

July 19

MICRO ∞ DIVE

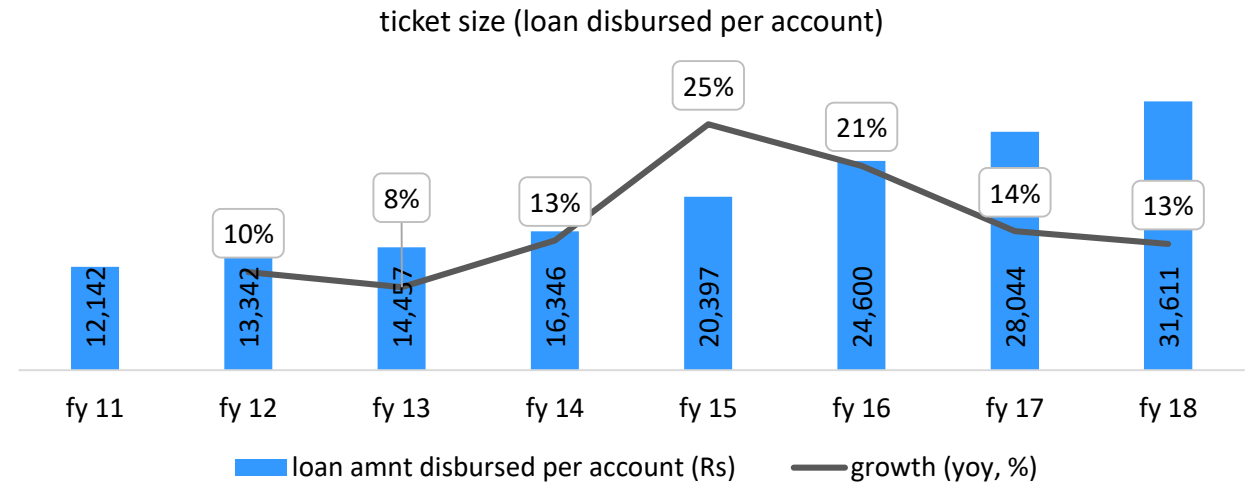
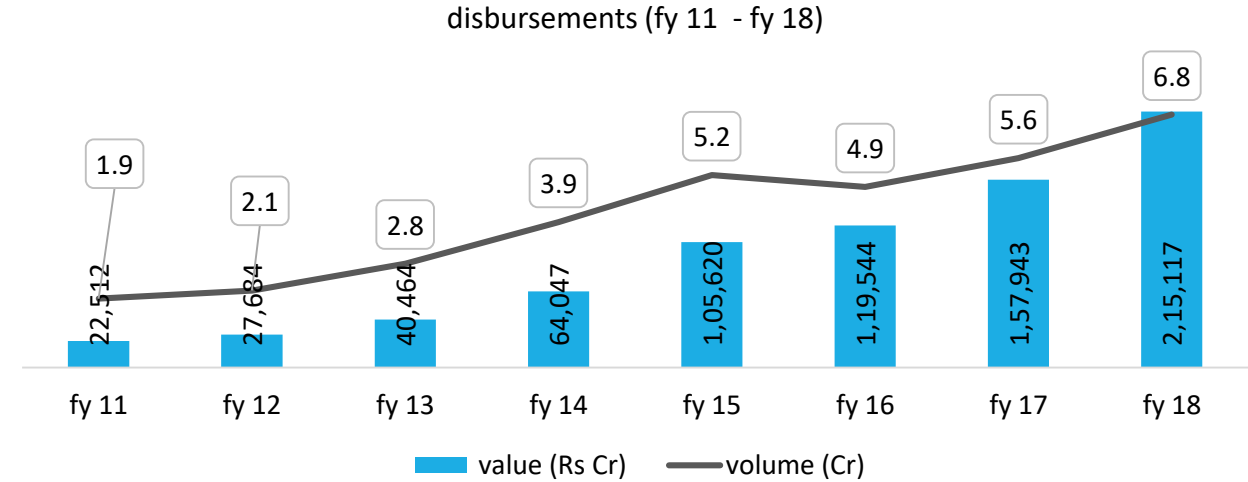
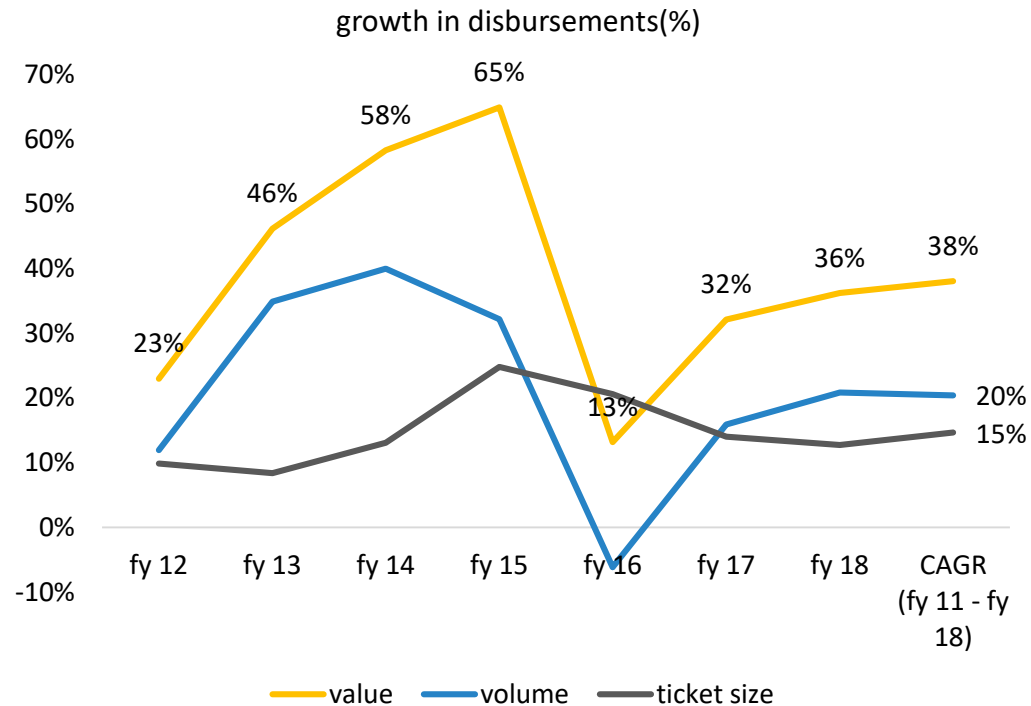
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- Microdive is a new series from MFIN which aims to support the micro-credit industry in understanding the critical industry issues through deeper and granular examination of industry data. This is an occasional series, focusing on topical and the most-relevant issues for the industry.
- This second issue, studies the following in turn:
 - › Growth of the micro-credit using disbursement data from fy 11 to fy 18
 - › Products diversity (tenure, repayment frequency, ticket sizes) in micro-credit using disbursements data for fy 18
 - › Geographical spread and concentration of micro-credit using disbursement data from fy 11 to fy 18
 - › Customer (unique customers sourced since Jul 13 and active in Mar 19) profiling to understand vintage, new customers, rural-urban break-up, activity, age
 - › Households' access to micro-credit at state and district level using unique customer count
 - › Customer leverage by profiling customers on the basis of multiple lending (active loan accounts, number of distinct lenders) and indebtedness (loan amount outstanding and disbursed amount)
 - › Portfolio quality and its relationship to geography (business volume, yoy growth rates and access of HH to micro-credit) as well as to customer profile (rural/urban, age, leverage)
- This report has used complete micro-credit data (from all Providers) available in microfinance segment of the credit bureau as of Mar 19.
- We sincerely thank our colleagues in Equifax for their keen interest and support to work on the requirement and giving us required data to work on.
- Report is prepared diligently to give accurate data and analysis. However, if any data/analysis contained in this report, seems to be at odd with your conventional wisdom, field-level knowledge or alternate data/evidence that you may have, please do reach out to us. This will help us to study the issue further and improve the quality of this report.

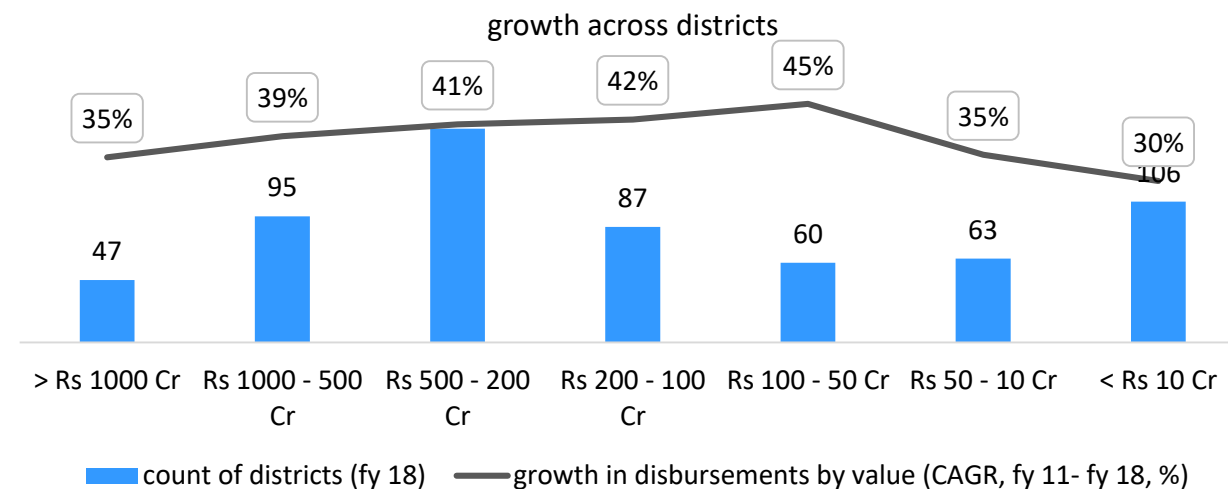
- Data used in this report is extracted from Equifax Credit Information Pvt Ltd. Data and analysis presented in this report includes data for all micro-credit lending submitted to the micro-finance segment of the credit bureau. Therefore, analysis is for the entire universe i.e. all customers getting micro-credit from all providers (Banks, NBFC-MFIs, NBFCs, SFBs and others). Customer's credit records on consumer segment of the bureau, however, are not accounted for.
- For rural-urban classification: If customer's pin-code is in the heart of a town or city, with no overlap with a village then it is defined as urban. If the pin-code is on the border of a city and has an overlap with a village then its semi-urban and if the pin-code is entirely a village then its rural.
- For new customers, data on disbursements (or sourcing) to customers is taken. Customers who opened their first trade-line during a quarter (i.e. these customers had no trade-line previously, either active or closed with micro-credit with any provider) were tagged as new customers.
- For customer level data (vintage, activity, age, leverage), unique customers sourced after Jul 13 were taken as a data set, totalling over 7.2 Cr customers. As of Mar 19, these customers were bucketed into inactive (not having any open account as of Mar 19) and active (having an open account as of Mar 19). It may be noted that only customers who opened their first trade line after Jul 13 were included in the data-set and not the customers who may have an active/closed account before Jul 13 and may or may not have accessed micro-credit post Jul 13. Therefore, customers who are active in Mar 19 but had tradeline before Jul 13 got excluded in the analysis. They amount to about 15% of active customer base in Mar 19.
- For data on loan accounts per customer, distinct provider per customer, indebtedness and disbursed amount, the active customer (having an open account) view was taken as of Mar 19. However, only customers who had opened their first tradeline after Jul 13 were considered.
- To estimate HH access to micro-credit in states/districts, customer count in states/districts is analysed with household count (calculated for 2019 based on 2011 census). It is presumed that each unique customer belongs to a single household. If a customer has an address falling in across multiple districts, she is counted in all those districts and therefore there will be some overlap at state-level roll-up. However, count of such customers is not significant and does not distort overall trends.
- A customer's delinquency status has been taken from her worst dpd for all her open loan accounts. So if a customer has indebtedness of Rs 10,000 and she has 3 open loan accounts with dpd =30, dpd=60, dpd=90, then her account status is tagged on the basis of her worst dpd account i.e. dpd =90. It may be noted that closed and written-off accounts are excluded from analysis in delinquent account status.

- **Growth:** In a span of 8 years from fy 11 to fy 18, disbursements in value terms grew by CAGR of 38% resulting in a 9-fold increase to reach Rs 2.12 lakh Cr. In fy 18, 6.8 Cr loans amounting to Rs 2.12 lakh Cr were given with avg ticket size of Rs 31,611.
- **Product:** Weekly repayment frequency still dominates, accounting for 44% of loans in value terms in fy 18. In tenure, 18—24 months tenure is most prevalent accounting for 38% of loans in value terms. Ticket size of 25k-35k accounts for about 40% of loans in value terms.
- **Spread/concentration:** In fy 18, micro-credit reached 619 districts. Top 10 states account for 83% annual industry disbursement. 142 districts with annual disbursement value > Rs 500 Cr account for 66% of annual industry disbursement.
- **Households (HH) access to micro-credit:** At an all India level, it is estimated that since Jul 13, micro-credit has reached about 28% of HH or 32% of target HH (target HH are low-income HH which are presumed to be 80% of total HH). On active customer base (active in Mar 19), HH access to credit is 17% and target HH access to micro-credit is 22%. In many districts (annual disbursement > Rs 500 Cr), share of HH who have access to micro-credit is much higher.
- **New customers:** In fy 18, about 27% loans were disbursed to new customers (those who didn't have any tradelines with any provider earlier).
- **Age:** Across age buckets, customer profile is fairly evenly distributed. However, younger (< 20 years) or senior (> 55 years) customers have relatively lower share.
- **Vintage and credit-activity:** On active customer base (those having at least one open account), about 57% customer have < 2 years of vintage, meaning they accessed their first microfinance loans in last 2 years. About 36% of the customers (2.6 Cr) sourced since Jul 13 are inactive as of Mar 19. Of inactive customer, about 70% had only 1 accounts, implying that a large majority stopped accessing micro-credit after their very first loan.
- **Leverage:** At an industry level, in volume terms, high-leverage customers are limited. 6% customers (16% in value terms) have > 3 loan accounts and 3% customer (7% in value terms) have > 3 distinct Providers. About 3% customers (13% in value terms) have loan amount > Rs 100k. 8% customers (24% in value terms) have loan amount disbursed > Rs 100k.
- **Portfolio quality:** Portfolio quality deteriorates with higher leverage (loan accounts, providers, loan amount outstanding). At geographical level, rural portfolio shows slightly better portfolio quality. Districts with high business volume show better portfolio quality.
- **Shopping frequency:** For group of customers, who have accessed > 1 loan in fy 18, majority of them access loan within an avg gap of 6 months. More importantly, half of them access multiple loans within a single month.

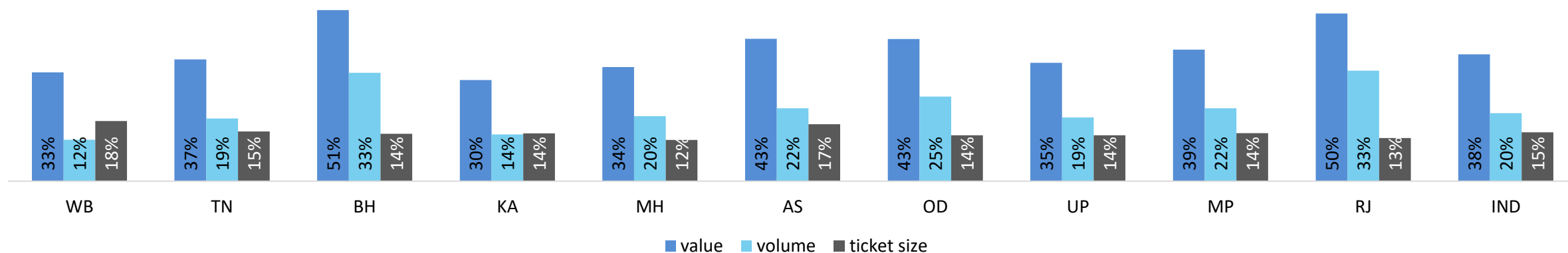
Based on disbursement data for fy 11 – fy 18, micro-credit has shown robust growth in last 8 years. In fy 18, a total of 6.8 Cr loans were disbursed amounting to Rs 2,15,117 Cr with average ticket size crossing Rs 30,000. For this 8-year period, in value terms CAGR was 38% for disbursements. In volume terms (i.e. loan accounts disbursed), CAGR was 20% and ticket size (loan amount disbursed per account) grew by CAGR of 15%.



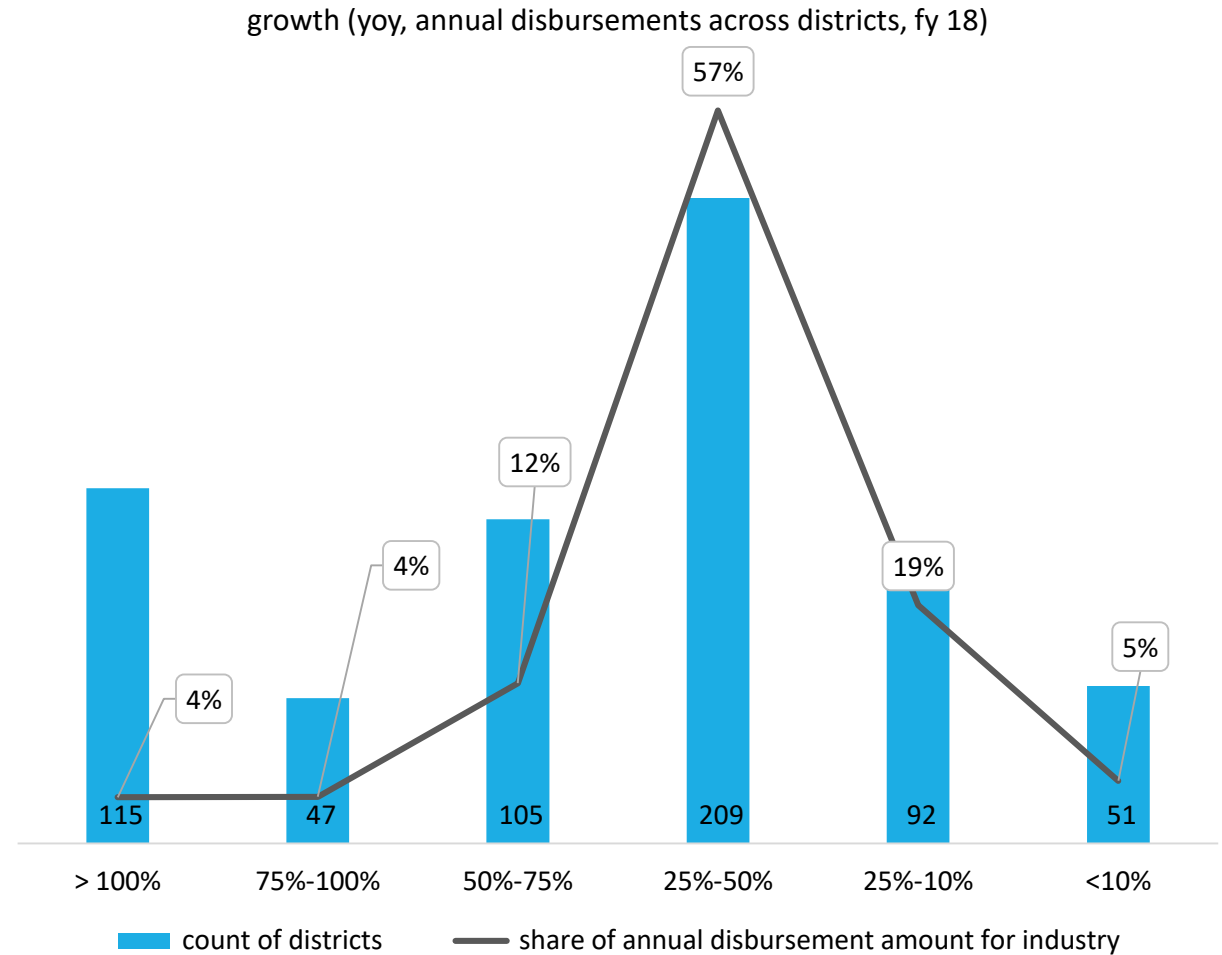
In fy 18, top 10 states account of 83% of the disbursements in value terms. CAGR of disbursements is shown in the chart below for top 10 states in terms of volume, value and ticket size. Against the CAGR of 38% for India in value terms, states like Bihar, Assam, Odisha, Madhya Pradesh and Rajasthan showed higher CAGR given their low base and large untapped market. This is borne by the fact that these states also show higher CAGR in volume terms. West Bengal and Assam stand out amongst the top 10 states for higher CAGR in ticket size compared to average for India. Clearly, for these states growth is driven more by higher growth in ticket sizes. Overall growth has been broad-based and uniform across the country. Even high-business districts (disbursements > Rs 1,000 Cr) show CAGR of 35%.



growth in disbursements in top 10 states (CAGR, fy 11 - fy 18, %)

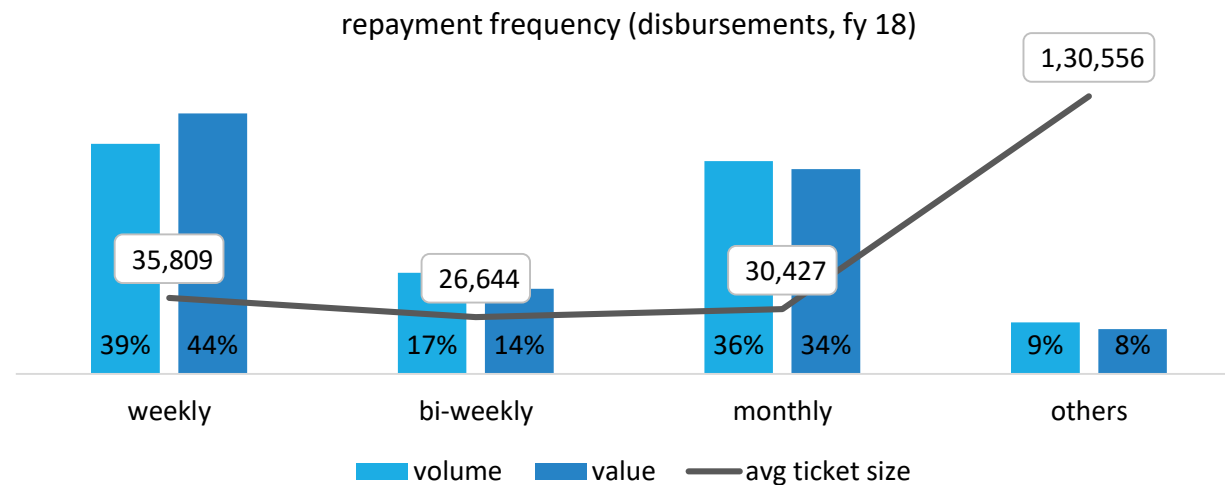


The chart here maps the districts based on yoy growth (in fy 18 over fy 17). Very-high growth districts (> 100% and 75%-100%) account for small portfolio of the industry. So high-growth is a reflection from a low base. Most common growth rate is between 25%-50% in 209 districts which accounts for 57% of annual industry disbursements.

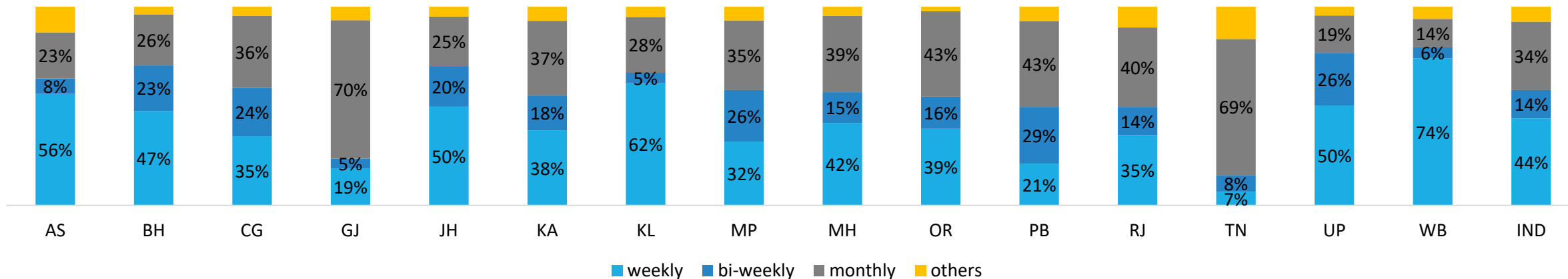


product: repayment frequency

Based on disbursement data for fy 18, in value terms, weekly is still the most-common repayment frequency accounting for 44% of disbursement, monthly repayment account for 34% and bi-weekly for 14%. Distribution of products based on repayment frequency is shown for top 15 states in the chart below. Variation across states in repayment frequency is attributed to preference of the dominant Provider in that state for a certain repayment frequency but also demands of the market and customers. Gujarat and Tamil Nadu have much higher ratio of loans under monthly repayment. West Bengal, Assam and Uttar Pradesh have higher ratio of weekly repayment.

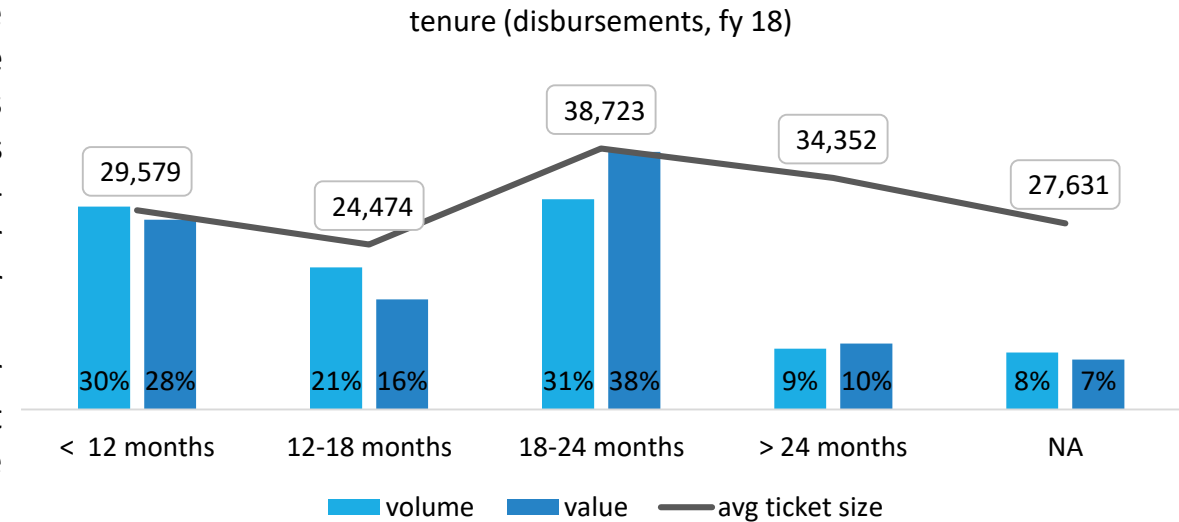


repayment frequency (disbursement by value, fy 18)

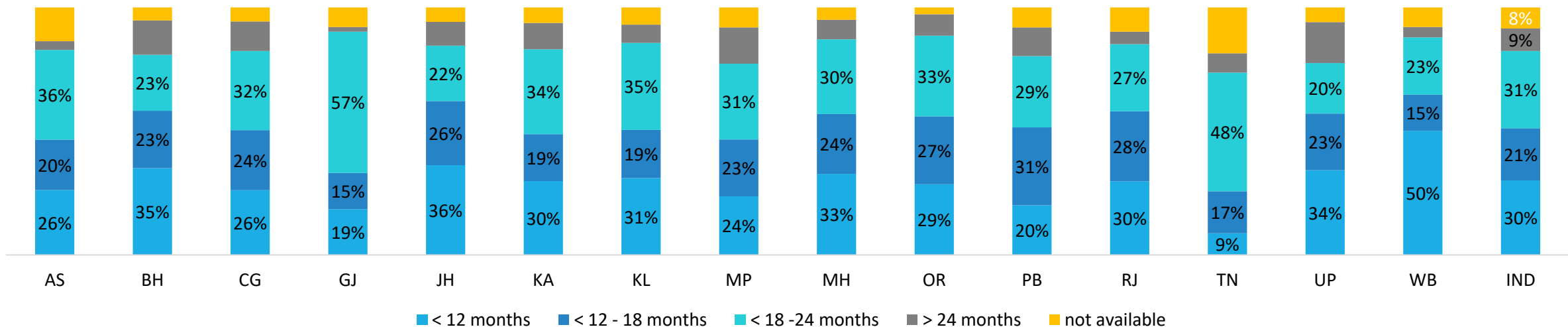


Other include junk/no-value submitted for repayment frequency in loans.

Based on disbursement data for fy 18, in value terms, 18-24 months tenure is most prevalent accounting for 38% of disbursements. Loan under tenure of < 12 months accounts for 28% and loans under tenure of 12-18 months account for 16%. Tenure > 24-months loans only account for 10% of loans disbursed in fy 18. It may be noted that as per RBI Directions for NBFC-MFIs, loans > Rs 30,000 should have tenure > 24 months. However, other Providers are not bound to follow this norm. Therefore there is no a linear relationship between tenure and ticket size. Distribution of products based on tenure is shown for top 15 states in chart below. There is a clear variation across states which is mostly, driven by preference of dominant Providers for a particular tenure in that state as well as demand of the market and customers.

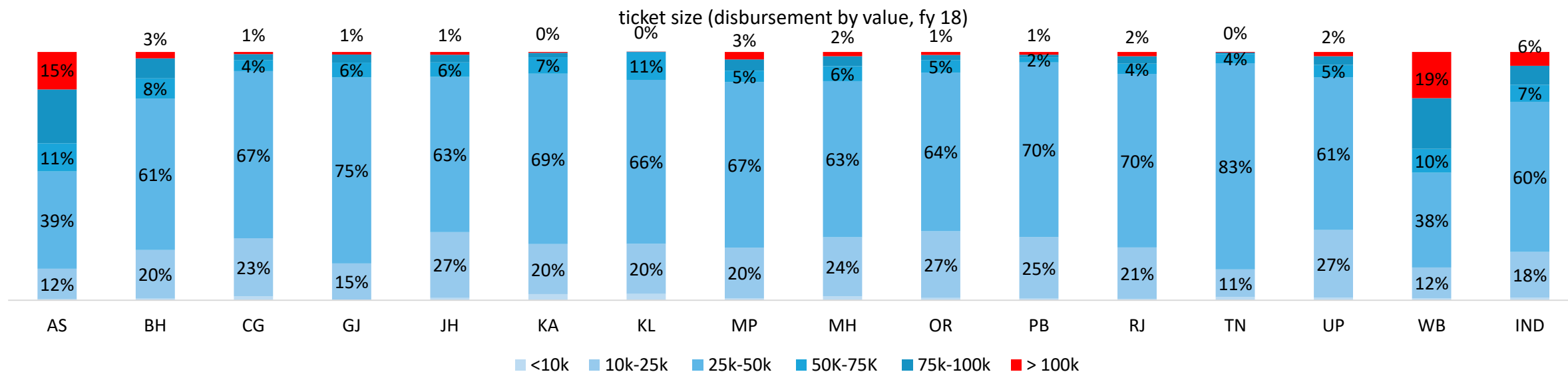
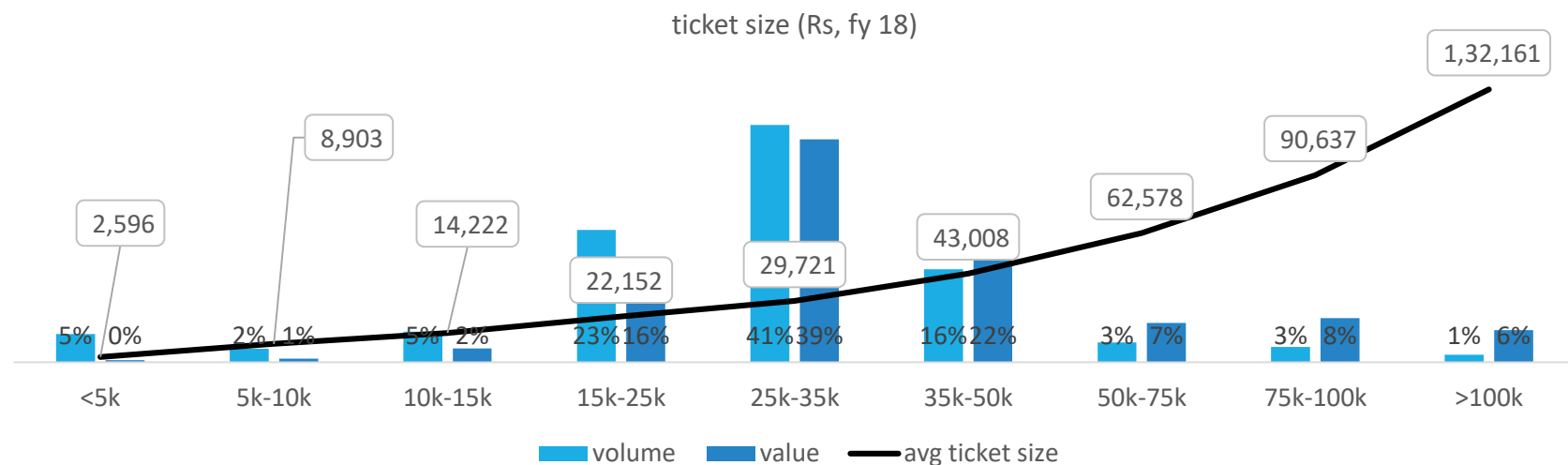


tenure across top 15 states (disbursement by value, fy 18)



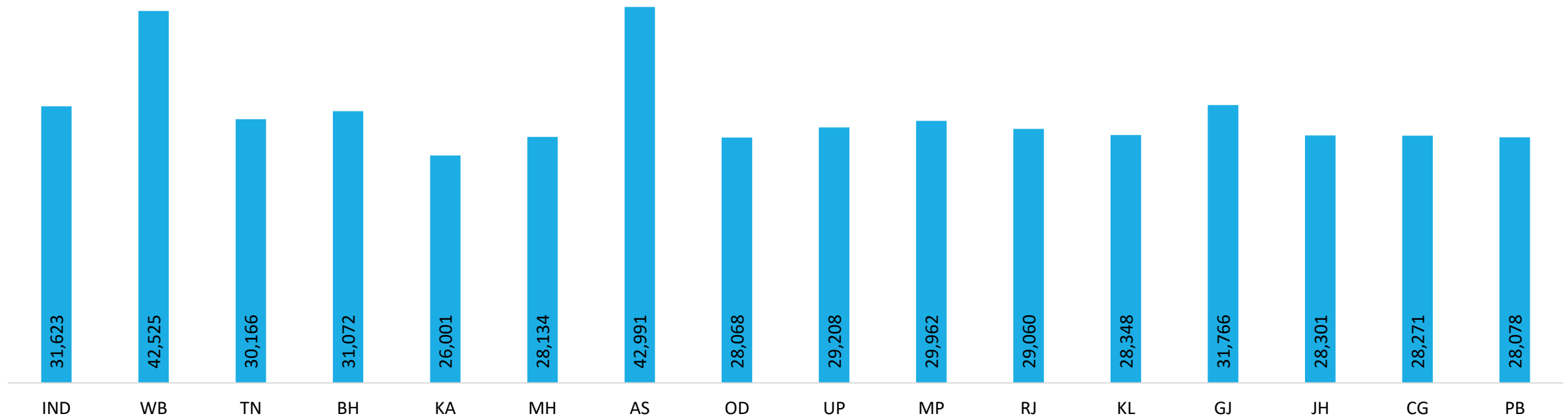
Not available include junk/no-value submitted for repayment frequency in loans.

In terms of ticket size (loan disbursed per account for fy 18), ticket size of Rs 25k-35k is most prevalent (accounting for 39% in value terms) followed by loans in range of Rs 35k-50k accounting for another 22%. In volume terms, only 1% loans are for > Rs 100k but they account for 6% of disbursement in value terms. West Bengal and Assam have much higher share of > Rs 100k loans.



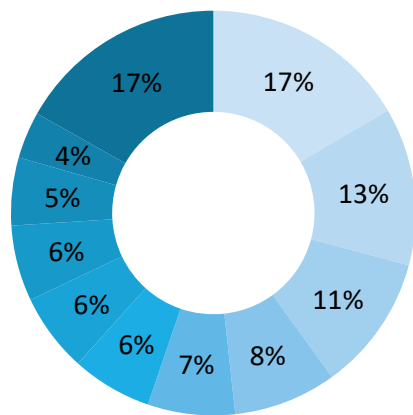
The chart here shows the avg ticket size across top 15 states. West Bengal and Assam stand out for avg ticket size being in upwards of Rs 40,000. However, lower avg ticket size in certain states is a consequence of distribution of small-value top-up loans (see previous chart for state on the page before). Higher share of small-value loans in state lowers the overall avg ticket size for the state.

avg ticket size across top 15 states (Rs, fy 18,)



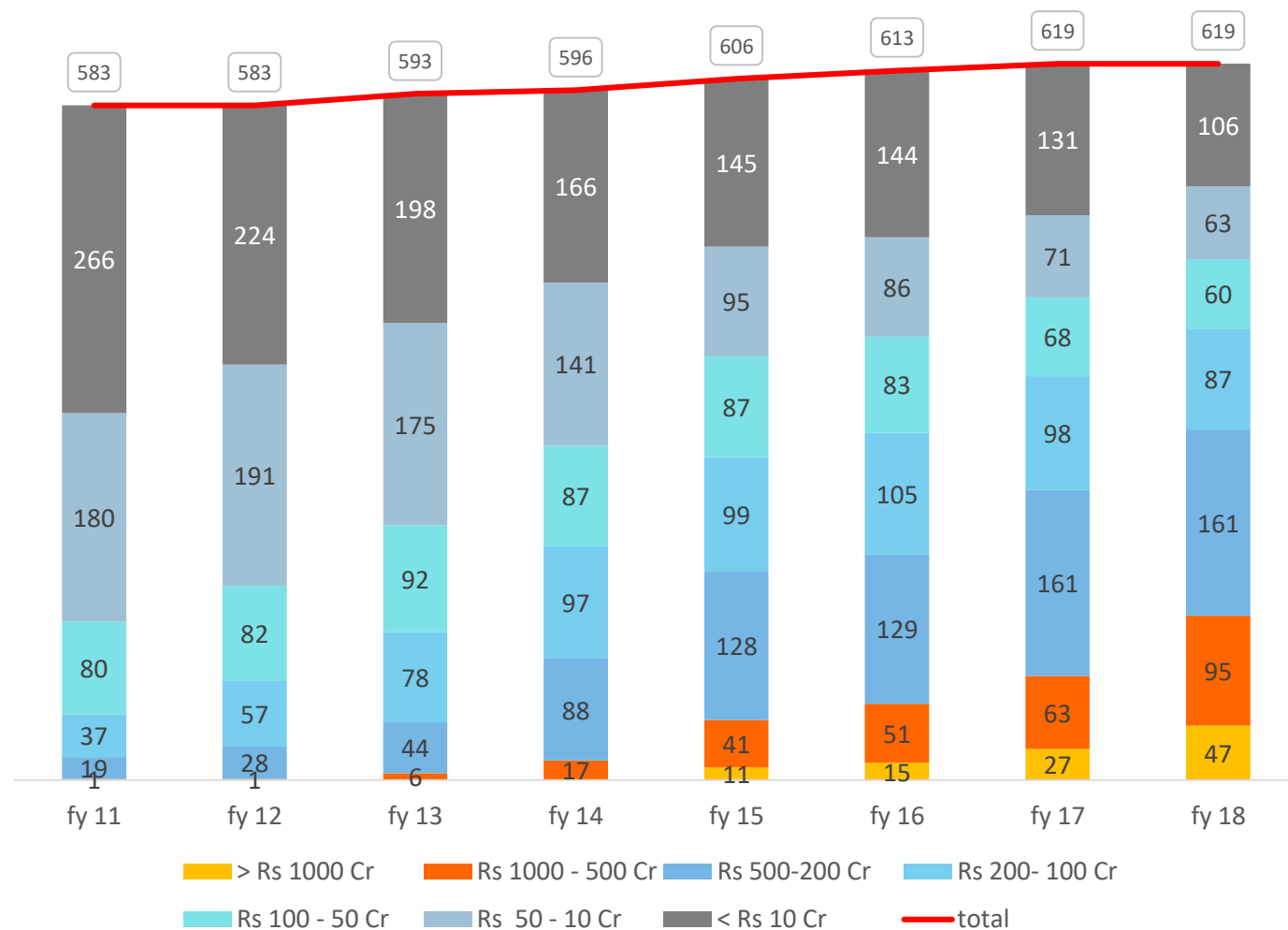
In the last 8 years, micro-credit industry has been increasing its presence across the country. In fy 18, micro-credit reached to 619 districts in 37 states and UTs. These 619 districts account of 98% of total households in the country and therefore there is hardly much scope to further expand to new geographies. Therefore, micro-credit is deepening its presence. Bucketing of districts based on disbursements in value terms show that micro-credit in increasing its reach in districts. Top 10 states account of 83% of the disbursements in value terms. Share of top 10 states in disbursements by value is shown in the pie chart below.

distribution of disbursements across states
(fy 18, value, %)

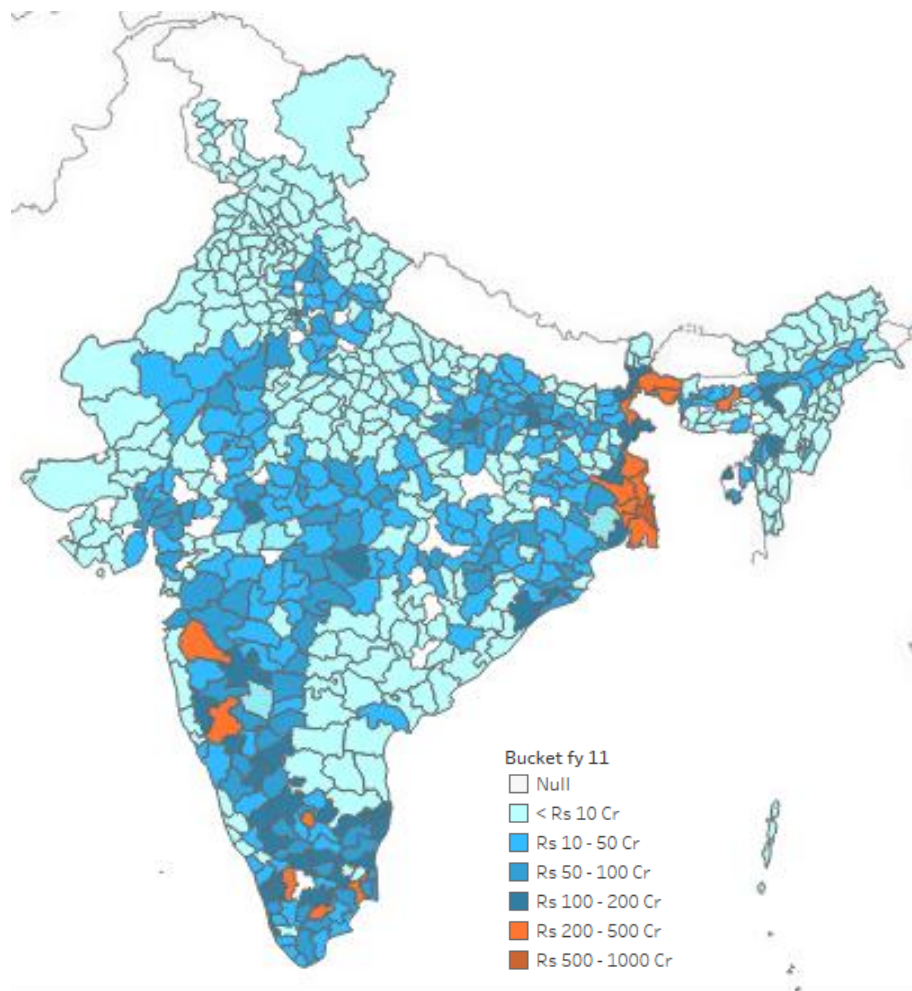


WB TN BH KA MH AS OD UP MP RJ Others

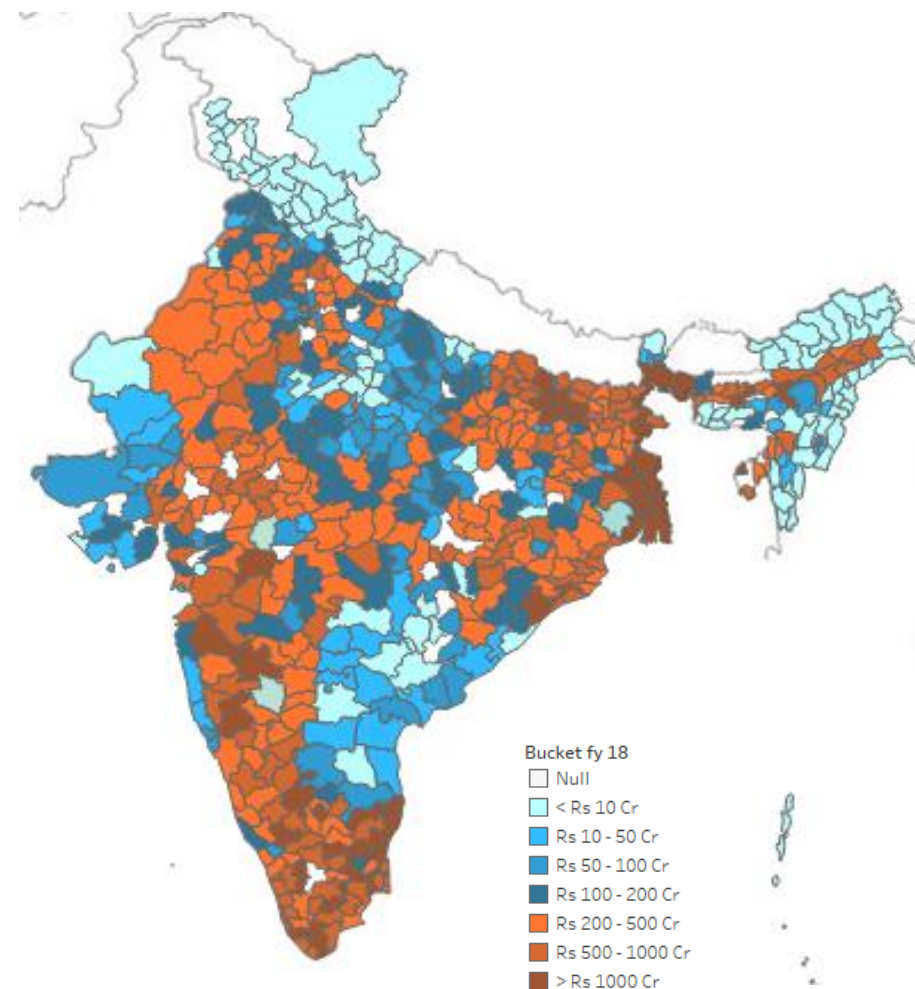
bucketing of districts on annual disbursements



annual disbursements fy 11



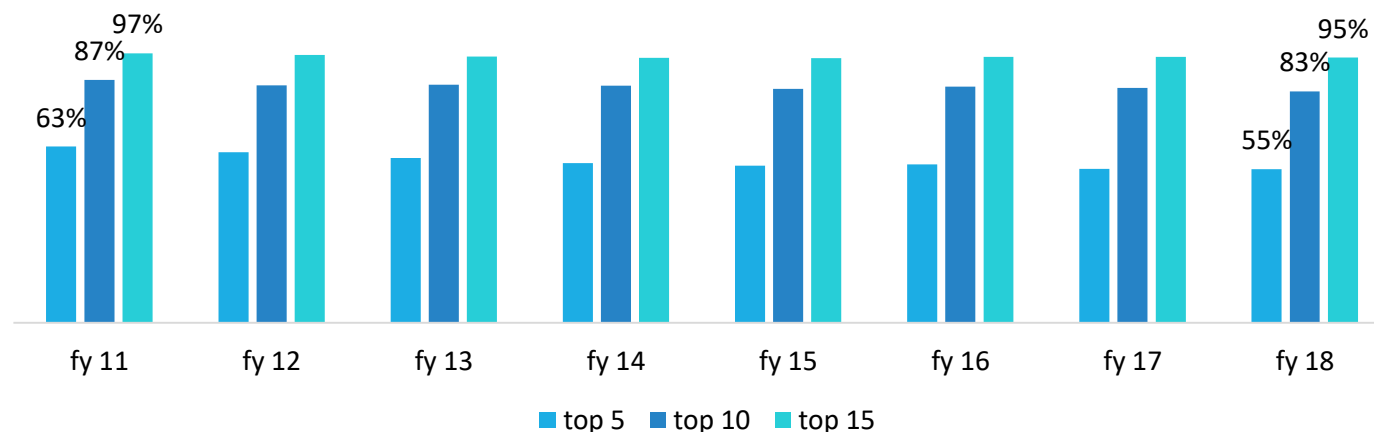
annual disbursements fy 18



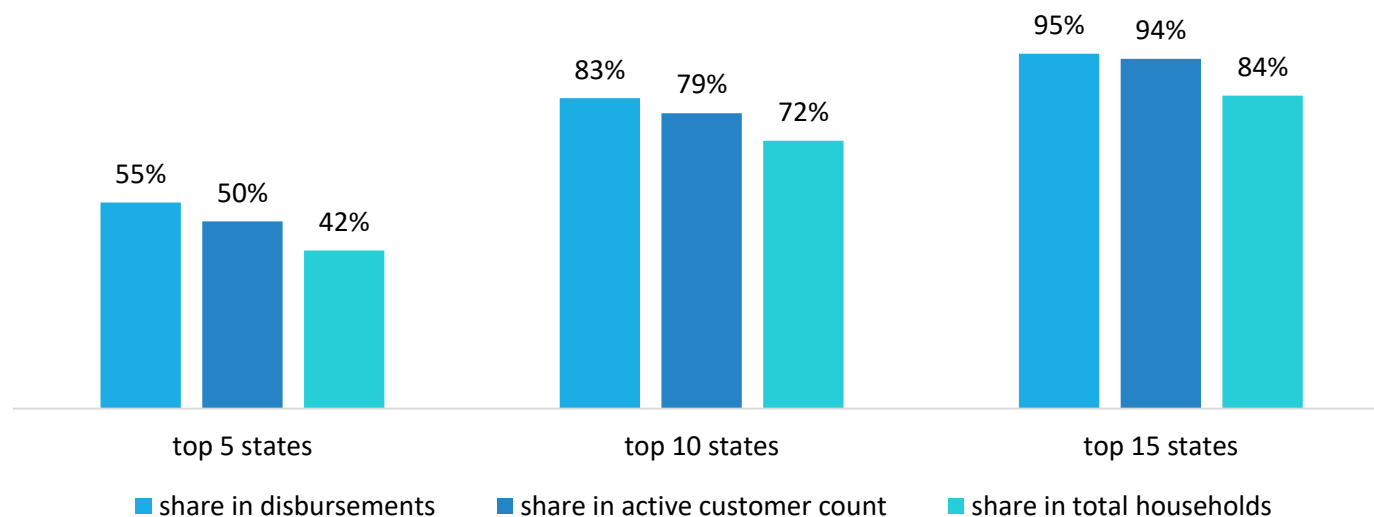
Over the years, there has been a small decrease in the share of top states in micro-credit (based on value of disbursements). Share of top 5 states in total industry disbursements dropped to 55% in fy 18 from high of 63% in fy 11. Similarly share of top 10 states dropped to 83% in fy 18 from 87% in fy 11 and share of top 15 states dropped to 95% in fy 18 from 97% in fy 11.

Concentration in these top 5 or 10 states is mostly explained by demography - these states account for higher population and therefore higher micro-credit business. However, there are other factors which make some states more favourable to micro-credit as compared to others, leading to concentration of micro-credit in these states. Top 5 states (for micro-credit in terms of disbursement value) account for 42% households in the country but these states contribute to 50% of the customer count in fy 18 and 55% of disbursements value. Unsurprisingly, there are many factors besides population (market potential) such as economic activity, physical infrastructure, population density, law & order and credit-culture which drive the presence of micro-credit and skew may be attributed to these factors.

spread across top states
(disbursements in value)



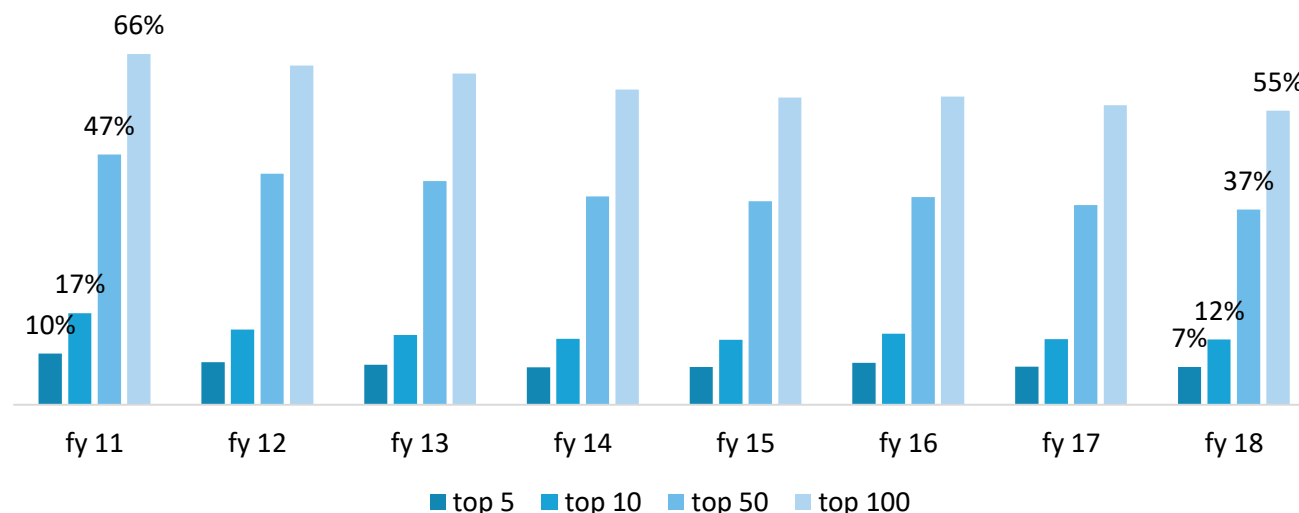
spread across top states (fy 18)



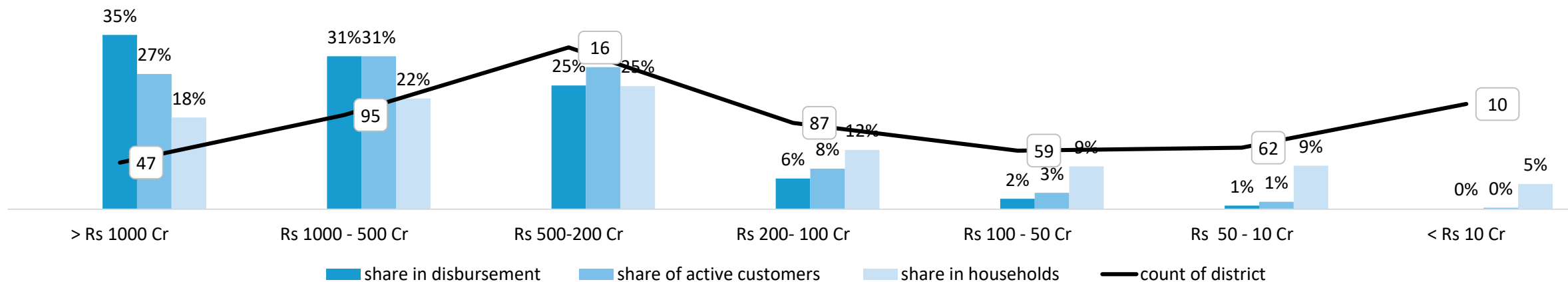
Similar to states, there is a small decrease in the share of top districts in the total industry disbursement (based on value). Share of top 50 and 100 districts in disbursements dropped by 10% during fy 11 to fy 18.

At a district level, concentration is much clear and confirms that factor other than demography drive the business. For example, 47 districts with annual disbursements >Rs 1000 Cr (in fy 18), contribute to 35% of annual industry disbursements, while they only account for 18% of the households in the country. Clearly high-business districts receive relatively larger share of micro-credit compared to households.

spread across top districts (disbursements in value)



spread across districts (fy 18)

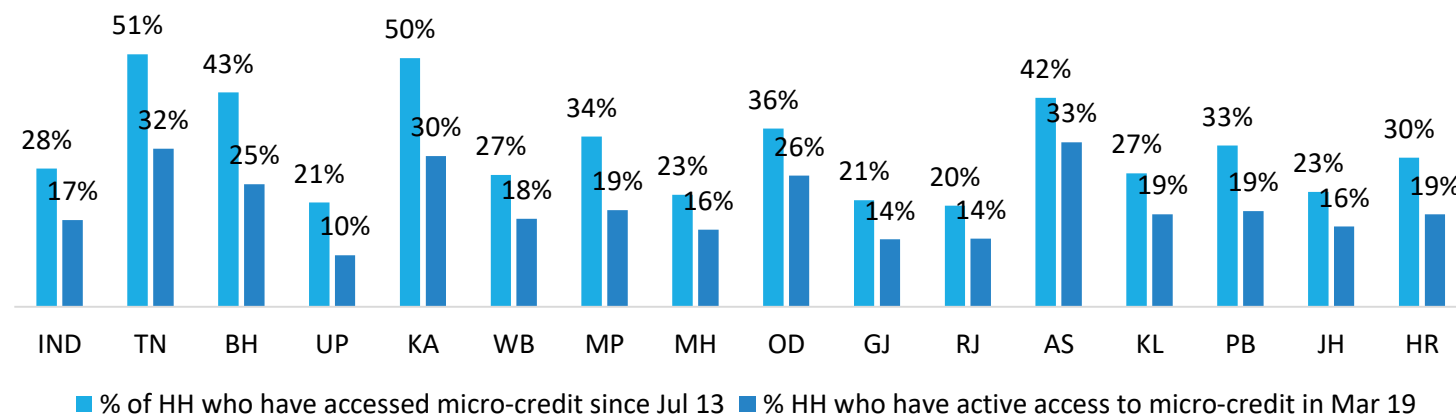


households access to micro-credit

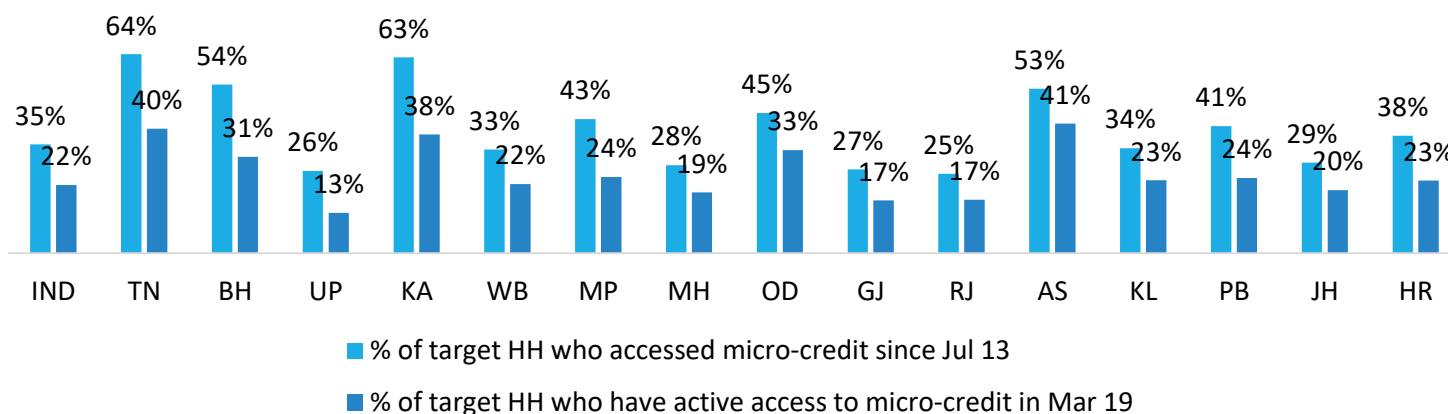
At an all India level, in 619 districts where micro-credit has presence, 28% of all households had accessed micro-credit since Jul 13 and 17% of households are accessing micro-credit in Mar 19.

However, if one presumes that target households for micro-credit (i.e. low-income households) are 80% of the total households, 35% of households had accessed micro-credit since Jul 13 and 22% of households are accessing micro-credit in Mar 19. Share of HH access to micro-credit is shown for top 15 states.

HH access to micro-credit across top 15 states



target HH access to micro-credit across top 15 states



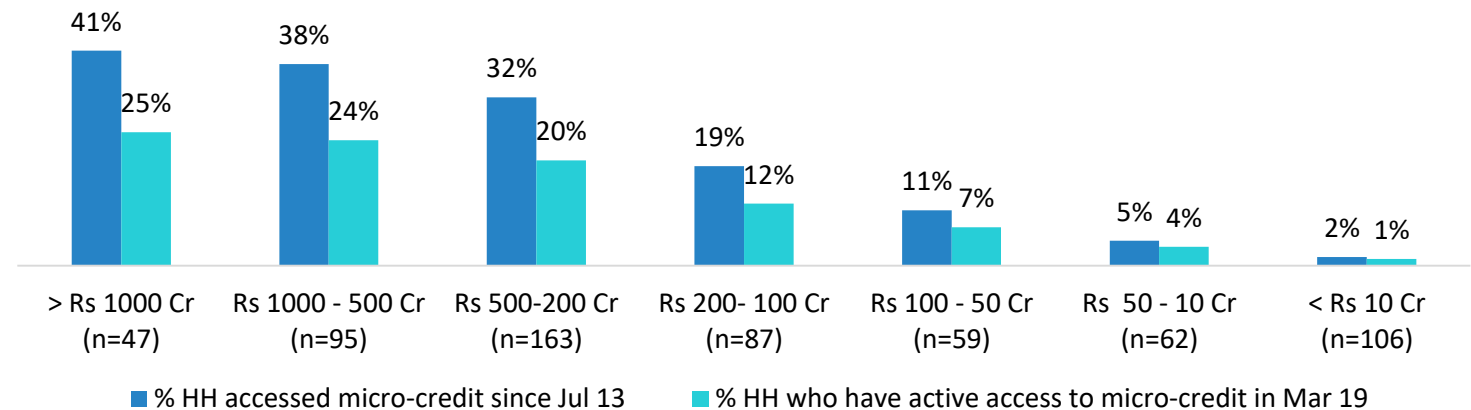
Top states plotted in charts are based on count of active customers as of Mar 19. It is presumed that every customer who has access to micro-credit belongs to one household. Therefore, count of customer is proxy to arrive at count of households access to credit.

households access to micro-credit

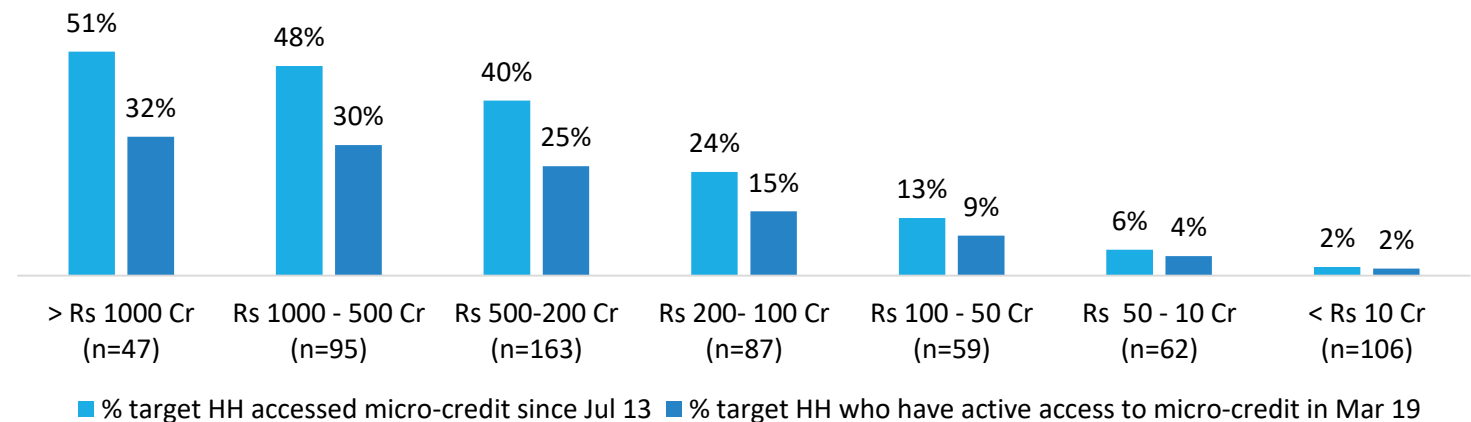
In high-business districts, percentage of households who have access to micro-credit is higher (see chart). In top 47 districts where disbursements > Rs 1000 Cr in fy 18, about 41% households have accessed micro-credit since Jul 13 and 25% have active access to micro-credit in Mar 19. Given that micro-credit is more prevalent in semi-urban and urban areas (see next page), many areas in high-business districts are likely to have much greater access to micro-credit.

It may be noted that HH data is estimated for 2019, based on census 2011 data with CAGR 1.2% which was the growth rate in last decade. Therefore, impact of migration cannot be and is not captured in arriving at these calculations.

households access to micro-credit across districts



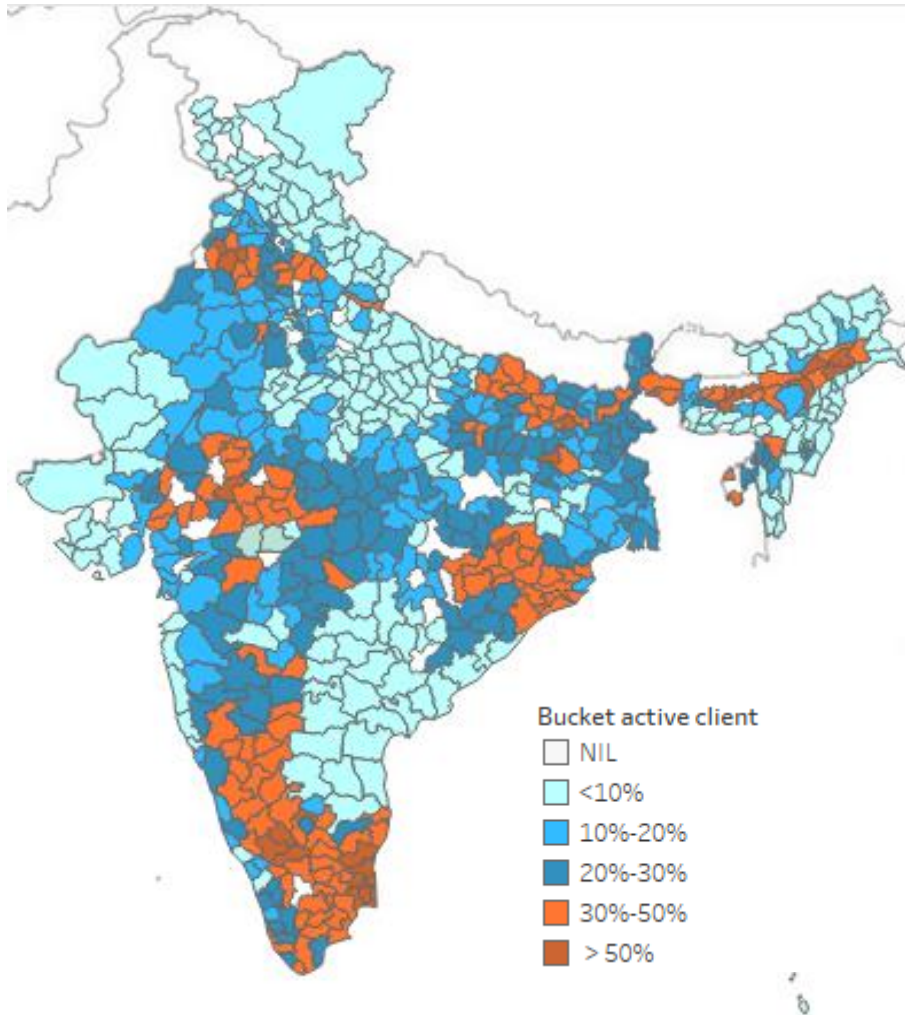
target HH access to micro-credit across districts



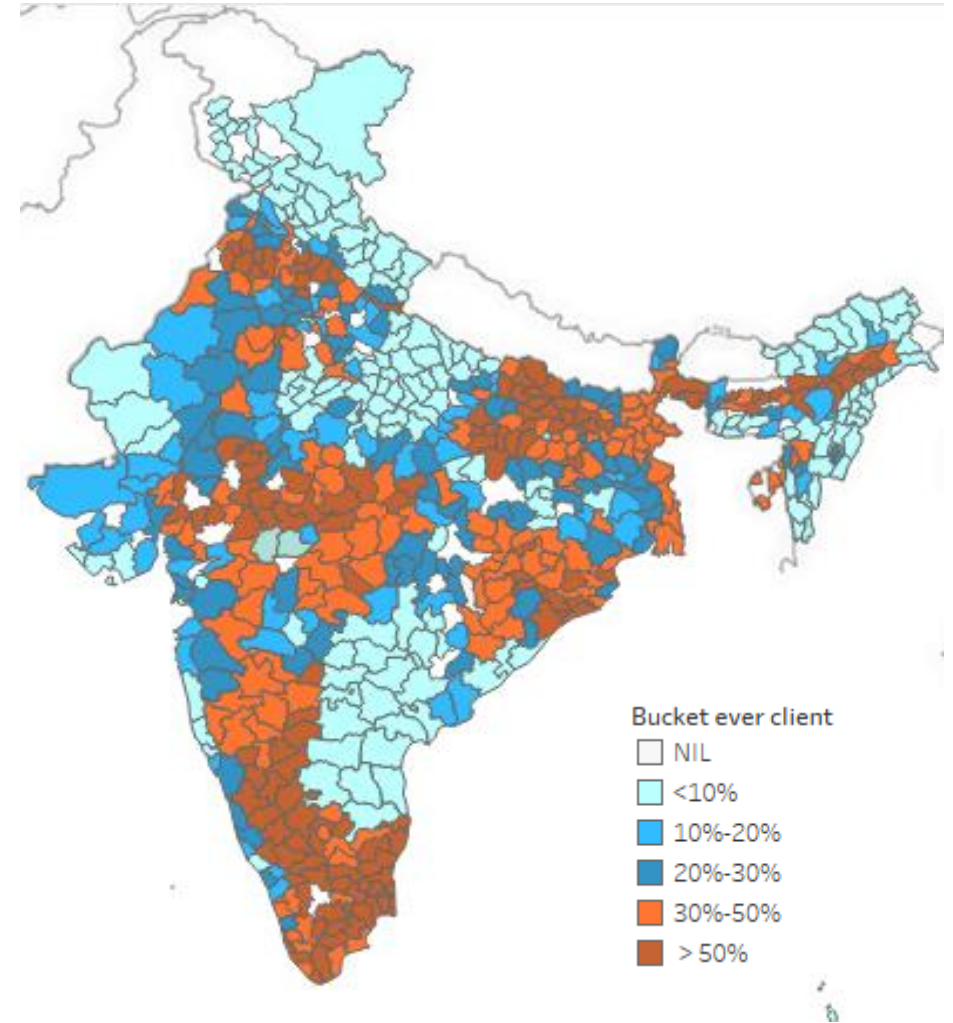
Districts categorized based on value of disbursements in fy 18. It is presumed that every customer who has access to micro-credit belongs to single household. Therefore, count of customer is used as proxy to arrive at count of households access to credit. Target HH (low-income HH) is presumed to be 80% of total households across districts.

households access to micro-credit

on active customer base in Mar 19



on total customer base sourced since Jul 13

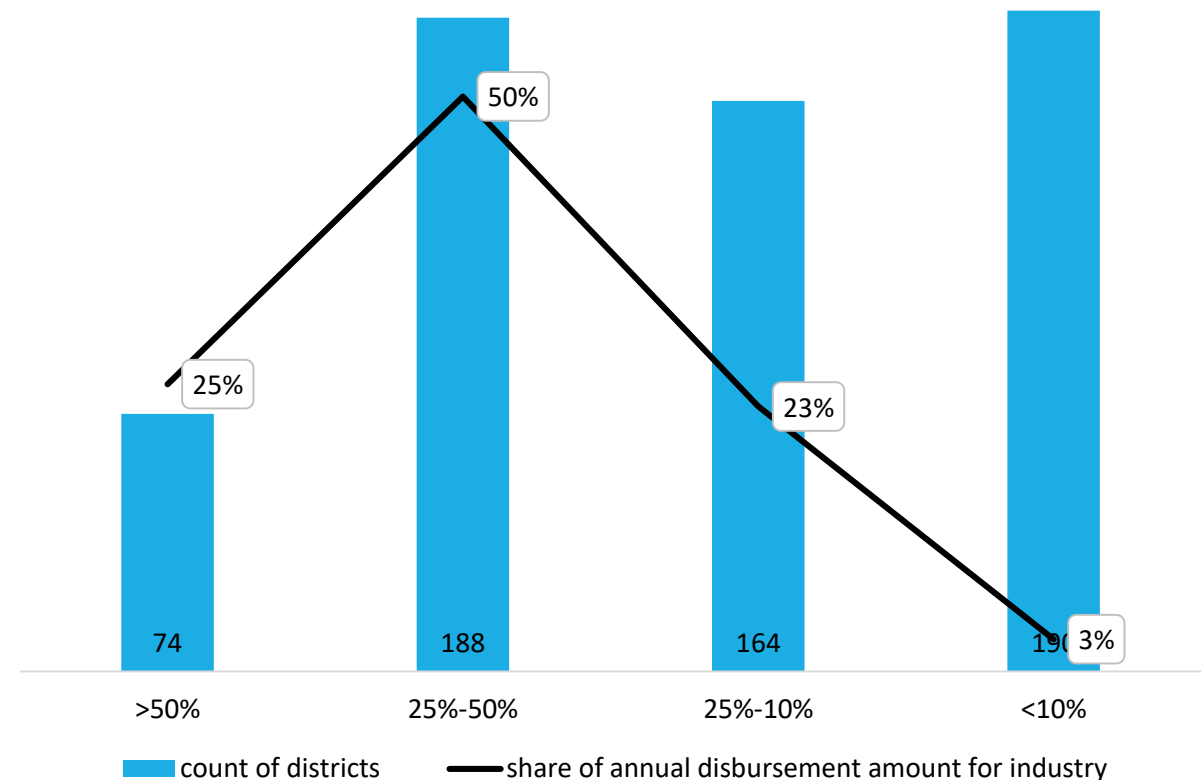


Bucketing of districts based on target HH (low-income HH who are presumed to be 80% of total HH across districts) access to micro-credit on active customer base is shown in the chart here.

74 districts show > 50% access and account for 25% of annual disbursement. 188 districts which have access levels between 25%-50% contribute to another 50% of annual disbursements. This implies that 75% of the industry disbursements comes from districts where 25% or more target HHs have access to micro-credit in Mar 19.

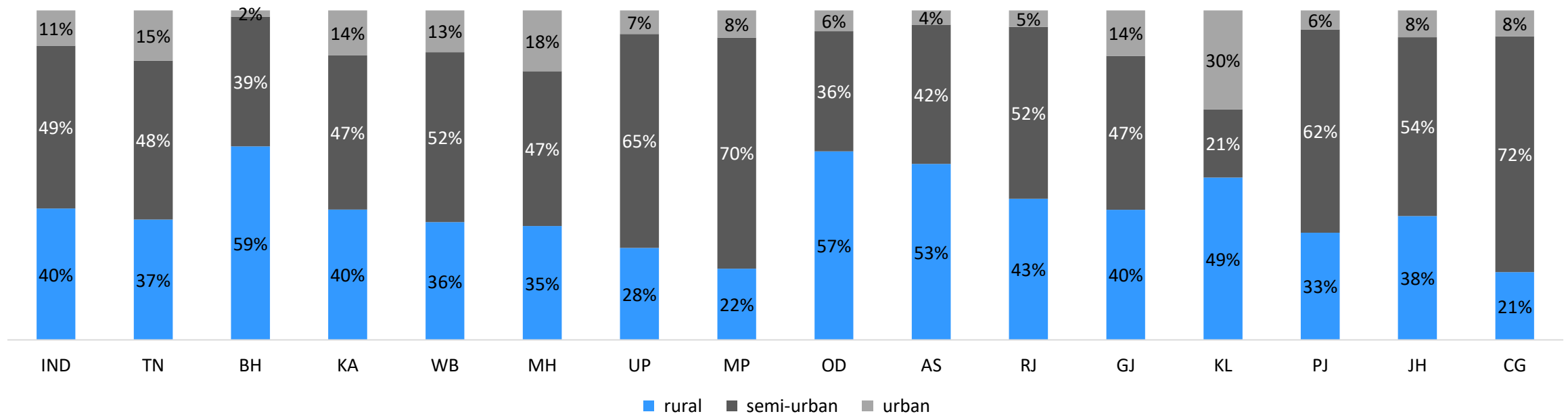
However, in the absence of any data on micro-credit demand (in terms of actual target HH, annual/short-medium term credit needs of HH etc), there is no reasonable and quantifiable basis to calculate if some districts are nearing saturation or not. These numbers are only indicative of estimated number of target HHs in districts which are accessing micro-credit in Mar 19.

bucketing districts based on target HH access to micro-credit
(active customer base, Mar 19)



Based on customer address for all active accounts (Mar 19), rural customers account for 40% of micro-credit, semi-urban account for 49% and remaining 11% are from urban areas. Based on census 2011 data, rural-urban ratio is 69% to 31% in India. Clearly, micro-credit model is skewed towards the semi-urban and urban which allows households greater access to small businesses and trade activities as well as regular cash-flows. Concentration of households in semi urban and urban area, brings operational efficiency and therefore greater spread of micro-credit in these areas, so far.

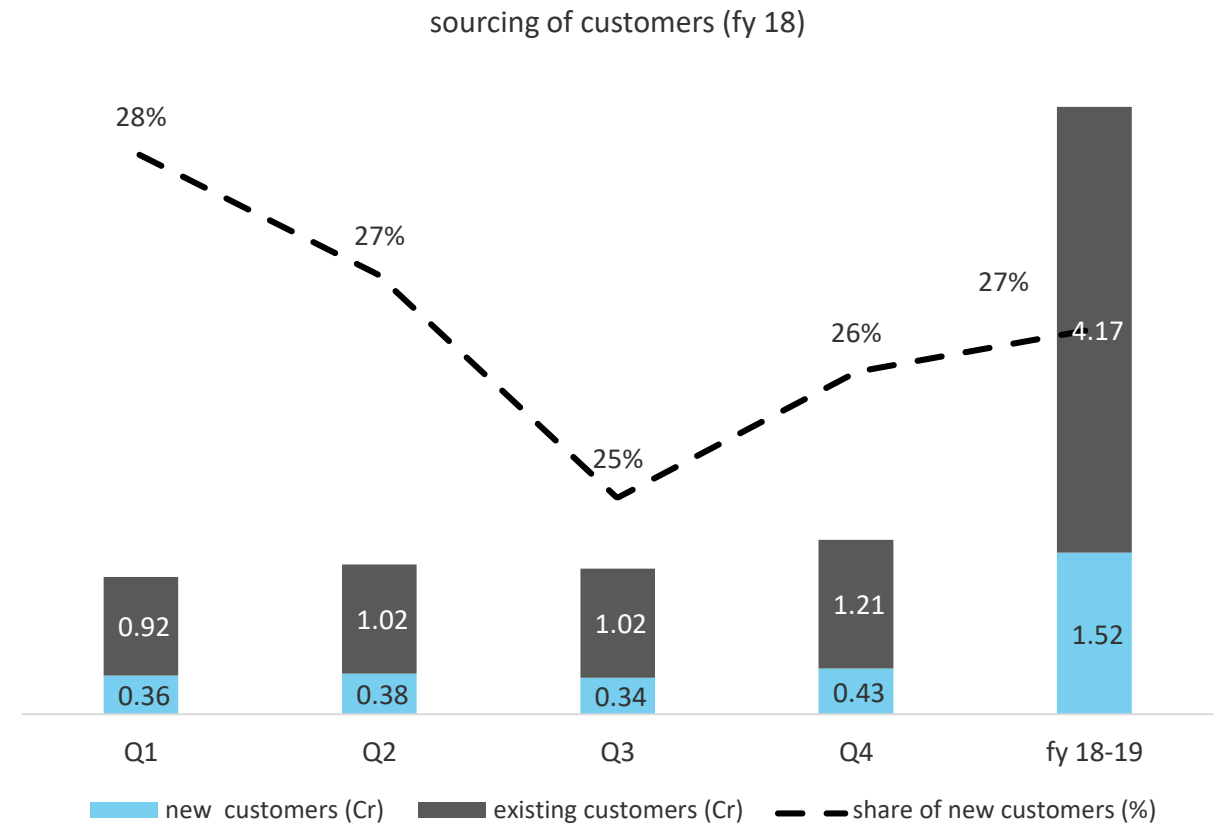
break-up of rural-urban in top 15 states (Mar 19)



Customers who have address falling in multiple buckets (rural, semi-urban, urban) are counted in all these categories. This implies some overlap of customer count but the overlap is not significant. Top states shown in the chart are based on total customer count.

Based on sourcing data for fy 18 (Apr 18 – Mar 19), a total of 5.7 Cr unique customers were sourced for micro-credit. Of these, 27% (1.5 Cr) were new to micro-credit, i.e. these customers opened their first tradeline (took their very first loan) with micro-credit during this period. Remaining 73% (4.2 Cr) were customers who already had a running micro-credit. The chart here gives the quarter wise distribution of new and existing customers for the four quarters of fy 18 and fy 18.

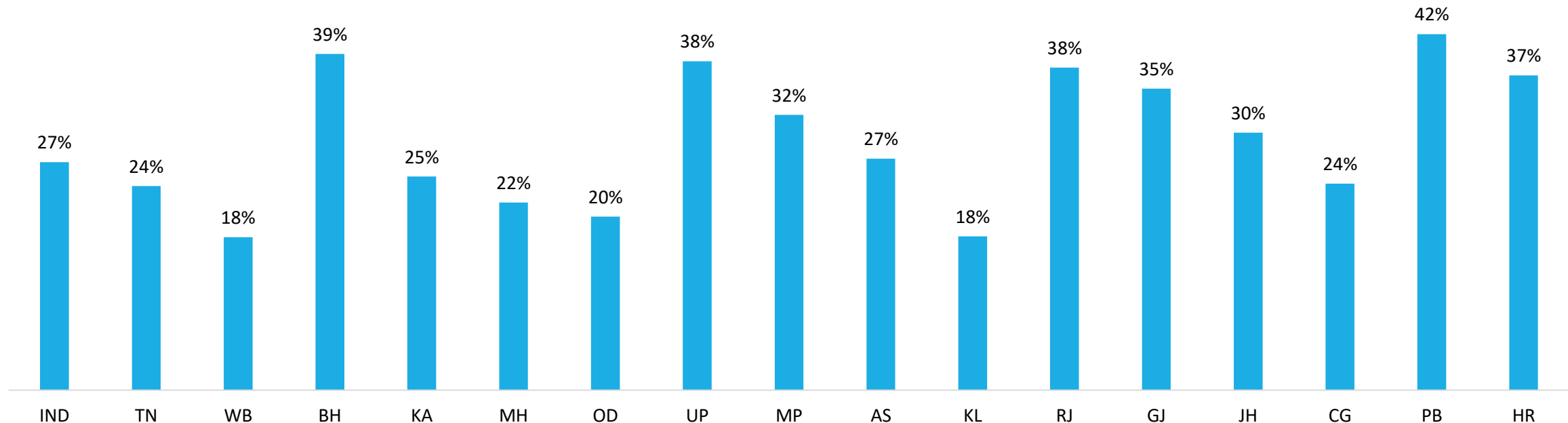
There are a few key drivers to sourcing of new customers. For sure, there is an untapped demand for micro-credit and new customers are reaching to micro-credit. Additionally, with business growing at a steady rate, dynamics for growth require reaching to new geographies and new customers, as many customers drop out (see section on customer vintage and drop out) and many customers can not access micro-credit due to regulatory caps on multiple Provider/total indebtedness and Provider's own risk limits. As a result, we see quite a significant share of new customers are being sourced.



It is possible that some of the customers are using different KYC IDs to create different identities for themselves (to access micro-credit) and therefore appearing as new customers. But there is no concrete evidence to establish or measure this.

Share of new customers to sourcing varies across the states (chart below). Amongst the top states (in terms of customer count in sourcing for fy 18), West Bengal, Odisha, Kerala and Tripura have a lower ratio of new customers in sourcing. Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, Gujarat, Jharkhand, Punjab, where outreach of micro-credit compared to market potential is still low, ratio of new customers in sourcing is relatively high.

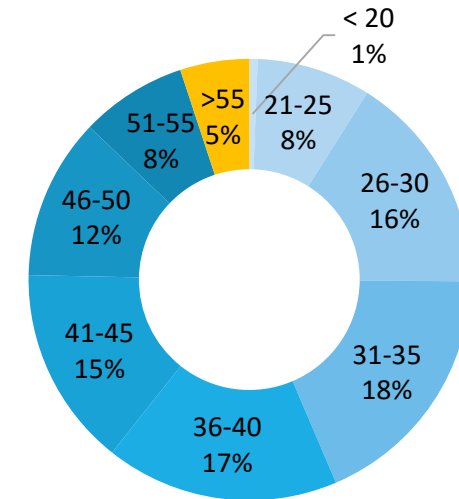
new customer as % of total customers sourced in fy 18



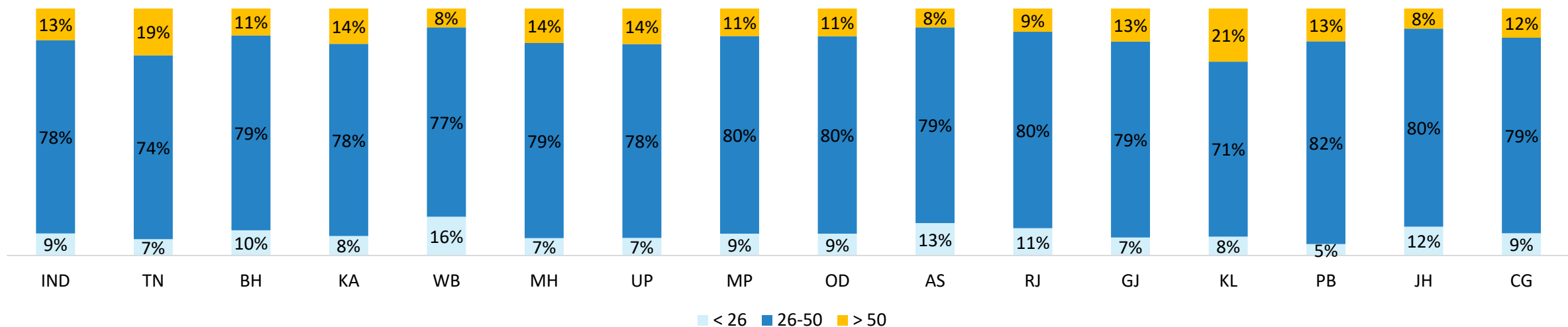
Top states based on count of unique customer who were sourced (i.e. disbursed loans) during fy 18. Customers who had address falling in more than > 1 states are grouped under the category of > 1 state to avoid counting of overlap.

The age profile of customers is shown in charts here. Given that micro-credit is taken by HHs to enhance their assets/income, customers in the most-productive age (between 25 years – 50 years) dominate the overall customer base. Across age buckets, customer profile is fairly evenly distributed. Younger customers (age < 20 years) or senior customers (> 55 years) have comparatively lower share in micro-credit. At an all India level, 78% of customers are in age group of 26-50 years, 9% in < 26 years and 13% in > 50 years. Age profile of customer in top 15 states is given in the chart below. Tamil Nadu and Kerala have much higher ratio of senior customers (age > 50 years). West Bengal and Assam stand out for relatively higher share (compared with other states and all India averages) of younger customers. Data does not show any substantive variation in loan outstanding per customer across age buckets, except that group of senior and younger customer has slightly lower avg loan amount outstanding per customer.

customer profile on age (volume, Mar19)



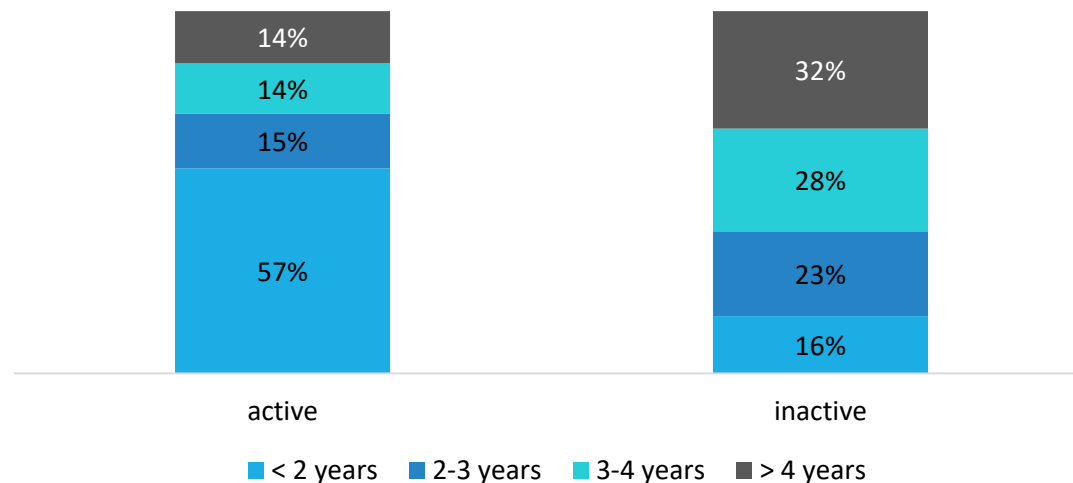
age profile of customers across top 15 states (volume, Mar 19)



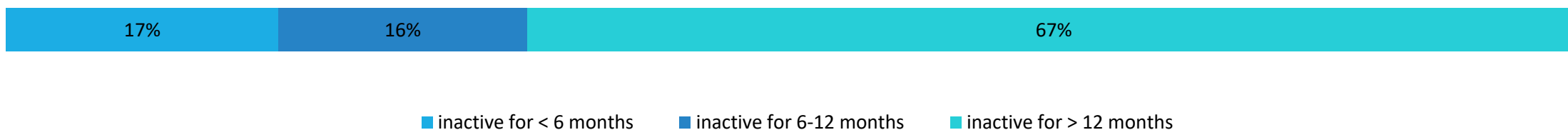
To further understand the customers, vintage of customers was analysed. For this purpose, all customers sourced since Jul 13, inactive (not having an open account or active tradeline on Mar 19) as well as active (having an open account or active tradeline), were taken. There are about 7.2 Cr customer sourced since Jul 13, of which 4.5 Cr are active and 2.5 inactive (having no active account as of Mar 19).

Amongst active customers, more over half (57%) have vintage of less than 2 years, meaning they opened their first trade-line with micro-credit in the last two years. There are 36% customers who have vintage of only 1 year. Customers with higher vintage have lower share in active customers. However, position is quite different amongst inactive customers. Share of relatively new customers (vintage less than 2 years) is low. Amongst the inactive customers more than two-third have not accessed micro-credit for over a year.

vintage of customers
(for customers sourced since Jul 13)



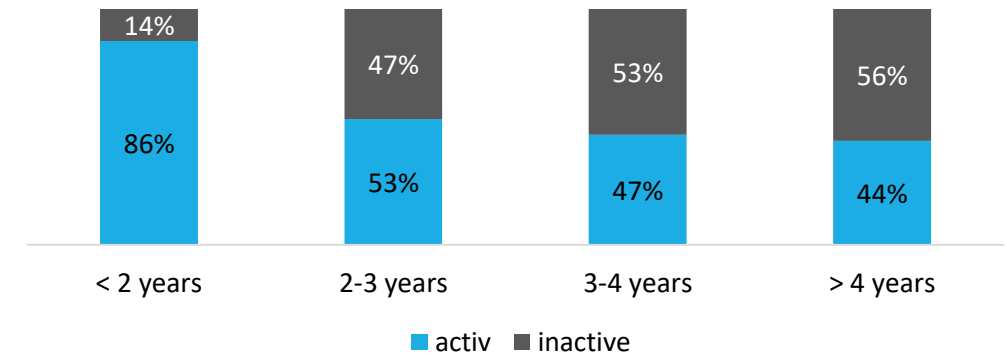
inactive customers
(from amongst customer sourced since Jul 13)



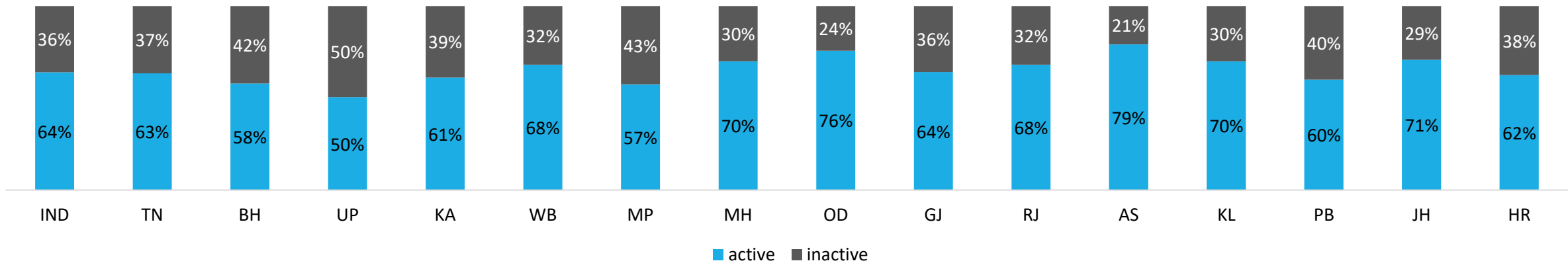
At an all India level, data shows that 86% of customers with vintage of < 2 years are active. However, share of active customer drop significantly with higher vintage customers and only 48% of customers who have vintage > 2 years are active as of Mar 19.

Share of active/inactive customer as well as vintage of active customers (i.e. open account as of Mar 19) across top 15 states (in terms of count of active customers) is shown in charts below. States which have much higher share of inactive customers are Bihar, Uttar Pradesh, Karnataka, Madhya Pradesh, Punjab and Haryana.

vintage and customer activity
(for customers sourced since Jul 13)

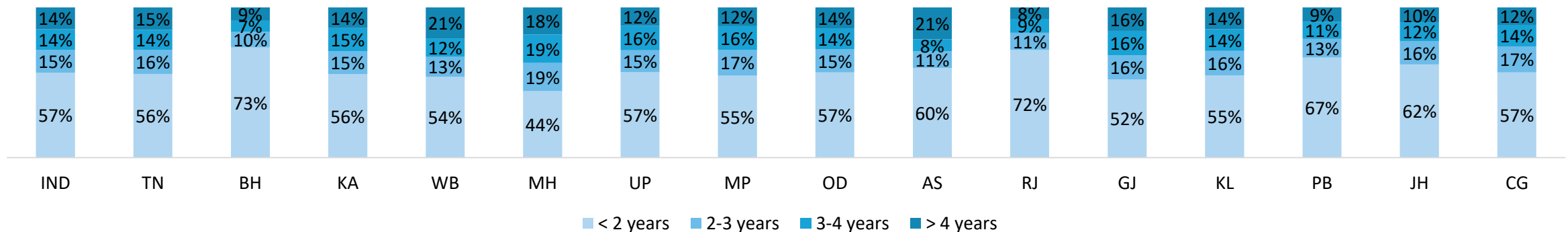


share of active and inactive customers across top 15 states
(Mar 19)

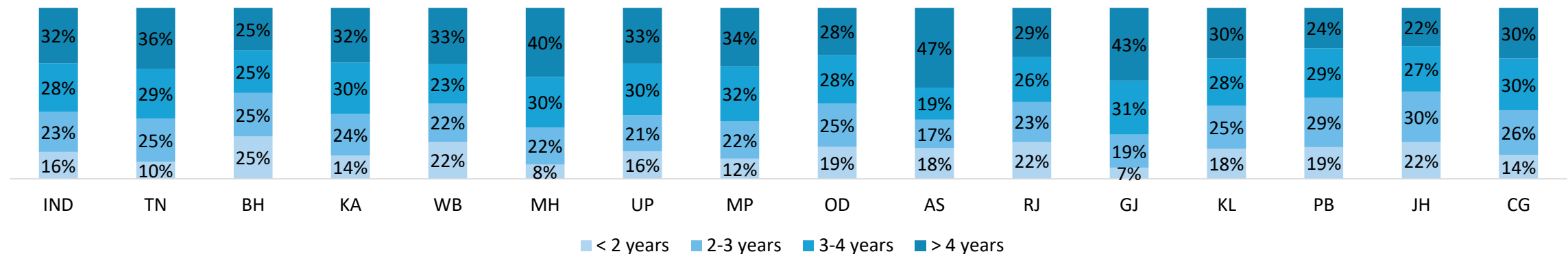


Vintage of active (i.e. open account as of Mar 19) and inactive (i.e. no open account as of Mar 19) customers across top 15 states (in terms of count of active customers) is shown in the charts here. On active customer base, Bihar, Assam, Rajasthan, Punjab have higher portion of low vintage (< 2 years) customers. West Bengal and Assam stand out for higher share of high vintage (> 4 years) customers, implying that a higher portion of mature customers are accessing micro-credit in these states. On inactive customer base, Bihar, West Bengal, Rajasthan, Jharkhand have higher share of low vintage customers, implying that higher drop-put amongst the new-to-micro-credit customers.

vintage of active customers across top 15 states (Mar 19)



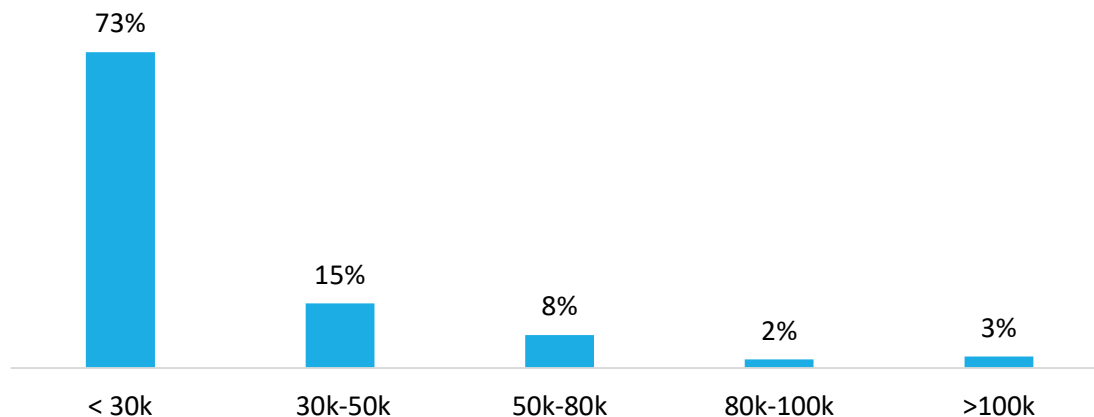
vintage of inactive customers across top 15 states (Mar 19)



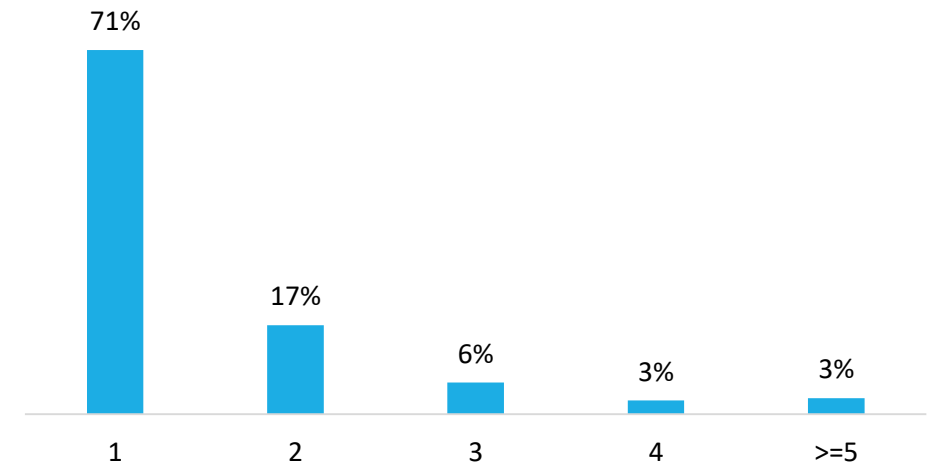
Examination of inactive customer based on count of accounts, providers and loan amount disbursed, shows that a large-majority of inactive customers only had 1 account/Providers and had a sanctioned value (or loan amount disbursed) < Rs 30k. So it seems, that many customers drop out of micro-credit after their very first loan. While these customers may have higher vintage, they necessarily aren't mature customers in terms of experience with micro-credit.

On the basis of this data, nearly 25% customers sourced since Jul 13, left micro-credit after first loan relationship.

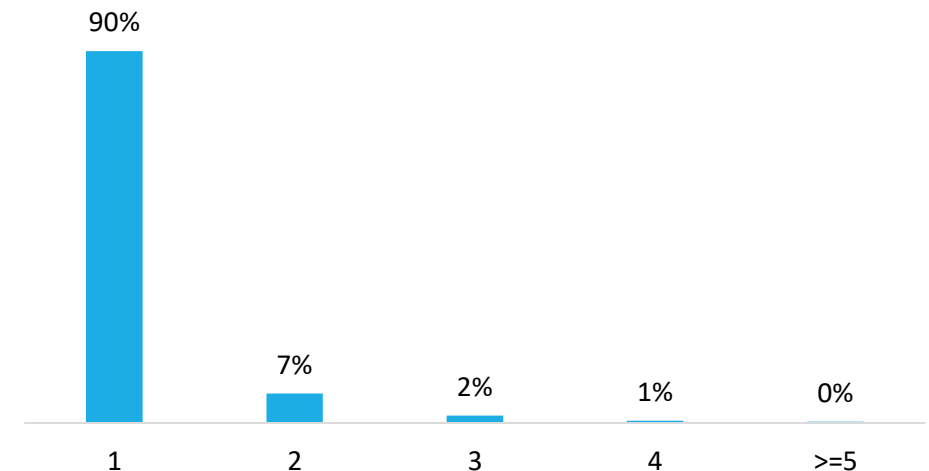
inactive customers (loan amount disbursed, Mar 19)



inactive customers (count of accounts, Mar 19)



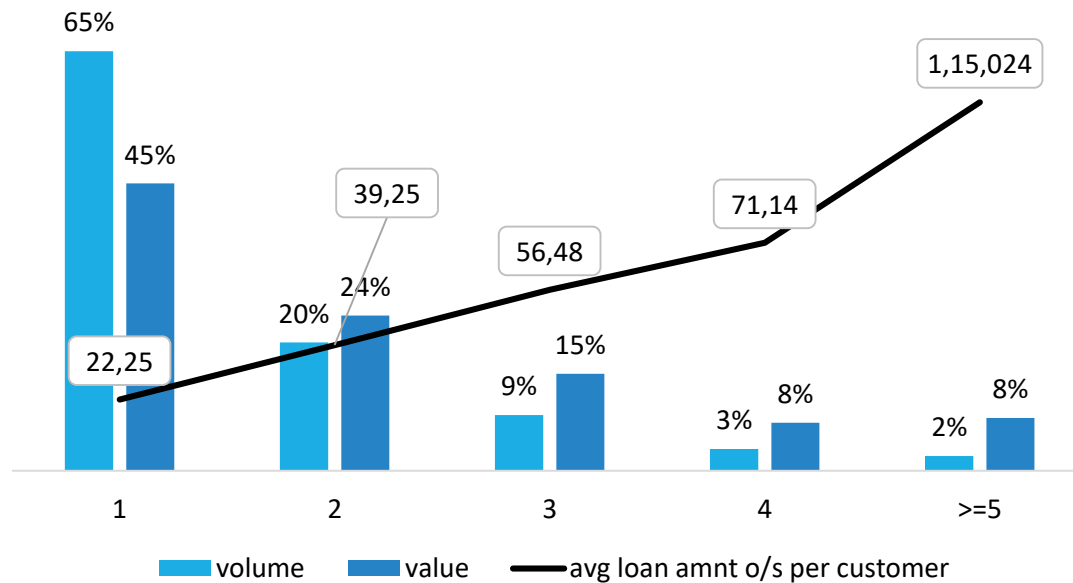
inactive customers (count of providers, Mar 19)



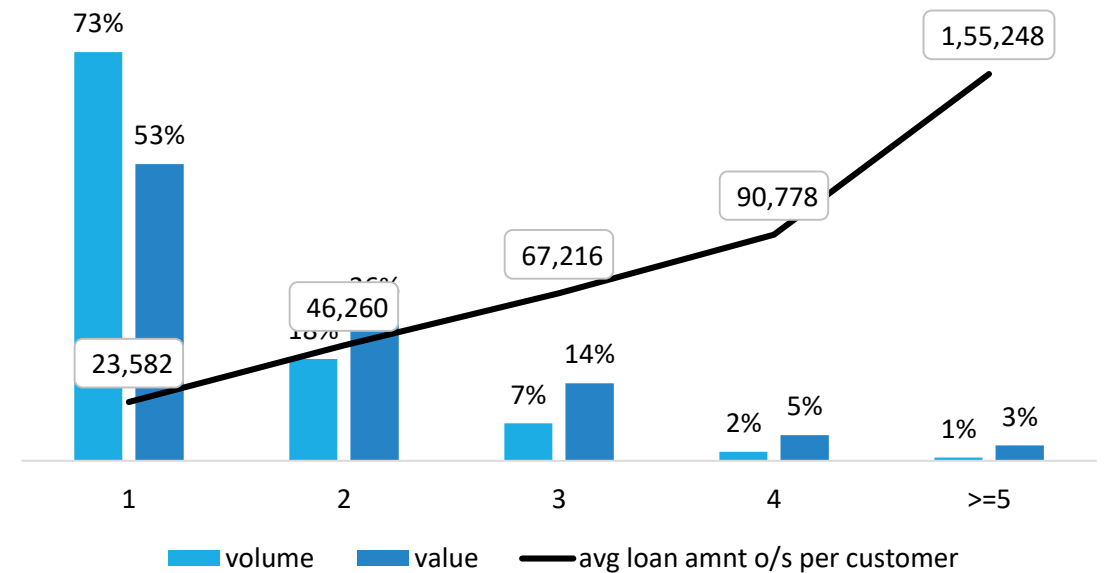
leverage: multiple lending

Charts here give leverage of customers based on count of loan accounts and providers in both volume and value terms as well as avg loan amount outstanding per customer for each buckets. 5% customer have > 3 loans accounting for 16% of industry loan outstanding. 3% customers have > 3 Providers but these customers accounts for 8% of the industry loan outstanding.

bucketing of customers based on count of loans accounts (Mar 19)

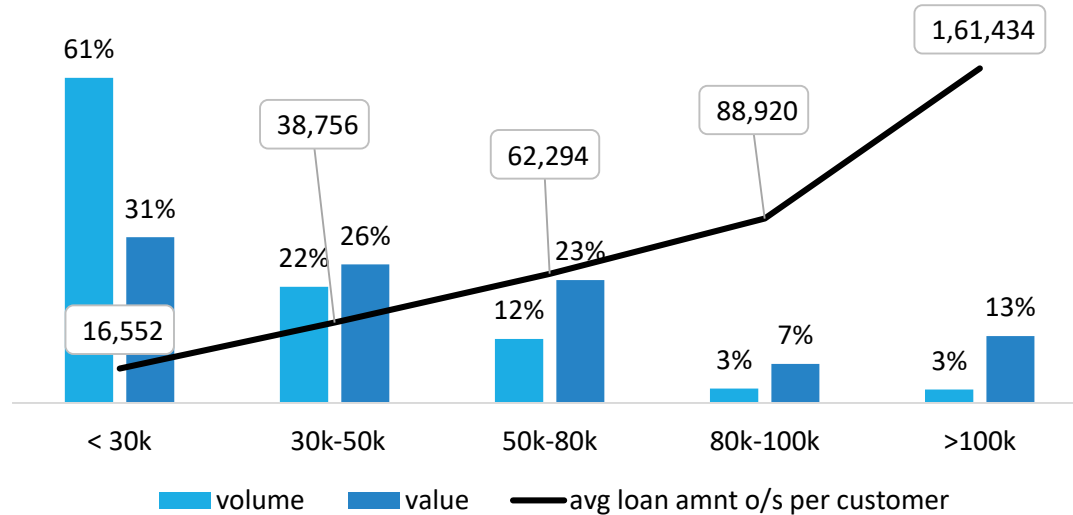


bucketing of customer based on count of providers (Mar 19)

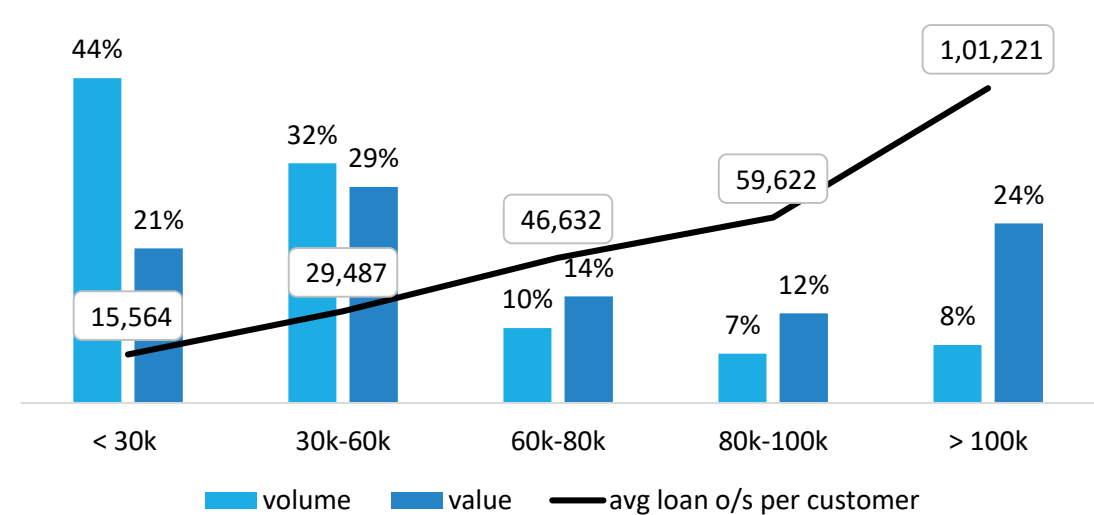


Charts here give leverage of customers based on total outstanding balance and disbursed amount in both volume and value terms as well as avg loan amount outstanding per customer for each buckets. 3% customer have indebtedness > Rs 100k and they account for 13% of the industry loan outstanding. 8% customers have loan amount disbursed (or total sanctioned value of active accounts) > Rs 100k and they account for 24% of industry portfolio.

bucketing of customer based on o/s balance (Mar 19)



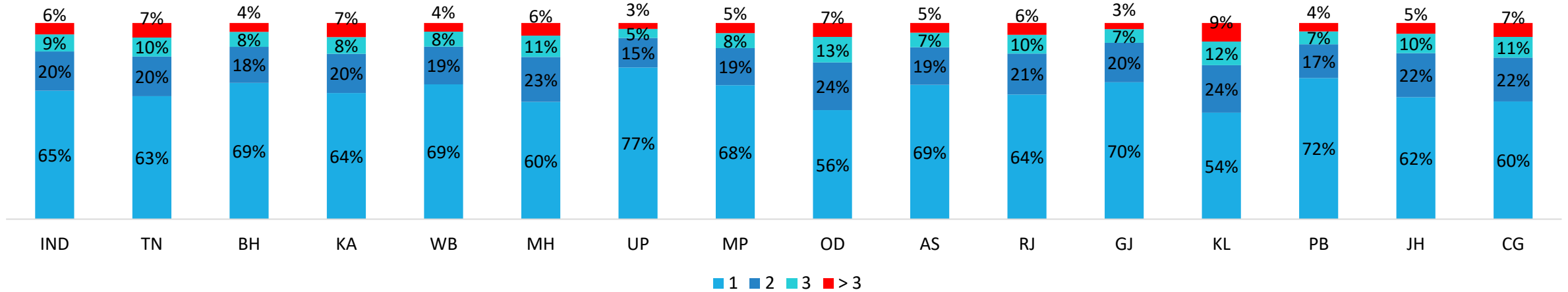
bucketing of customers based on loan amount disbursed (Mar 19)



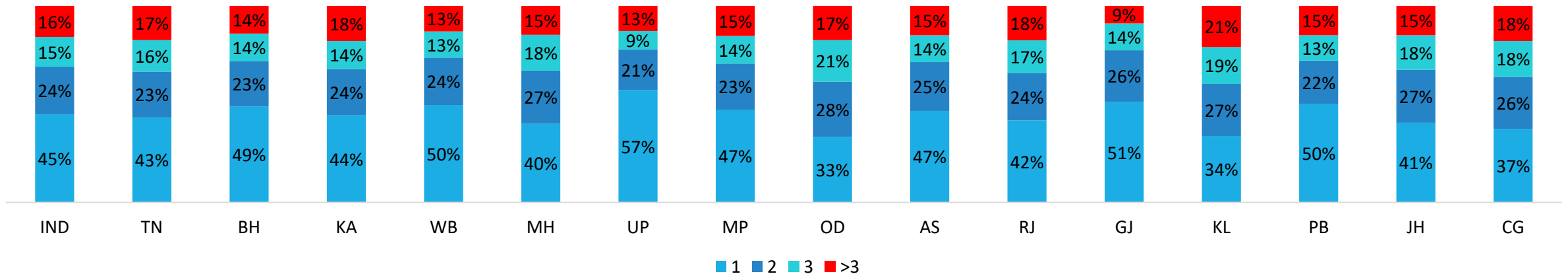
leverage: count of loan accounts per customer

Customer profiling based on count of loan accounts per customer across states in both volume and value terms is shown in the chart below.

bucketing of customers across states on count of loan accounts (volume, Mar 19)



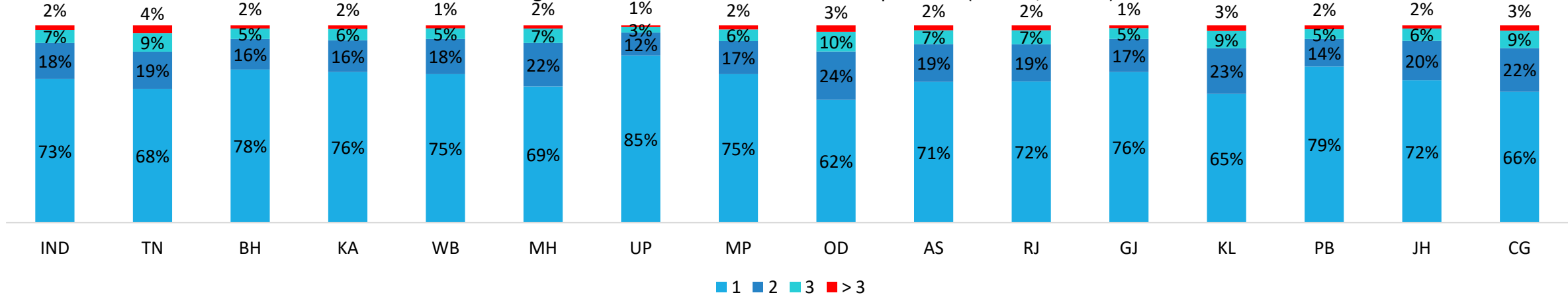
bucketing of customers across states on count of loan accounts(value, Mar 19)



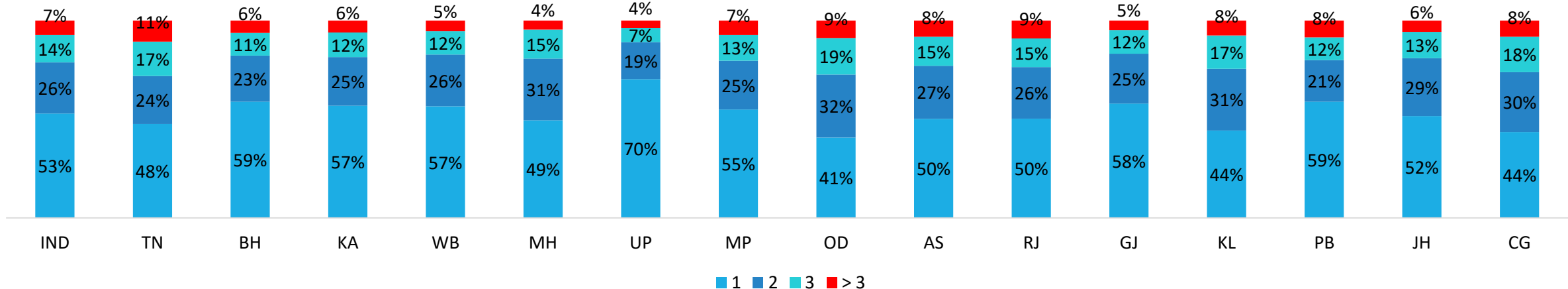
leverage: count of providers per customer

Customer profiling based on distinct provider per customer (these are unique or distinct provider to a customer) across states in both volume and value terms is shown in the chart below.

bucketing of customers across states on count of providers (volume, Mar 19)



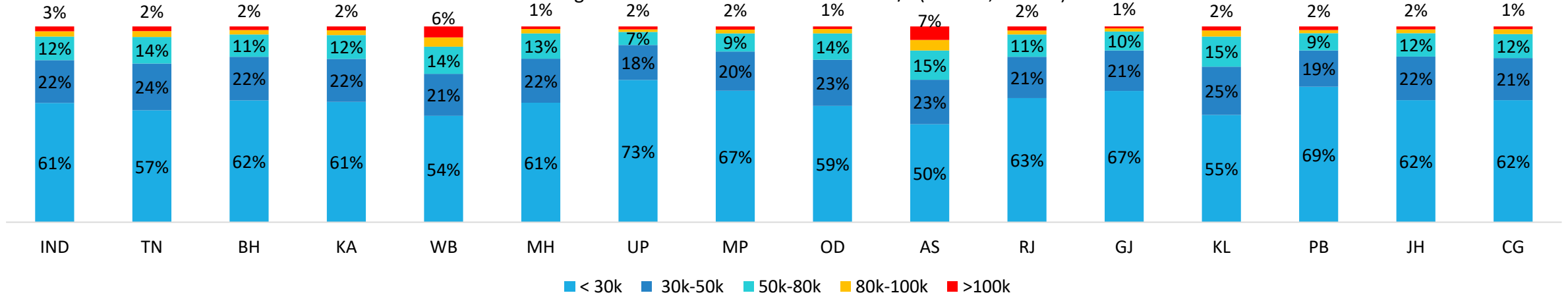
bucketing of customers across states on count of providers (value, Mar 19)



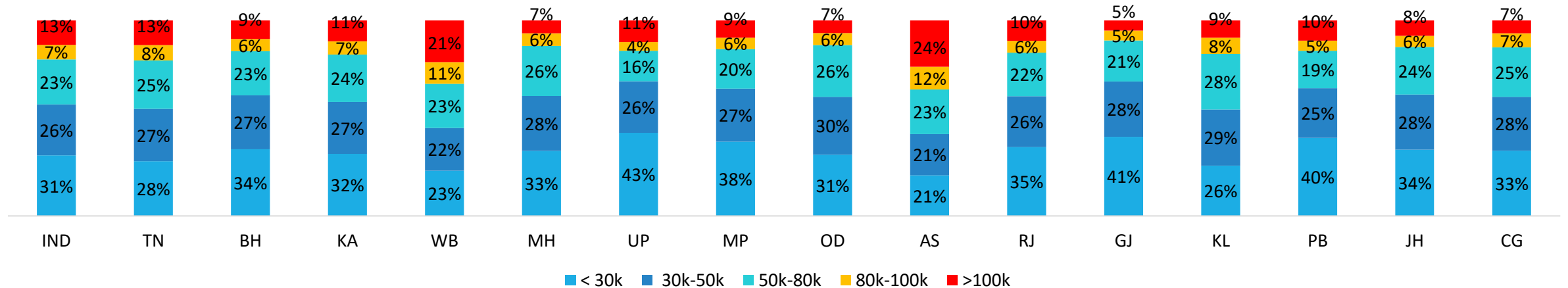
leverage: loan o/s per customer

Customer profiling based on loan outstanding per customer across states in both volume and value terms is shown in the chart below.

bucketing of customers across states on loan o/s (volume, Mar 19)



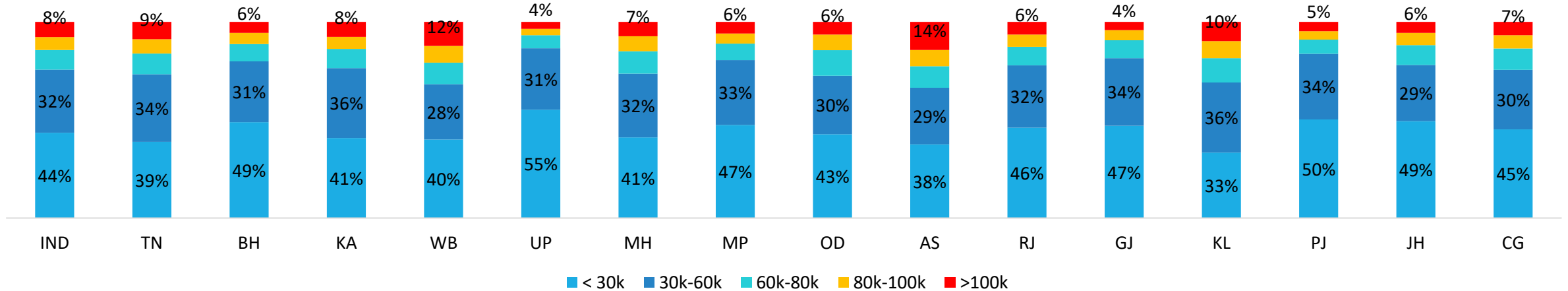
bucketing of customers across states on loan o/s (value, Mar 19)



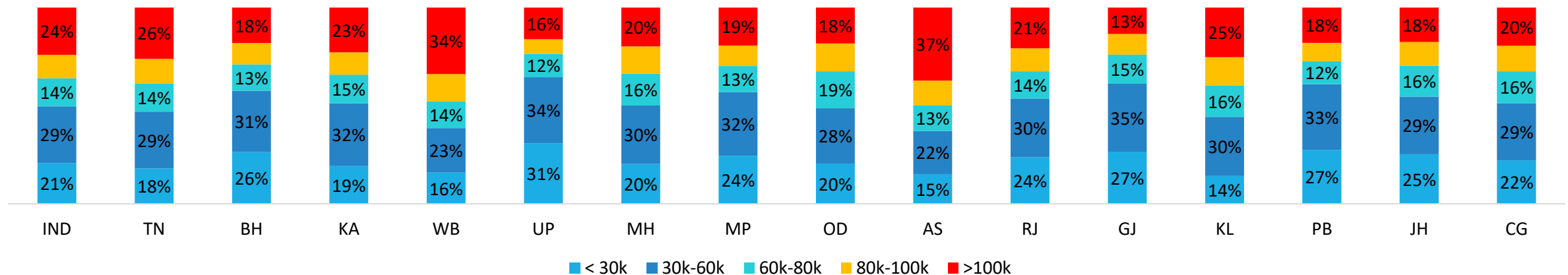
leverage: loan amount disbursed per customer

Customer profiling based on loan amount disbursed per customer across states in both volume and value terms is shown in the chart below.

bucketing of customers across states on disbursed amount (volume, Mar 19)



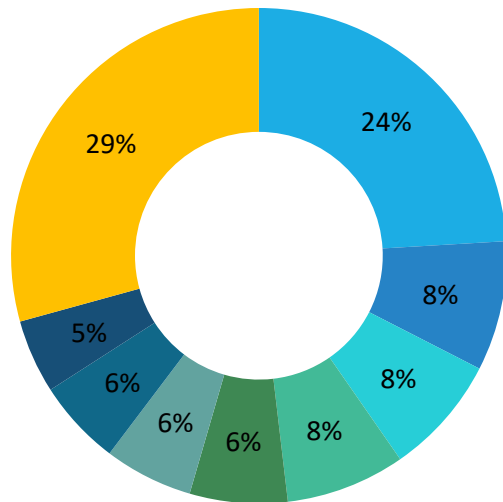
bucketing of customers across states on disbursed amount (value, Mar 19)



leverage: high-leverage customers

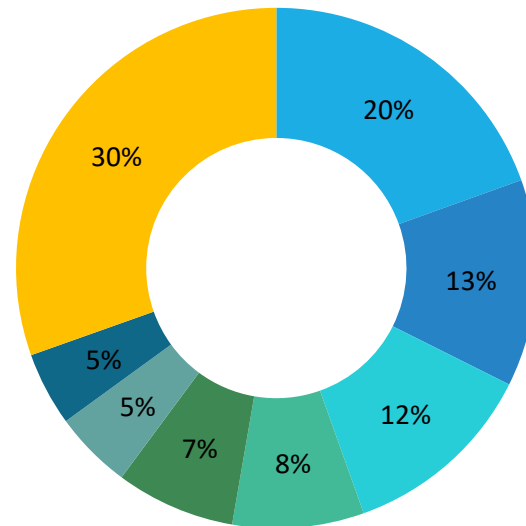
Spread of high-leverage customers (> 3 provider; loan outstanding > Rs 100k and loan disbursed > Rs 100k) is shown in the charts below. Amongst the customers who have > 3 providers, one-fourth are in Tamil Nadu. Odisha, Karnataka and Bihar account for another one-fourth. Amongst the customers who have loan amount outstanding > Rs 100k, one-third are from West Bengal and Assam. Tamil Nadu is also home to 13% of such customers. Amongst the customers who have disbursed amount > Rs 100k, 15% based in Tamil Nadu, followed by 14% in West Bengal.

distribution of high-leverage customers
(>3 providers, Mar 19)



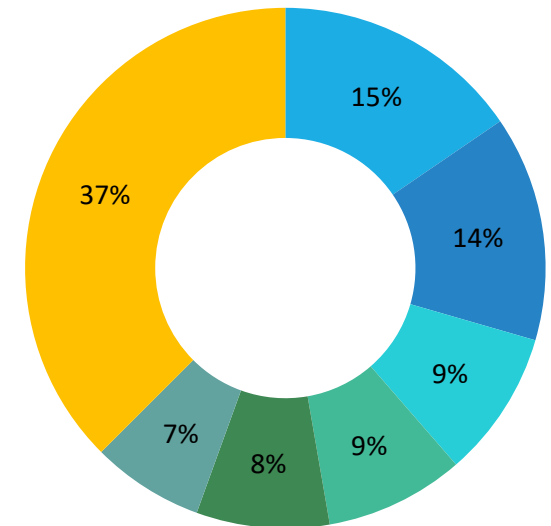
■ TN ■ OD ■ KA ■ BH ■ MP ■ MH ■ WB ■ AS ■ Others

distribution of high-leverage customers
(loan o/s > Rs 100k, Mar 19)



■ WB ■ TN ■ AS ■ BH ■ KA ■ UP ■ MP ■ Others

distribution of high-leverage customers
(disbursed amnt > Rs 100k, Mar 19)

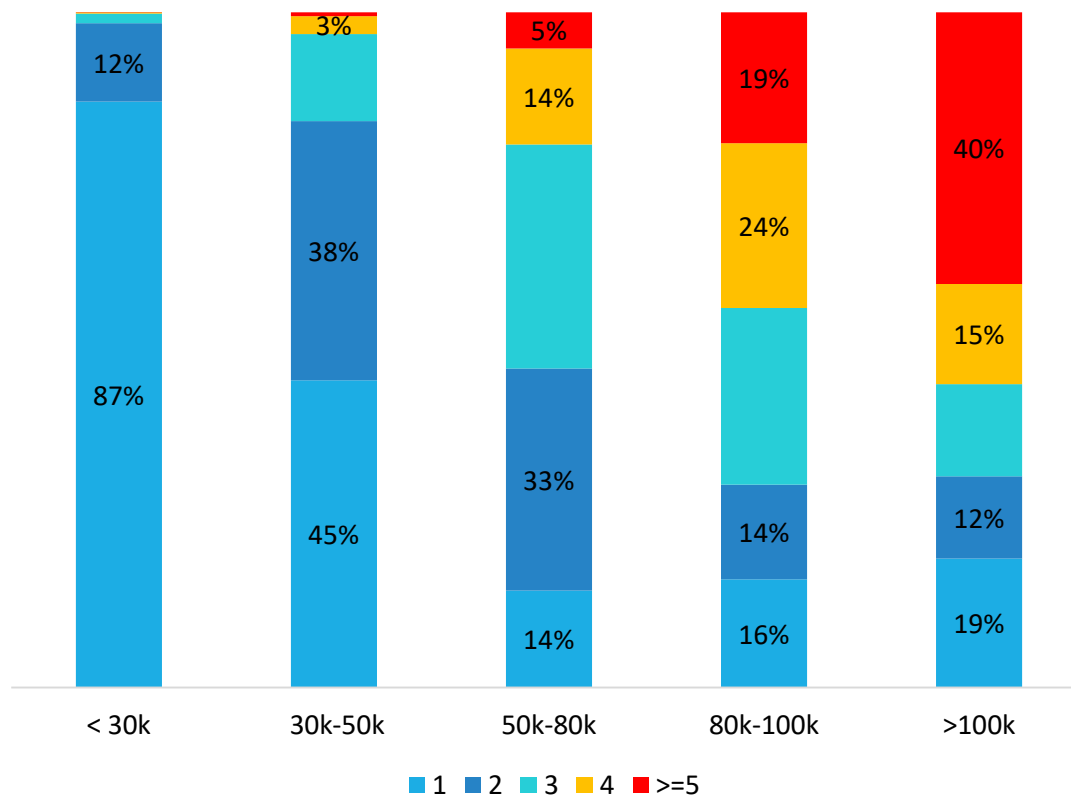


■ TN ■ WB ■ KA ■ AS ■ BH ■ MH ■ Others

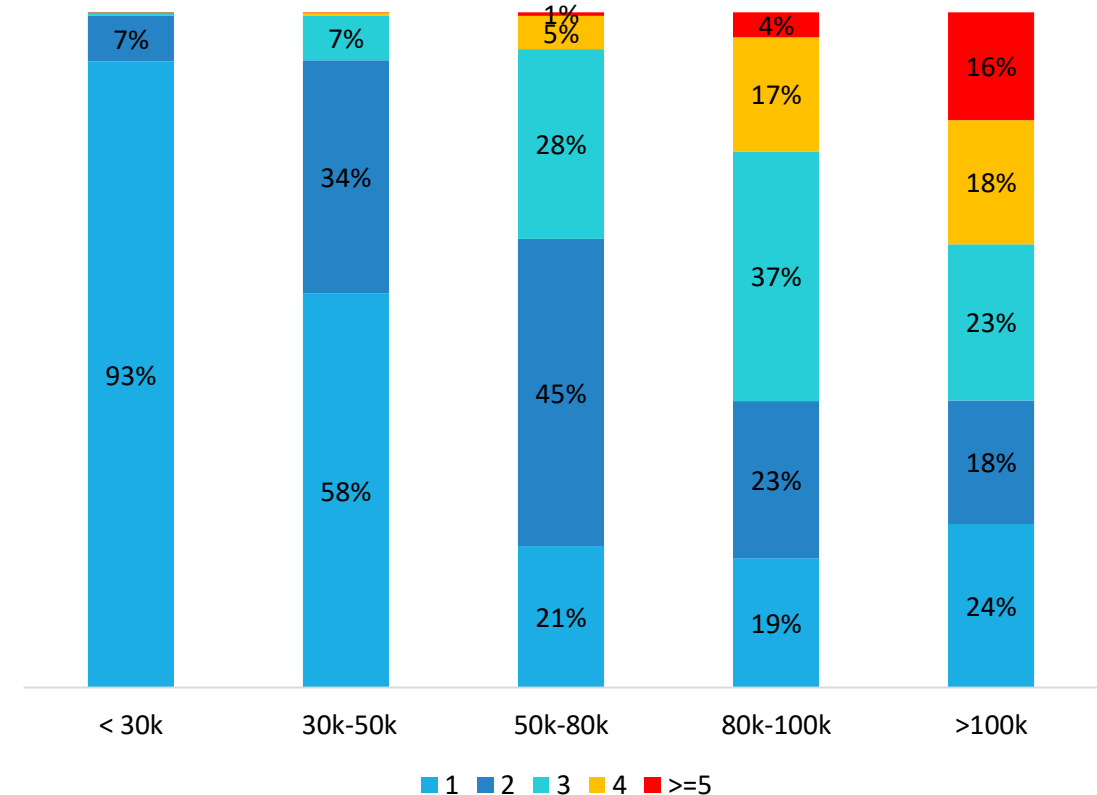
leverage: relationship btw os, accounts, providers

Generally speaking, customer with higher loan outstanding have higher count of accounts and providers, but not always. While the relationship is quite clear for low-indebted customers - lower indebtedness means lower count of accounts and providers. However, amongst the high-indebtedness customer, there are also customers who have lower count of accounts and providers. Clearly some customers are accessing higher loan value through fewer providers too. For example, amongst the customers who have loan outstanding > Rs 100k, 19% have only one loan account and 24% have single provider.

loan o/s and count of loan accounts (Mar 19)



loan o/s and count of providers (Mar 19)

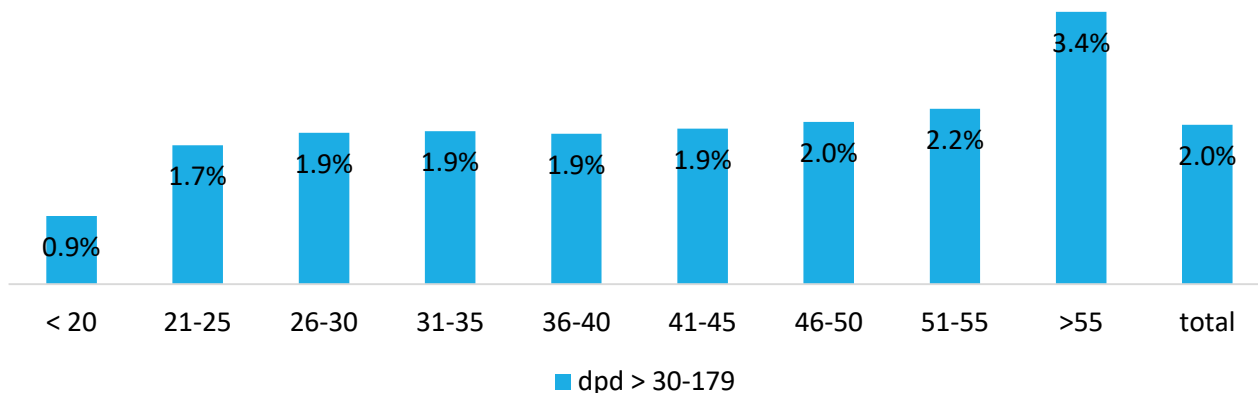


portfolio quality: rural urban/age

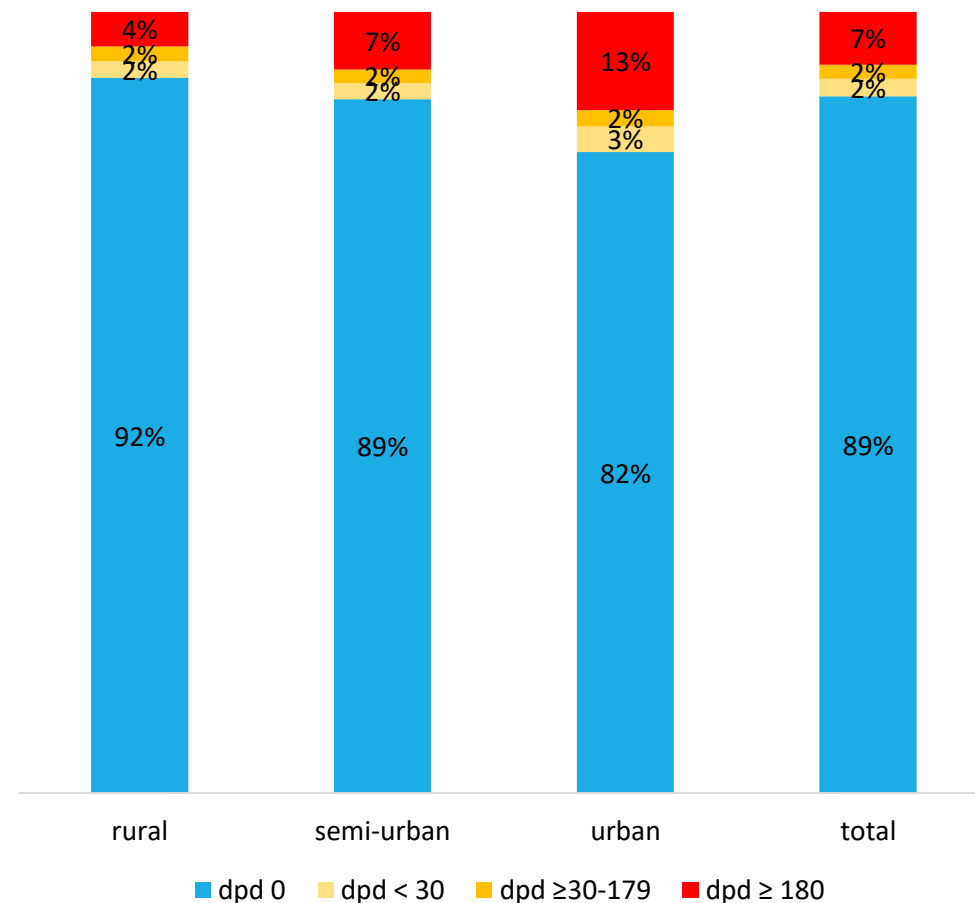
Based on profiling of customers across dpd buckets, urban customers show a slightly worse portfolio quality. 92% of rural customers are current compared to 89% for semi-urban and 82% for urban. There are 4% rural customer under dpd ≥ 180 days. Share of customers under dpd ≥ 180 days in urban area is 13%, more than 3 times compared to rural customers. However, if dpd $> 180+$ is removed from the analysis which was a result of demonetization, then difference in portfolio quality is less significant between rural, urban and semi-urban areas.

Data shows that portfolio quality of senior age customers (> 50 years) is relatively worse than their younger counterparts.

portfolio quality (customer's age)



portfolio quality (customer level, %)

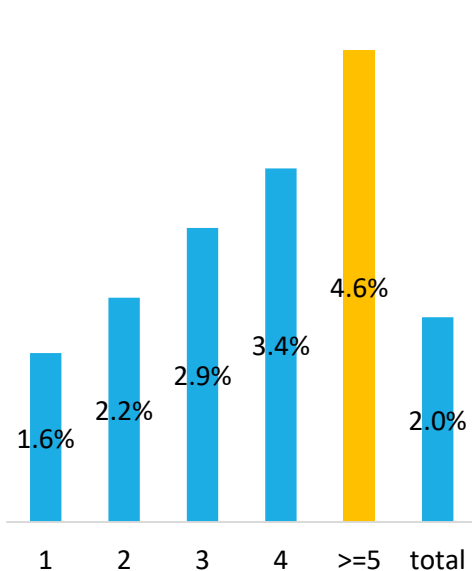


A customer's delinquency status has been taken from her worst dpd for all her open loan accounts. So if a customer has indebtedness of Rs 10,000 and she has 3 open loan accounts with dpd =12, dpd=30, dpd=90, then her account status is tagged on the basis of her worst dpd account i.e. dpd =90. It may be noted that closed and written-off accounts are excluded from analysis in delinquent account status

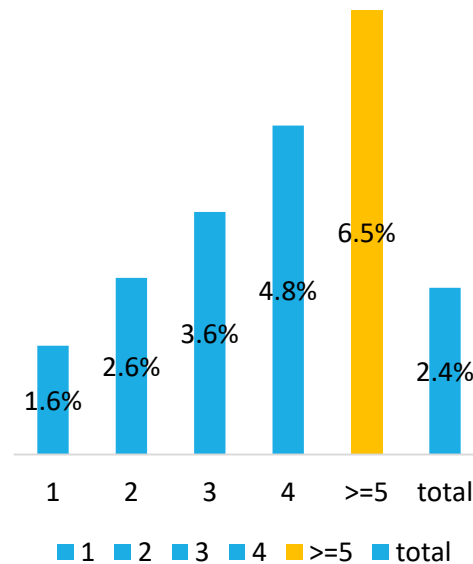
portfolio quality: customer leverage

Portfolio quality deteriorates with customer's increasing count of accounts, providers, loan outstanding and loan amount disbursed. It may be noted that dpd shown here is the customer's worst dpd across all active accounts (see note) and is shown in volume terms. Customers having dpd > 180+ is removed in the analysis as most of these customers became delinquent during demonetization period.

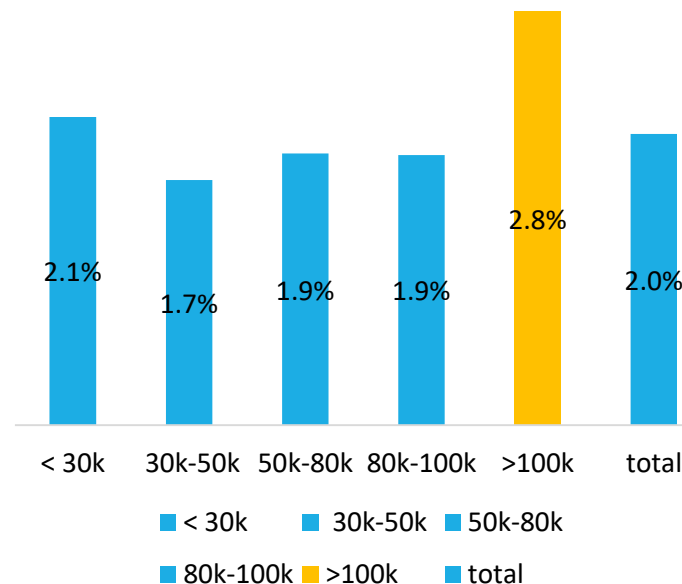
portfolio quality (dpd > 30-179) and count of loan accounts per customer



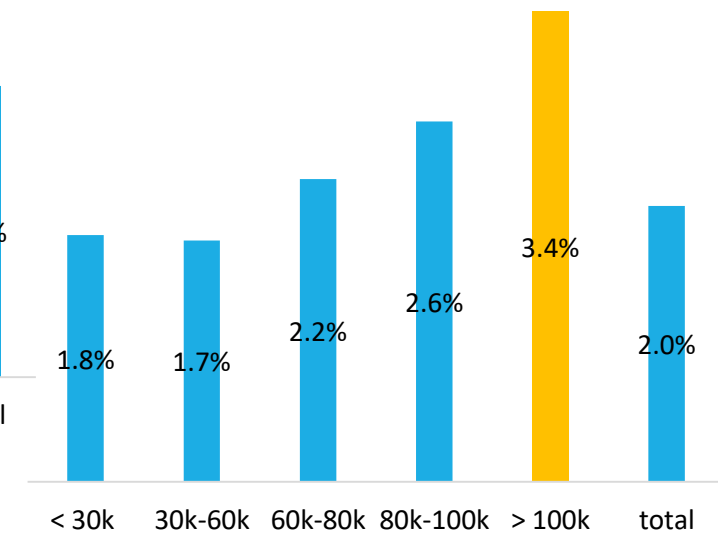
portfolio quality (dpd > 30-179) and count of providers



portfolio quality (dpd > 30-179) and loan outstanding per customer



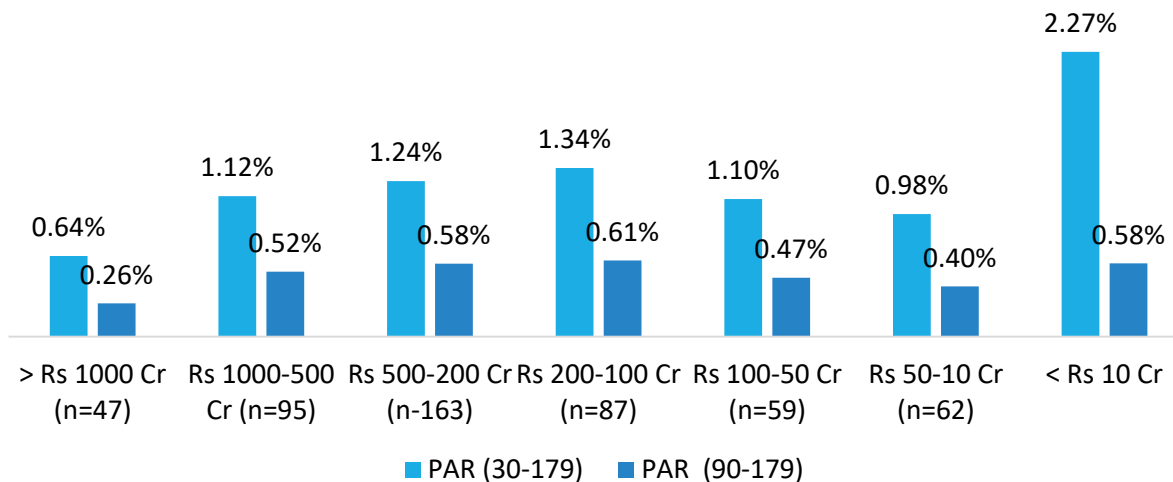
portfolio quality (dpd > 30-179) and loan amount disbursed per customer



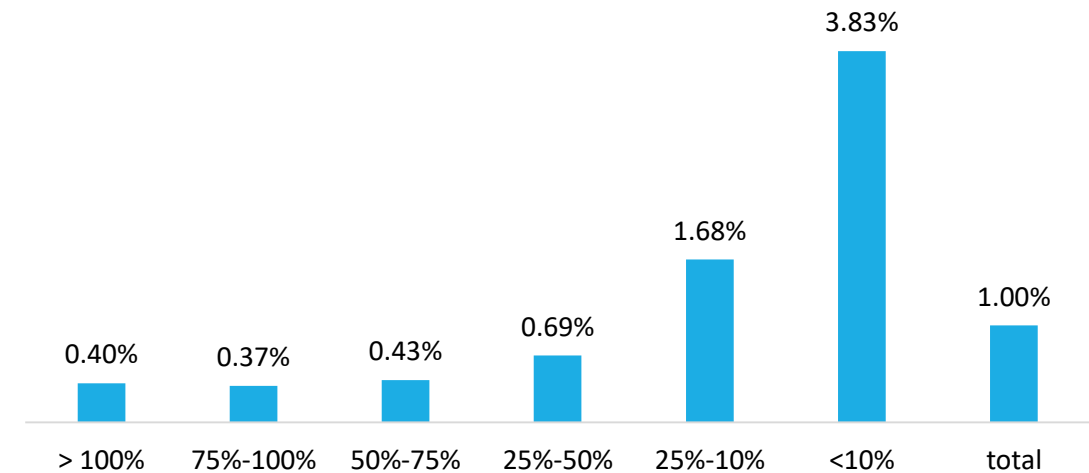
portfolio quality: growth, HH access, business in districts

Based on Mar 19 data, PAR > 30 (0-179) is mapped vis a vis yoy growth in annual disbursements in fy 18. Districts which have higher growth, show better portfolio quality compared with districts with less yoy growth. Similarly, based on Mar 19 data, PAR > 30 (0-179) is mapped vis a vis district level HH access to micro-credit (active customer base). Districts which have higher access show slightly worse portfolio quality as also the districts which have lower access. Based on district level data on portfolio quality, high-business districts show a better portfolio quality.

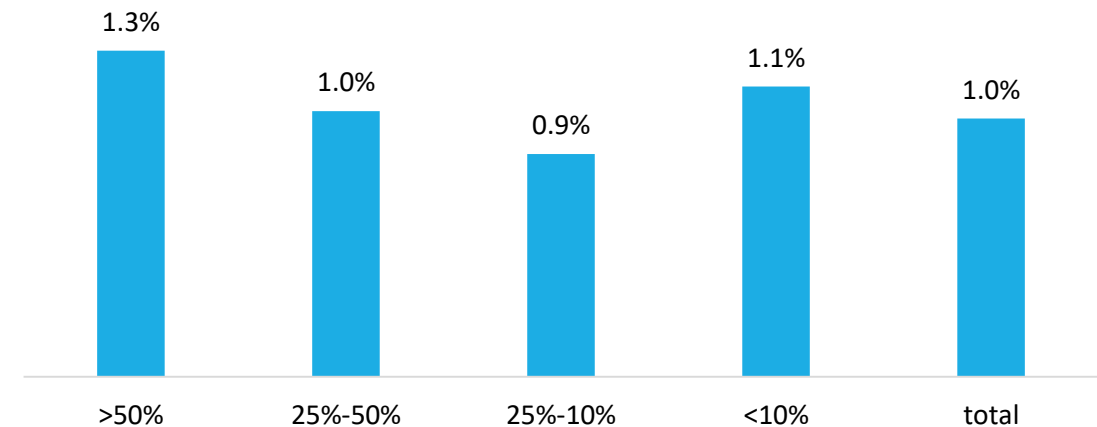
annual disbursement in districts and PAR > 30 (dpd 0-179, Mar 19)



yoy growth in districts and PAR > 30 (dpd 0-179, Mar 19)



HH access to micro-credit in districts (on active customer base in Mar 19) and PAR > 30 (dpd 0-179, Mar 19)



last but important point: customer's shopping frequency

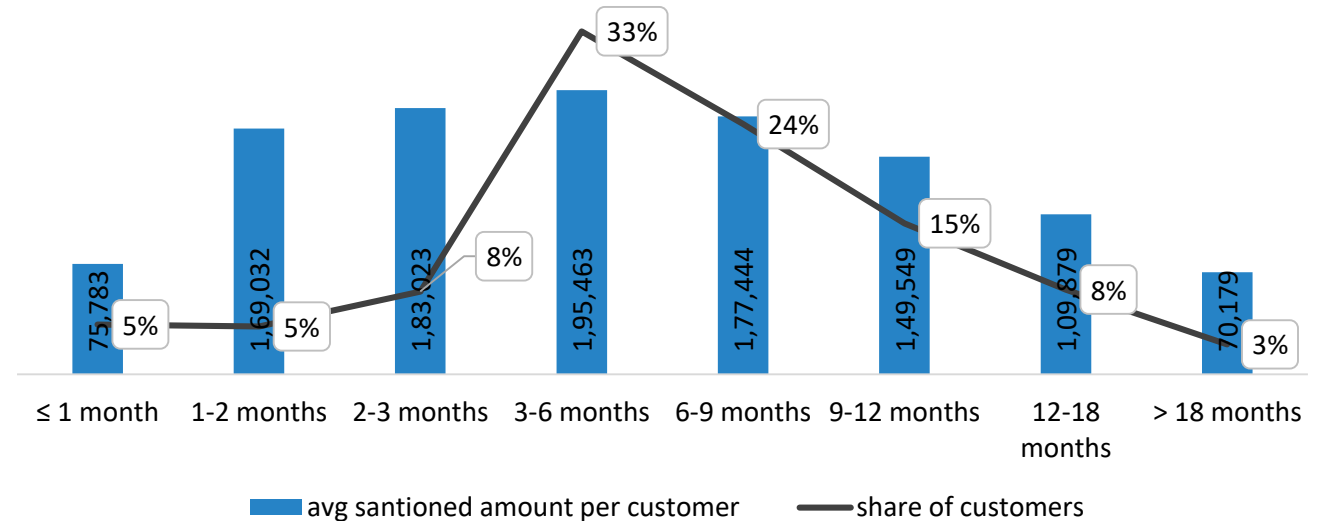
In order to understand the customer's shopping frequency, a sample of customers who had accessed multiple loans during fy 18 and are active as on Mar 19 were analysed. These set of customers (about 2.7 Cr) were analysed for all their trade-lines (both open and closed) to bucket them for avg shopping frequency. Please refer to note below for calculation on shopping frequency.

Data showed (see chart) that most customers (33%) access loans on average between 3-6 months, 24% customers access loans on avg between 6-9 months and so on. About 10% access loans with avg frequency of less than 2 months.

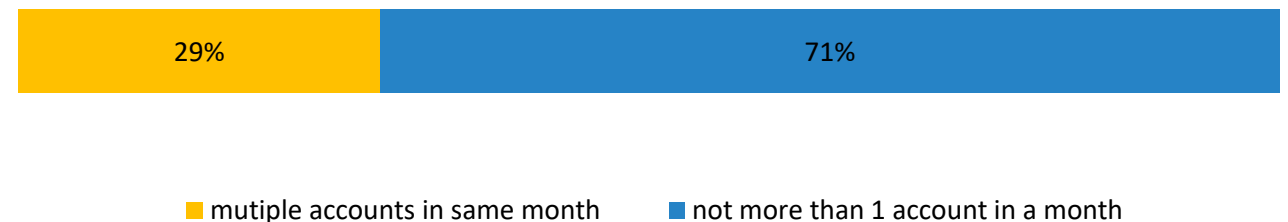
This set of customers were also analysed to see if they are accessing multiple loans in the same month. Data showed that about 29% customers opened multiple accounts in a single month. Possibly, many customer who need higher loan amounts, access multiple Providers to fill their required credit need. But plausible explanation is that many customers access multiple loans in a short period (within a month) to avoid being filtered-out because of restrictions on provider count and total indebtedness.

Shopping frequency: Average frequency of taking a loan for a customer. For example, consider Customer X, who has taken 1 loan between Apr'18 and Mar'19 but has a total of 5 loans during the period starting Jan'17 till Jun'18; 1st loan - Jan'17, 2nd - Apr'17, 3rd - Oct'17, 4th - Dec'17 and the 5th - Jun'18. So the gap between 1st and 2nd - 3 months, 2nd and 3rd - 6 months, 3rd and 4th - 2 months, 4th and 5th - 6 months. This averages out to $(3+6+2+6)/4 = 4.25$ months. Hence, Customer X falls in the category 3-6 months.

customer profiling based on avg shopping frequency



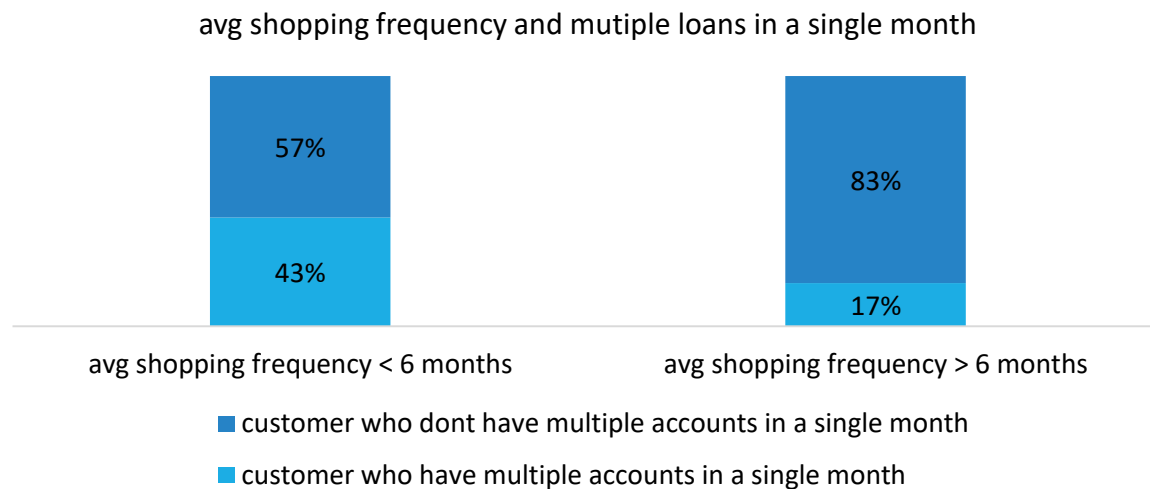
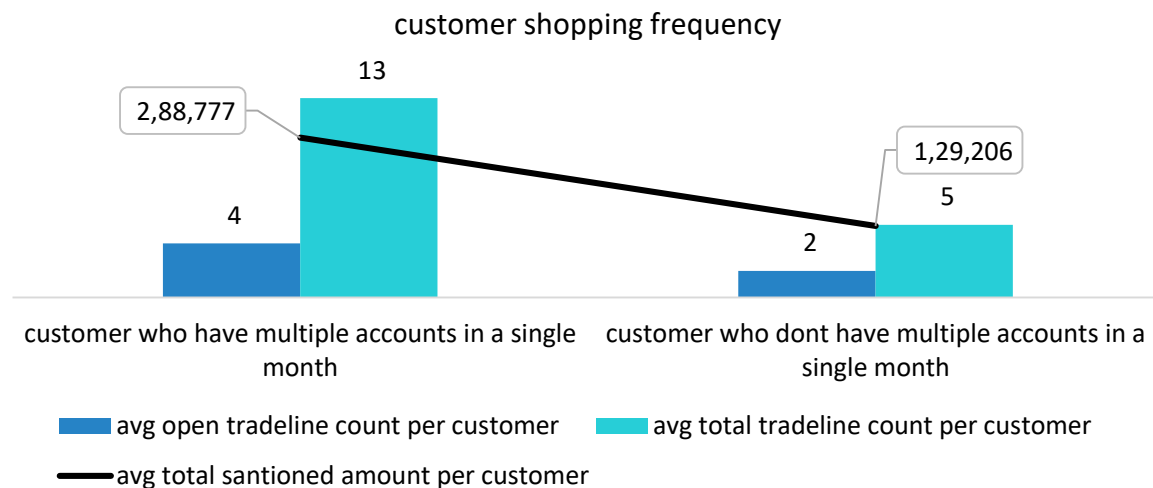
multiple accounts in same month



last but important point: customer's shopping frequency

Customers who open multiple accounts in single month, have higher avg count of open and total tradelines and sanctioned value. To clarify, group of customers, who have open multiple accounts in single month, have 4 open accounts compared with 2 open accounts for customers who don't open multiple accounts in a single month. Similarly, group of customer who have multiple accounts in a single month have a higher count of avg tradelines (total number of accounts open as well as closed) at 13 vs customers who don't have multiple account in single month. Total sanctioned value of these customers is also much higher for this set of customers.

Further, amongst the group of customers who accessed loans at a shorter interval (< 6 months), 43% customer have accessed loan in a single month. However, amongst the customers who access loans at higher intervals (> 6 months), only 17% customers have opened multiple loans in a single month.



- In the last 8 years, the micro-credit industry has been on a robust growth trajectory. Given the regulatory limitations on market segment and products, and the fact that this period also saw the transition of some of the largest NBFC-MFIs to Banks/SFBs (2015-16), demonetization (2016-17) and liquidity crisis (2018), CAGR of 38% is quite extraordinary. It is worthwhile to mention that this growth is achieved by expanding across geographies, reaching new customers and with high standards of customer-protection.
- At an aggregated level, micro-credit has only reached 25% of HH. However, in the absence of any credible macro data on demand (size of target HHs and their short-medium term credit need) at district level, it is difficult to discern if many areas (districts) which have been drivers of growth, have potential credit demand to sustain the growth. Nevertheless, increasing competition and supply of micro-credit means that growing business would require reaching new frontiers. Equally important would be adaption to products, processes and service quality to retain and attract the customers.
- High availability of micro-credit business in some areas/few districts cannot be ruled out. Business forecasts would require investing time and resources to examine and better understand the supply and demand dynamics at the district level.
- In line with the regulatory directions, in volume terms, micro-credit industry has very high adherence to norms on the count of providers and total indebtedness per customer. Nonetheless, given that supply-side now has multiple providers (Banks, SFBs, NBFCs etc) where similar regulatory norms are not applicable, this may potentially lead to higher customer leverage. This is already visible in certain geographies, where providers other than NBFC-MFIs are dominant. Going forward, the adoption of Code of Responsible Lending (CRL) will be critical to ensure that customers are not over-leveraged. Further, looking from risk angle, at an industry level a sizable percentage of industry portfolio is sitting with customers with loan o/s > Rs 100k or disbursed amount > Rs 100k. As of now, this group of customers show worse portfolio quality (compared with other customers) but not a worrying level. More work is required to measure this risk.
- A significant number of customers are accessing multiple loans within a single month. Strict adherence with regard to submission of data to CICs and using valid CIR report is critical to minimise the risks of customers getting over-leveraged and breaching industry norms.

Andaman and Nicobar Islands	AN
Andhra Pradesh	AP
Arunachal Pradesh	AR
Assam	AS
Bihar	BR
Chandigarh	CH
Chhattisgarh	CG
Dadra and Nagar Haveli	DN
Daman and Diu	DD
Delhi	DL
Goa	GA
Gujarat	GJ
Haryana	HR
Himachal Pradesh	HP
Jammu and Kashmir	JK
Jharkhand	JH
Karnataka	KA
Kerala	KL
Lakshadweep	LD
Madhya Pradesh	MP
Maharashtra	MH
Manipur	MN

Meghalaya	ML
Mizoram	MZ
Nagaland	NL
Odisha	OR
Puducherry	PY
Punjab	PB
Rajasthan	RJ
Sikkim	SK
Tamil Nadu	TN
Tripura	TR
Uttar Pradesh	UP
Uttarakhand	UK
West Bengal	WB
Average	Avg
dpd	days past due
o/s	outstanding
HH	household
Avg	average
Rs	rupee
yoy	year on year
CAGR	compounded annual growth rate
Amnt	amount

For any suggestion/clarification/query, please contact at sugandhsaxena@mfinindia.org