separately, it is also pertinent to note from the demand-side data that 41 per cent of the proprietors have not taken any formal loan for their business between 2017-2022. Thus it is reasonable to assume that the share of those who are NTC (business) is much higher than 10 per cent. Overall however, the larger no. of customers with prior credit history seems intuitive given that the median vintage of the enterprises is seven years and it is likely they would have availed a loan previously. The credit history does not vary much across the three turnover segments.

► Sources of initial capital

There is a lack of availability of seed capital, presumably owing to the perceived risk in lending.

- Majority of the proprietors bootstrap their enterprises from their own savings (69 per cent), and a little more than one-third of the enterprises also received support from family or friends (37 per cent). Sources of initial capital do not differ significantly across three turnover segments as well. This ties back to the point that lenders are risk averse to serve NTC customers as well as enterprises that are less than three years old.

¹⁵ It is to be noted that such a small number is more an outcome of the portfolio construct of the seven NBFCs. This figure is also corroborated by another fact, as stated before: 90% of respondents have a credit history. For a comparison with the overall national picture, as per the [All India Debt and Investment Survey \(AIDIS\), 2021](#), the percentage of households reporting debt from moneylenders is 9.1 per cent and 3.8 per cent in rural and urban areas, respectively (see Figure 3.7 in the AIDIS report). At a broader level, the share of those availing credit from all the non-institutional sources (landlord, agricultural moneylender, professional moneylender, input supplier, relatives and friends, chit fund, market commission agent/traders, etc.) is 17.1 per cent and 7.9 per cent in rural and urban areas, respectively.

¹⁶ The breakdown in the rest is as follows: Fair (11%), 'Poor'(7%), Insufficient data (15%)

¹⁷ See 'Definitions and Notes', Pg 19, [Emerging trends in retail credit caused by the COVID-19 pandemic](#), TransUnion CIBIL, 2020

¹⁸ No Experian score was reported for any borrower, and hence has been excluded from the analysis. Overall there are 120 nano enterprise proprietors for which no credit bureau score (ETC/NTC) was received from the partner NBFCs. One of those NBFCs has 97 such proprietors and the credit score is not checked as those are its repeat borrowers. This NBFC belongs to the NBFCs I type.

OPERATIONAL CHARACTERISTICS

Borrowers in the portfolio belong to the usual shop-based businesses that can be seen in any hyperlocal urban/semi-urban environment in India: furniture, repair, kirana, tailoring, salons, welding, etc.

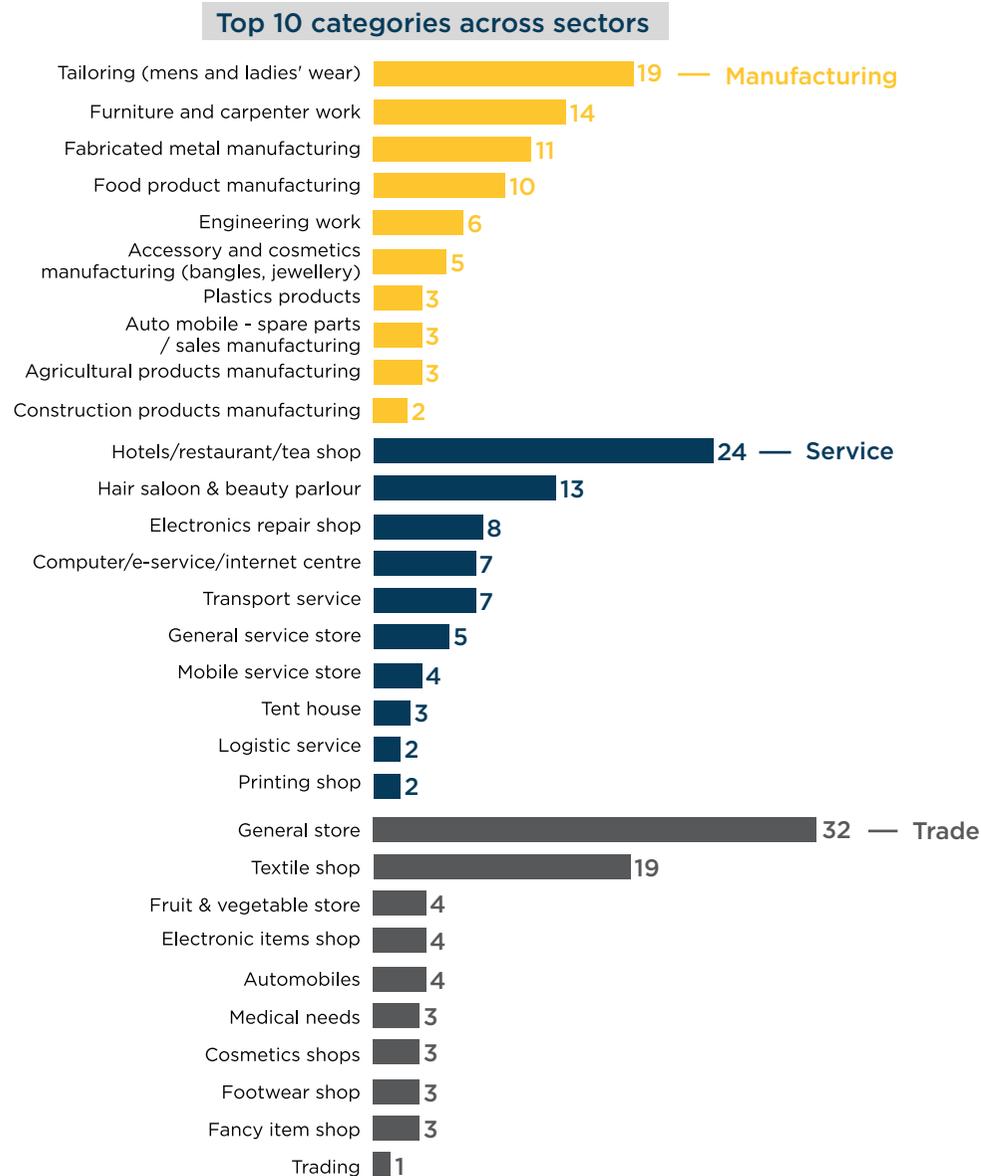


Sectors

- The nano enterprises in the study belong to non-farm sectors such as livestock, manufacturing, services and trade. The trade enterprises has the highest share at 43 per cent followed by the manufacturing enterprises at 23 per cent, services and livestock at 17 per cent each.¹⁹
- The livestock-based enterprises predominantly (95 per cent) have an annual turnover less than INR 10 Lakh, and is followed by the services-based enterprises (80 per cent). In contrast, 40 per cent manufacturing-based and trade-based enterprises have a turnover above INR 10 Lakh.
- A more nuanced way to understand the sectors beyond the National Industrial Classification (NIC) codes is to look at the actual business activities that comprise these sectors. The hyperlocal nature of the business is more evident in Figure 6.

¹⁹ The sector classification has been done based on the [National Industrial Classification](#) codes used in the survey.

Figure 6 ▶ Sector-wise hyperlocal business activities (%)



▶ Vintage

The median vintage of enterprises is seven years and it does not vary much across the three turnover segments.

- 28 per cent of businesses have been passed on within the family to the current proprietor/borrower and their median vintage is greater, at 12 years. This is an important result as it shows that most nano enterprises (72 per cent) are run by first generation entrepreneurs.
- It is important to note that only 11 per cent of enterprises have a vintage less than three years.²⁰ (This period is generally considered the industry threshold for lending as it means business cash flows have stabilised and are suitable for unsecured loans.²¹)

▶ Formalisation

Only 16 per cent of nano enterprises in the portfolio have MSME Udyam Registration Number.

- 60 per cent of the nano enterprises do not possess any typical registration certificate, such as a municipal license, trade license, business PAN, Udyam, etc.
- Financial institutions however use other metrics for credit worthiness such as personal credit score, utility bill records, rental slips, etc. Close to 92 per cent of the enterprises in the highest

²⁰ 87 per cent (N=212) of them are customers of two NBFCs from NBFCs I category, which cater to JLG microfinance graduated customers.

²¹ See [Fullerton](#) | [Tata Capital](#) | [Bajaj Finserv](#).

turnover segment pay utility bills as compared to 53 per cent in the lowest segment.

- Around 43 per cent of the nano enterprises in the highest turnover segment have a Goods and Service Tax (GST) registration.²²

► Digital adoption

► Overall, digital payments adoption is below par, especially in the lowest turnover segment.

- ~80 per cent of the proprietors use a smartphone for enterprise related activities. As turnover increases, so does the prevalence of using a smartphone for business purposes, from 68 per cent in the lowest segment to 94 per cent in the highest segment, reflecting perhaps that the price of the smartphone is still a prohibitive barrier in digital adoption.
- 58 per cent (N=1,275) of the enterprises send/receive digital payment. Of these:
 - » 83 per cent (N=1,058) receive digital payments and 77 per cent (N=985) make at least one form of digital payment (utility bills, mobile recharge, supplier payments, taxes, employee salary, etc.).
 - » More than 60 per cent of these (N=768) both receive and make digital payments. This finding is broadly in line with the [World Bank's Findex 2021](#) result which finds that the majority of those who accept digital payments also make digital payments.

- 66 per cent of enterprises in the highest turnover segment daily transact digitally (sending/receiving) as compared to only 22 per cent in the lowest segment, which points to variegated digital uptake across nano enterprises.



²² This includes any government payment (municipal/district authorities, etc.) or enterprise taxes (direct/indirect) paid by the borrower in one month prior to the date of disbursement.



**Lukman
Ramjan**
42

▶ Portraits of nano enterprises



Location

Alwar, Rajasthan



Turnover segment 1
(INR ≤ 3 Lakh)

Lukman Ramjan is a 42-year-old bangles manufacturer and retailer based out of Toda Bhim, a small town 100 kilometres from Alwar, in Rajasthan. He lives with his wife and three children. His eldest college-going daughter assists him in running the shop. The shop is the only source of income for the family.

His tiny shop is located in the town's bustling marketplace and he pays a rent of INR 3,000 per month for it. He aims to purchase a larger shop on the main square of the market to increase the shop's visibility and customer footfall. But for that he seeks a larger term loan of INR 5-6 lakhs. Once he has that shop, he would want his children to enter the trade and expand the business further.

Currently he received a loan of INR 1.2 lakh which he has used to purchase bangles as stock. He provided documents such as PAN and Aadhaar cards, electricity bill and expense bills for his credit assessment. He has not used the loan fully till now, keeping some as a buffer for staggered planning.

Lukman feels it is difficult to get a loan from a bank which ironically is located less than 50 metre from his shop.

He hires two or three workers on a part-time basis to make bangles in his household facility nearby. While he has adopted digital payments through QR code, the share of digital payments is low, at less than 10 per cent in a day. He maintains his account books studiously, especially the expenses and the account receivables from regular, loyal customers.





Gokul
Parmar
35

▶ Portraits of nano enterprises

▶ Location

Indore, Madhya Pradesh



Turnover segment 2
(INR > 3 - 10 Lakh)

Gokul has been running his pharmacy business since 2012 but has accessed a business loan for the first time now. Before starting his current business, he had apprenticed in the city of Indore as the pharmacy business requires technical knowledge. Adjacent to the shop is another shop which he has started recently retailing utensils and household appliances. His wife runs this shop which is registered in her name. His father practices agriculture on his farmland nearby and sells the crop commercially as well.

Gokul's daily sale is close to INR 10,000, fluctuating between INR 8,000-12,000. Being in the pharmacy business, he has had a good couple of years during the COVID-19 pandemic. Based on favourable cash flows from the two years of pandemic, he wanted to expand the shop premises and stock more drugs.



Gokul had applied for a loan of INR 10 lakh but was offered only INR 2 lakh. He wanted the larger loan to expand into the wholesale business, supplying to smaller retailers.

His net margins would be better in a wholesale business model. He had earlier taken out a loan for some personal activities in 2015 — based on income shown through his salary slip — and due to certain discrepancies, his credit score had been impacted. He has been told by the lender that his loan amount sanctioned has been affected by this and after paying the current loan, the credit score would improve for him to be offered a higher desired ticket size.

He has provided temporary seasonal employment to a relative of his friend as an apprentice in summer vacations and pays him INR 2,000 monthly. He does not have any full-time employees and believes the need for it arises only when the business expands. Such a large scale of business is possible according to him when he takes a much larger ticket size loan.



**Lata
Prajapati**
38

▶ Portraits of nano enterprises



Location

Dhar, Madhya Pradesh



Turnover segment 3
(INR > 10 Lakh - 1 Crore)

Lata is a 38-year-old retailer, based out of Pithampur, a small town 30 kilometres from Indore. She took a loan of INR 1.4 lakh for her retail shop that stocks apparel and accessories for women customers.

She has a daily sale of around INR 6,000 from 25-30 customers. The income spikes during festivals, and she also provides part-time employment to young girls at that time to help manage customer footfall.

Earlier she used to run her enterprise from home but, since 2015, she operates out of commercial market premises paying a rent of around INR 4,000. Before starting her business, she used to work in the nearby industrial area where she earned and saved money for her own venture.

She gets support from her family members, for example, in outstation travel (e.g., Surat) to buy the stock as well as search for best financing options in the market.

The loan has been taken for working capital purposes to purchase stock. She has set her eyes on a larger investment a few years from now.'



Lata had earlier taken multiple loans from some local MFIs but wasn't satisfied with the cumbersome JLG model. Hence, she decided to take a bigger loan from the NBFC partner in the study.

ECONOMIC CHARACTERISTICS

The top monthly expense heads are raw materials, utility bills, and transportation and logistics.²³



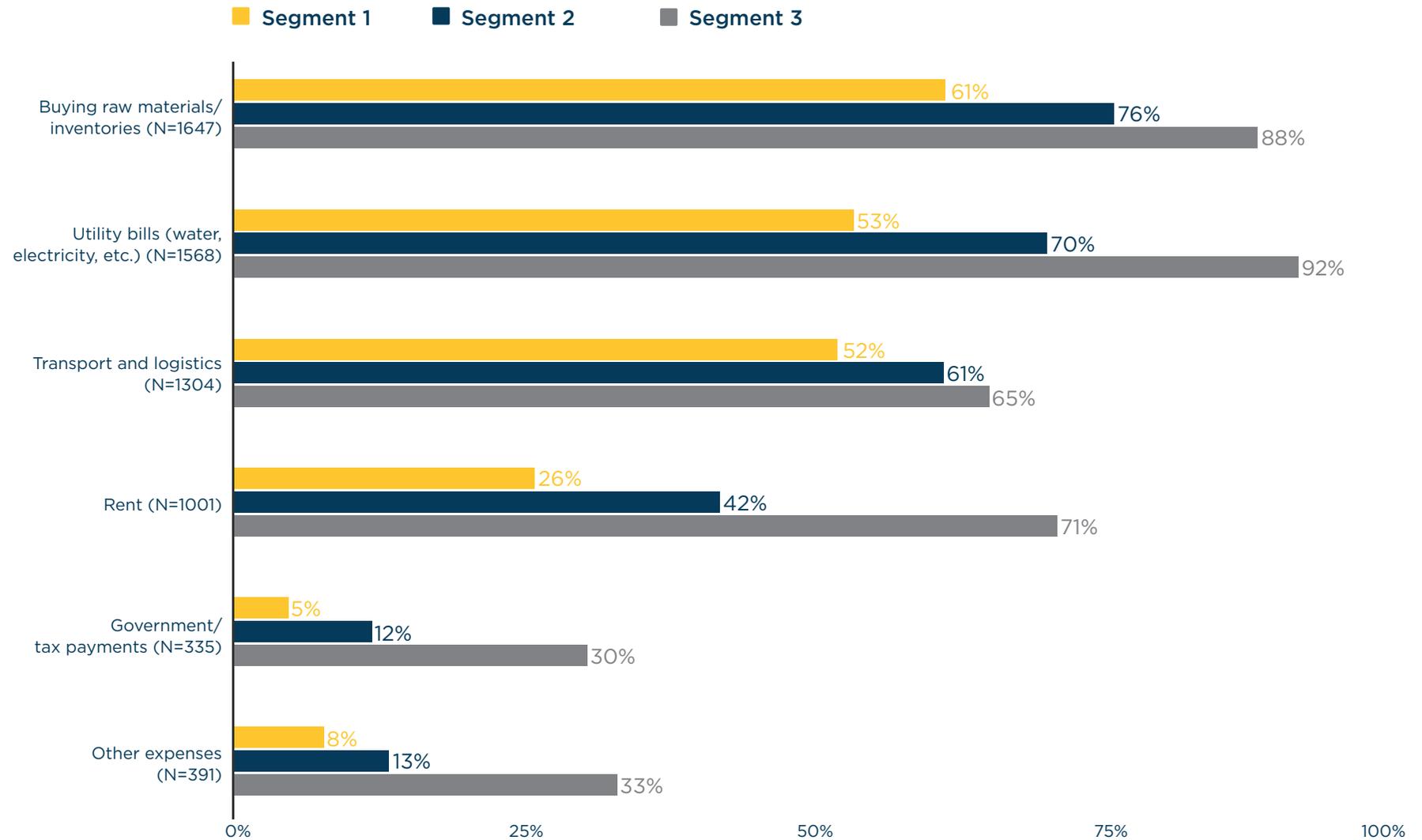
► Enterprise finances

- A higher number of enterprises incur the expenses across the rising turnover segment (see Figure 7). For example:
 - » While 61 per cent of the enterprises in the turnover segment 1 purchased raw material in the month prior to the date of disbursement, it rises to 88 per cent in case of segment 3.
 - » Enterprises incurring rental expense rise manifold from only 26 per cent in lowest turnover segment 1 to 71 per cent in the highest turnover segment 3.²⁴
- Overall, the expenses incurred on raw material is substantially higher than all other expenses across the three turnover segments (see Table 4). Further, the median value of expense on raw material rises ~22x between the lowest and highest turnover segment (whereas the turnover rises ~13x between the two).
- However, regarding the other operational expenses, it is observed that the increase across turnover segments is only incremental in nature, which stands out especially the median turnover rise across the three segments.

²³ These are the expense heads incurred by nano enterprises in the month prior to the date of disbursement of loan.

²⁴ The decision to operate on rent deserves more scrutiny, hitherto absent in the discourse on MSMEs. While, on the one hand, operating from commercial premises on rent provides an opportunity to serve more customers, operating from home allows a larger window to serve customers, for example, late at night or early in the morning. This facet could be explored more in qualitative research. 33 per cent (N=736) of the enterprises are run from home. The majority of the rest (55 per cent, N=1,229) are run from fixed, permanent premises outside of home; 72 per cent (N=882) are on rent and the rest are owned. In addition, there are a few home-based enterprises as well as some non-permanent, fixed premises (kiosks, stalls, etc.) that are also on rent.

Figure 7 ▶ Percentage of enterprises across turnover segments incurring monthly expenses



The expense statement captures the expenditure made by nano enterprises across the expense heads mentioned earlier.²⁵

Table 4 Monthly expenses of nano enterprises

Expense statement (Median, INR)	INR ≤ 3 Lakh	INR > 3 - 10 Lakh	INR > 10 Lakh - 1 Crore
Monthly turnover (N=2,215)	15,000	50,000	2,00,000
Breakdown of monthly expenses			
Buying raw materials/inventories (N=1,647)	5,000	26,250	1,10,000
Utility bills (water, electricity, etc.) (N=1,568)	500	600	1,000
Transport and logistics (N=1,304)	500	1,200	2,000
Rent (N=1,001)	2,000	3,417	6,000
Government/tax payments (N=335)	258	1,000	2,250
Other expenses (N=391)	300	500	592

²⁵ The expense statement captures the state of enterprise finances for one month prior to the date of disbursement of loan. The statement is crucial for impact assessment as baseline information to understand the changes at the end of the loan tenure as endline.

► Employment and wages

► Only 33 per cent of enterprises employ workers (paid, full time/part time), with high variation between low and high turnover segments. The median number of employees (two) and average wage paid per employee (INR 10,000) remains the same across segments.²⁶

- » 12 per cent of nano enterprises in segment 1 employ workers as compared to 57 per cent in segment 3. This finding gives credence to the view that enterprises need to cross a certain threshold size of business before they are able to employ workers.²⁷
- » The median number of workers per enterprise is two and does not vary much across segments. Thus, enterprises with a higher turnover do not create more per unit jobs.
- » The overall median monthly wage per worker is INR 10,000.²⁸ It does not vary significantly across segments, which suggests that the gains of working for an enterprise with a larger turnover/profit does not trickle down to an individual worker.

► Household income

► Nano enterprise households have multiple income streams, which helps achieve a middle income living.

- At an overall monthly median household income of INR 40,000, nano enterprise households comprise the middle-income group of India.²⁹ 84 per cent of the households in the sample have at least one additional source of income, whether it be another earning family member or another personal source of income. They have approximately similar shares across the three segments.
- Nano enterprises contribute 60 per cent to the household income overall, rising from 47 per cent in the lowest segment to 68 per cent in the highest segment. Combined with the previous point, this leads to a crucial finding: with increasing turnover, proprietors begin to focus on their specialised knowledge in a particular economic activity and reduce dependence on other livelihood income sources.



²⁶ 'Employment' refers to the hiring of any person who is paid monetarily. Full-time employment refers to someone that works for all working hours and days at the business. Part-time employment refers to someone that works for a few hours in a day/days in a week/weeks in a month and is not required at the business at all times. For the purpose of analysis, both permanent and temporary workers are considered. Permanent worker refers to someone that has been hired to regularly work at the business and not only for a short period/season, while temporary worker refers to someone that has been hired only for a short period of time and who may/may not be fired after that period.

²⁷ ~90 per cent of the nano enterprises do not have any plans of hiring workers in the 'next three months' (from the date of loan disbursement), the predominant reason being they can themselves take care of the business.

²⁸ This is, in fact, less than the national average (urban) for a regular wage/salaried employee and closer to monthly wages for casual workers, as per [Periodic Labour Force Survey \(PLFS\)](#), 2022.

²⁹ Based on harmonising [CMIE](#), [Pew Research](#) (based on the World Bank database), [BCG](#) and proprietary [PRICE](#) data, we define 'middle-income group' as households with a gross monthly income between INR 25-50 thousand (2021).

WOMEN-RUN ENTERPRISES

Women-run enterprises are a heterogeneous segment in themselves. Those enterprises which receive credit from non-microfinance space (NBFCs II) show a distinct lag in operational and economic performance.



- In the sample, the number of women borrowers (56 per cent) is higher than male borrowers (44 per cent), and can be attributed to a high percentage of Microfinance Institution (MFI) graduated borrowers in the Dell Foundation's portfolio construct.
- Given that MFIs primarily channel credit funds to women borrowers, we consider it important that the women customers of three NBFCs I (having microfinance focus, portfolio or legacy) be studied distinctly from those of four NBFCs II (without microfinance focus, portfolio or legacy). Figure 8 shows the borrower mix of the NBFCs I and II.

Field analysis does, however, confirm the long-standing view that a large number of women who borrow do not run the enterprise, especially in the microfinance space, as shown in Figure 9 in case of the NBFCs I.

In the analysis (Figure 10), we provide disaggregated details for women- and men-run enterprises across the two types of NBFCs in the portfolio to get a nuanced picture. Across crucial factors such as turnover, sectoral split, digital adoption, employment generation and credit history, there is an evident similarity in the men-run and women-run enterprises in the NBFCs I whereas a stark gender contrast is observed in NBFCs II.

Figure 8 Borrower mix of the NBFCs I and II

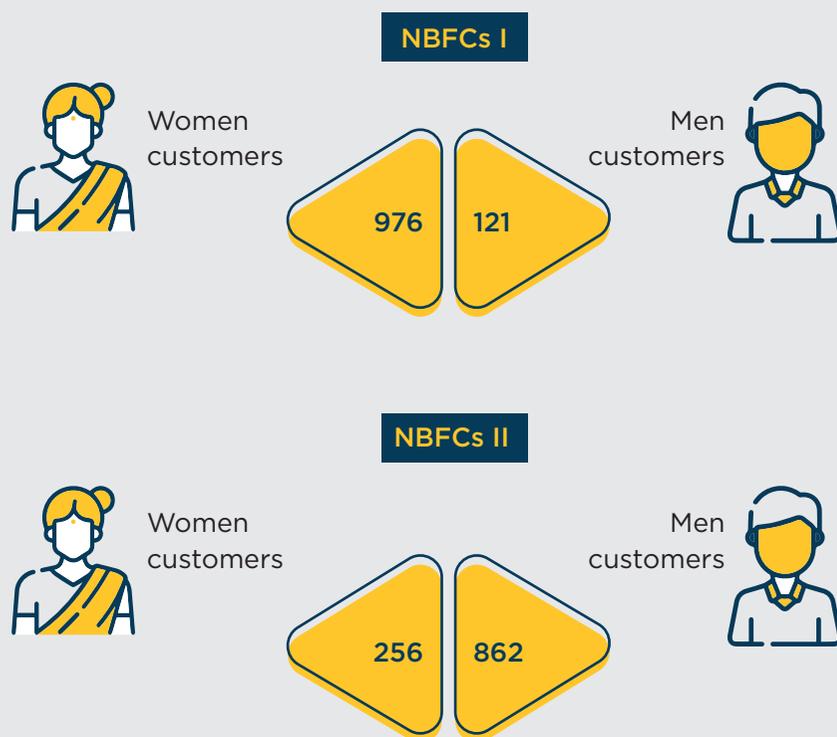


Figure 9 Women borrowers that run enterprises

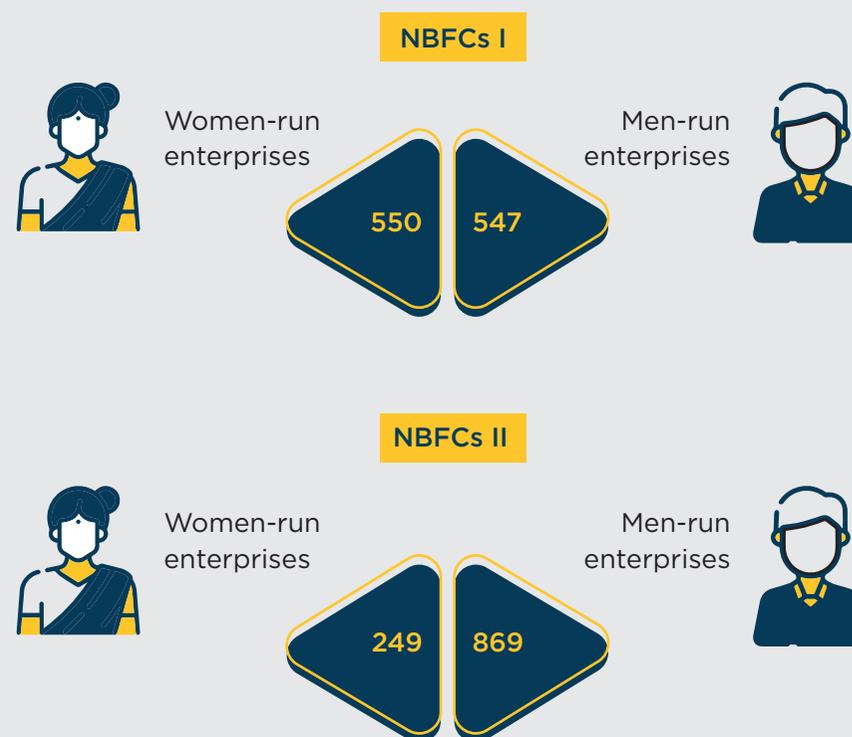


Figure 10 Disaggregated details for women- and men-run enterprises in NBFCs I and NBFCs II

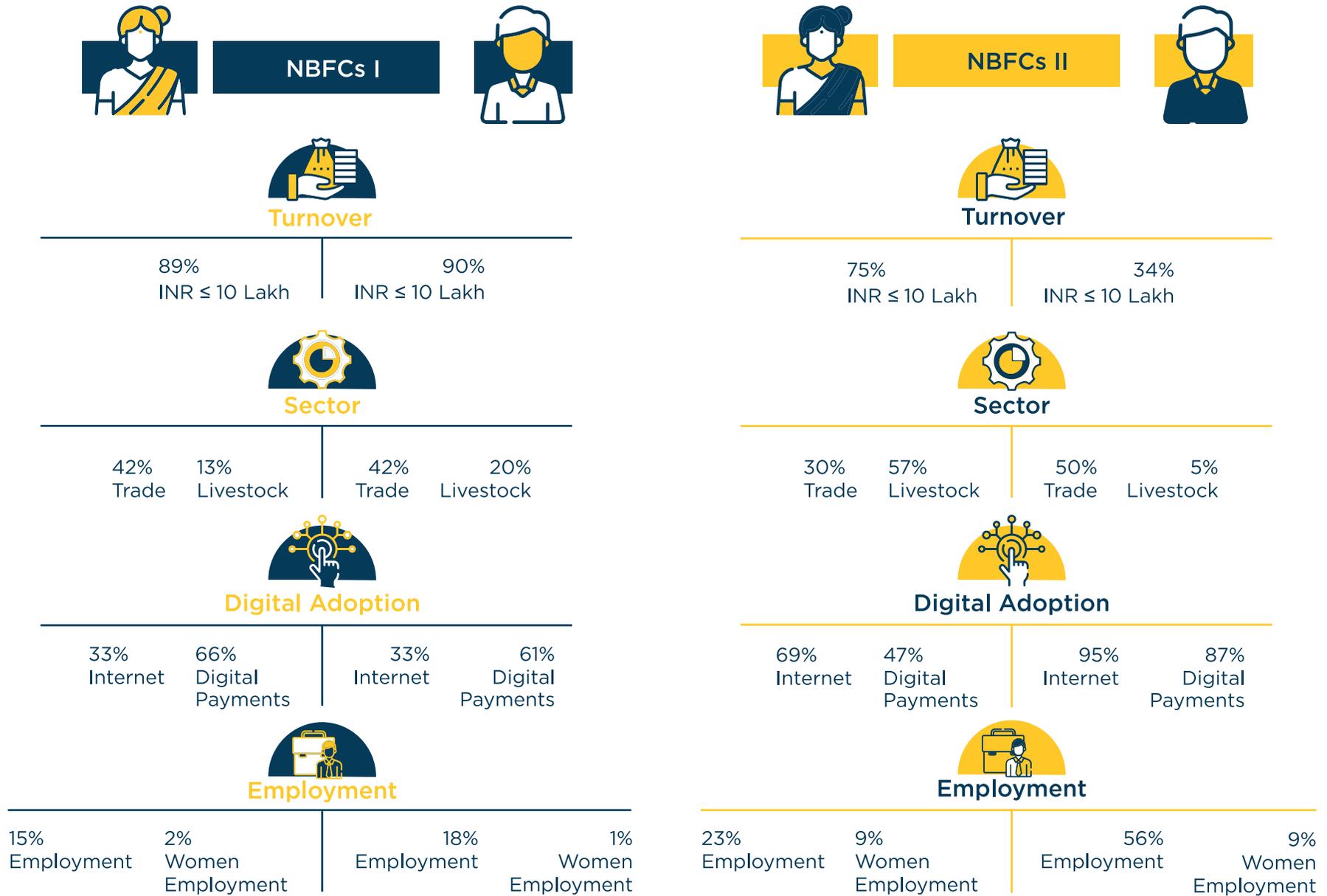
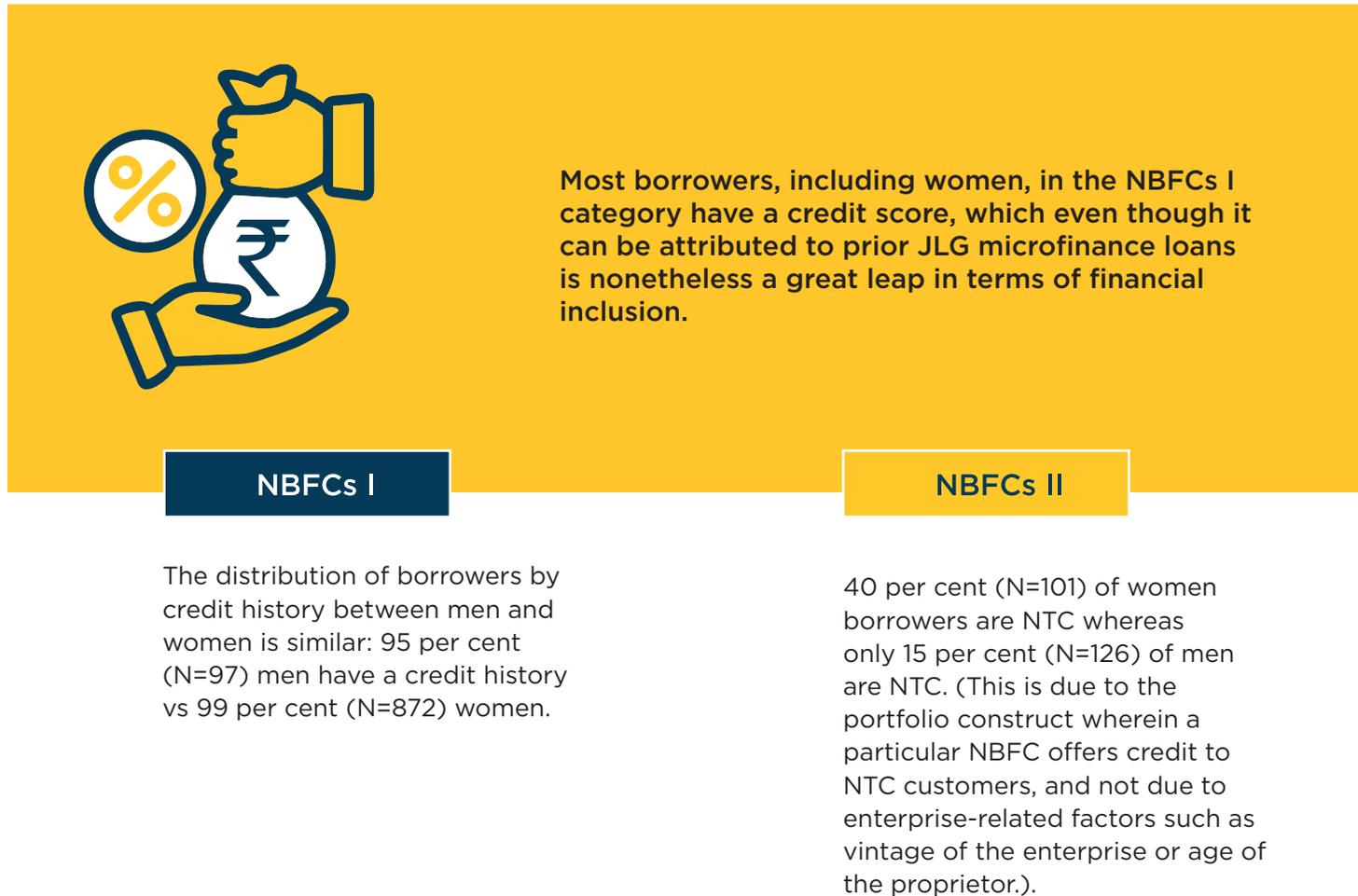


Figure 11 Credit history of women vis a vie men borrowers³⁰



³⁰ Here the insights pertain to the gender of the applicant as in the loan books of the NBFCs, and not the gender of the person running the enterprise (for which the loan was taken).

NEXT STEPS



This study consolidates detailed results from 2,250 borrowers spread across 169 districts (including metro, urban and semi-urban areas) in seven large states of India (in north and south). Thus, despite covering only seven NBFC partners, the insights paint a granular picture of urban nano enterprises in India.

The current findings present a baseline picture of these nano enterprises. The study shall continue for two more years to capture trends in business performance, employment, well-being, entrepreneurship, and formalisation (see Figure 12). The study also hopes to identify characteristics of high-performing nano enterprises, 'gazelles'.

Over the next two years, we will release a series of publications based on the agenda outlined in Figure 13. We look forward to any comments or suggestions from you to help us improve the midline and endline survey, as well as probe more during the qualitative research and key informant interviews. We hope this study would help drive policy discourse and market activity towards nano enterprises.

Figure 12 Assessing multidimensional impact of finance on nano enterprises

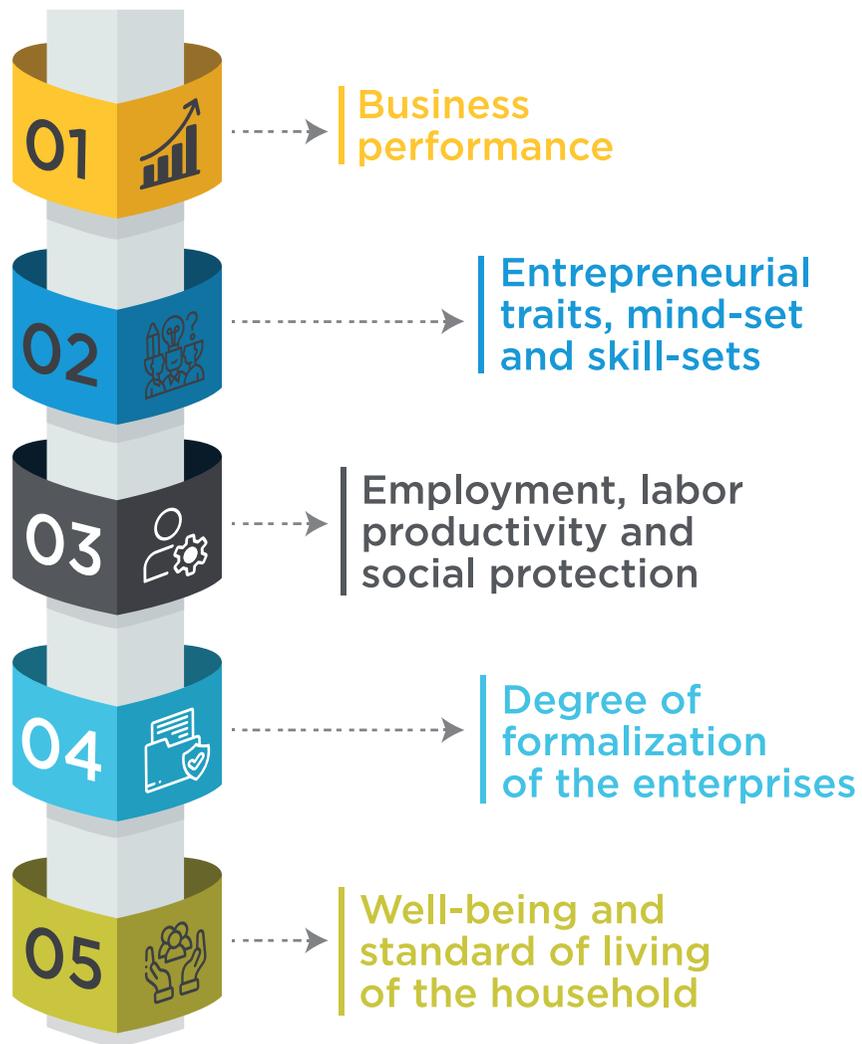
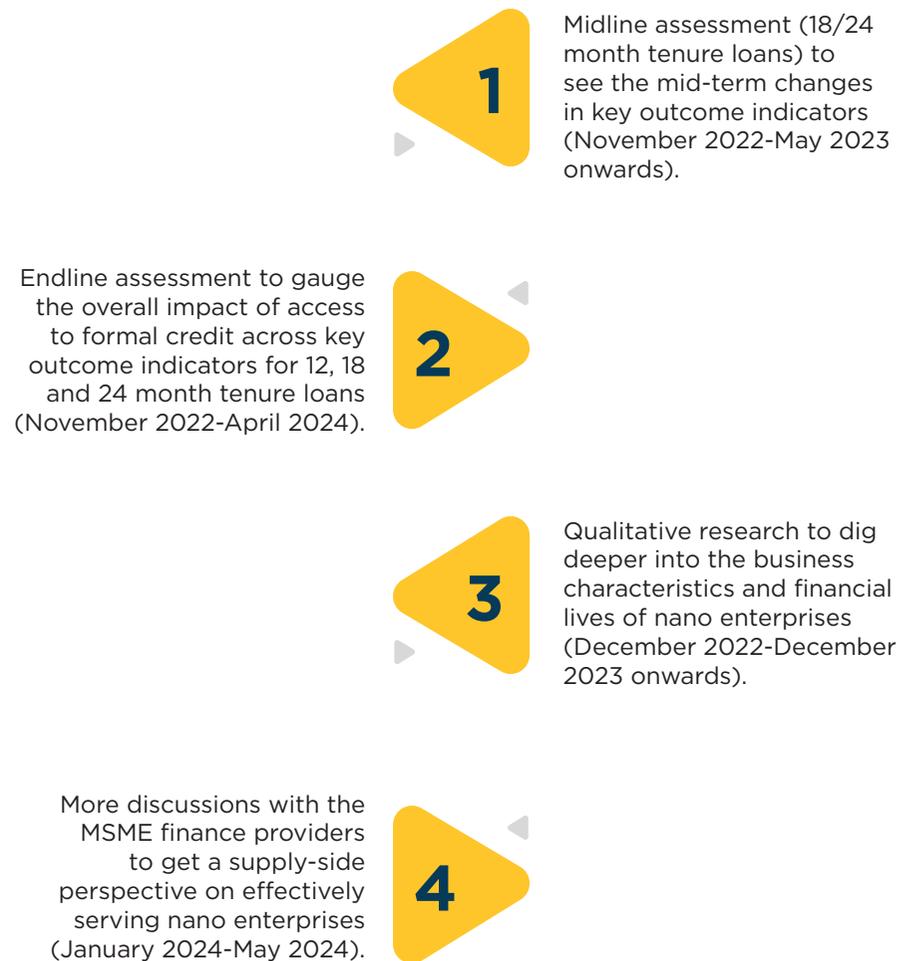


Figure 13 Key steps over next two years



1

Appendix Definition of nano enterprises

A [report](#) prepared in 2020 by FICCI and other partnering institutions for a Working Group of Ministers on Employment and Skill Generation was submitted to the Prime Minister's Office. It articulated nano enterprises as those having less than five workers. At the industry level, [Google](#) and other partnering institutions bring to the fore the [hyperlocal](#) character of these small businesses. Finally, globally, another [report](#) calls these businesses 'livelihood sustaining enterprises serving highly local markets', under the larger ambit of small and growing businesses (SGBs).

2

Appendix Ticket size determination for the study

As per [Dell Foundation's mandate](#), the target urban segment for intervention must have 'net' household income less than INR 25,000. The 'net' is calculated by deducting from the total monthly household income the EMIs incurred from the present loan taken from one of Dell Foundations' NBFC partners.

Since the household income cannot be directly known before the study itself, a suitable proxy needs to be determined to collect the sample. Ticket size data from the lenders becomes crucial here, as the EMI (at a standard interest rate and tenor) is the best barometer for loan servicing capacity at a given income. This can be done by using debt-to-income ratio.



DTI = EMI/Total income

Total income = Disposable income + EMI

Highest disposable income = 'Net' income limit = INR 25,000

Minimum disposable income = INR 10,000³¹

DTI upper limit proposed for the study = 45 per cent³²

DTI lower limit proposed for the study = 33 per cent³³

³¹Based on the calculated urban poverty line of -INR 7,000 monthly income in 2021-22 for a household with four members. [Official](#) per capita poverty line is INR 1,000 in urban areas, as [set in 2011-12](#). The assumption is that nano enterprise households will not incur large debt, if it brings them near to the poverty threshold as the incomes are volatile.

³²Bringing it conservatively down from the [RBI threshold](#) of 50 per cent in case of microfinance loans.

³³Keeping it at one-third of total income, as it meets the preferred criteria for formal financial institutions generally.

Table A1 Calculation of ticket size

Ticket size, INR (Two year tenure, interest rate 20% ³⁴)		
Disposable income (INR)→ DTI (%)↓	INR 10,000	INR 25,000
45%	1,60,000	4,00,000
33%	1,00,000	2,50,000
Ticket size, INR (One year tenure, interest rate 20%)		
Disposable income (INR)→ DTI (%)↓	INR 10,000	INR 25,000
45%	90,000	2,00,000
33%	50,000	1,35,000

Based on the above, the loan ticket size was taken at the highest possible DTI scenario (45 per cent) as well as the highest possible 'net' income (INR 25,000), i.e., INR 4 lakh and INR 2 lakh for a two-year and one-year tenor, respectively.

The minimum loan ticket size is considered at INR 40,000, as it is the typical microfinance JLG loan and also is similar to the threshold of Shishu loans under the Pradhan Mantri MUDRA Yojana (PMMY). Note that this is less than the calculated minimum ticket size (INR 50,000) in Table A1 and hence is logically correct to assume. Secondary literature below provides more context for the selected ticket size range.

► Secondary literature supporting the calculation

International Finance Corporation (IFC) uses the key proxy of

loan ticket sizes of US\$10,000 as the upper bound to classify microenterprises, which translates to a loan ticket size less than INR 8 lakhs (IFC, 2019). It is important to note that this ticket size closely matches the highest threshold of loans disbursed under PMMY, at INR 10 lakhs. It is in this segment that credit needs lie above the microfinance loans but is still not catered to adequately by banks and large NBFCs (except through schemes such as PMMY and priority sector lending) that there is a 'missing middle' market (Shankar, 2016). This middle segment is referred to in various places by IFC in South America and the Middle East & North Africa as 'very small enterprises' (IFC, 2014), (IFC, 2016). SIDBI and TransUnion CIBIL also classify this segment with credit needs up to INR 10 lakhs as 'very small enterprises' (SIDBI and TransUnion CIBIL, 2021).

Another way to interpret this segment is by using the household incomes lens. RBI caps the annual income of the households availing microfinance loans at INR 3 lakhs (INR 25,000 per month) as per extant regulations (RBI, 2022). In urban areas, these households fall under economically weaker sections (EWS) for the affordable housing finance category (GoI, 2017). Nano enterprises will marginally supersede this ultra-poor category and belong to the low-income group (LIG) category of INR 3-6 lakhs in the affordable housing finance market.

At a debt-service ratio of 30-40 per cent preferred by lenders, these households would have a two-year tenor loan ticket size range of INR 50 thousand to 5 lakhs as per general interest rate spreads prevailing in the industry (20-25 per cent). Interestingly, this would correspond to the middle category 'Kishore' in the PMMY scheme, which can be classified as the heart of the 'missing middle'. To focus on an underserved market due to prevalence of informal and personal loans, we have more conservatively considered the range for the study at INR 40 thousand to 4 lakh.

³⁴ Based on the prevailing interest rates across many NBFCs due to their high cost of funds.



Michael & Susan Dell
FOUNDATION



LEAD LEVERAGING EVIDENCE FOR
ACCESS AND DEVELOPMENT
KREA UNIVERSITY

LEAD at KREA UNIVERSITY
7TH FLOOR, B BLOCK, IIT-MADRAS RESEARCH PARK,
KANAGAM ROAD, TARAMANI, CHENNAI - 600113, TAMIL NADU.

 LEAD at Krea University

 LEADatKrea

 www.ifmrlead.org