Research Report

Uttar Pradesh – CD Ratio Analysis

Message

Message

प्रस्तावना

भारत का सबसे अधिक आबादी वाला राज्य, उत्तर प्रदेश, तीव्र आर्थिक परिवर्तन की राह पर है। यह राज्य, जो अब भारत की तीसरी सबसे बड़ी राज्य अर्थव्यवस्था है, 1 ट्रिलियन डॉलर की अर्थव्यवस्था बनने के अपने लक्ष्य को प्राप्त करने के लिए व्यापक बुनियादी ढाँचे और लक्षित क्षेत्रीय विकास का लाभ उठा रहा है। वित्तीय संसाधनों का कुशल आवंटन इस यात्रा का केंद्रबिंदु होगा। ऋण-जमा (सीडी) अनुपात, जो किसी क्षेत्र की वित्तीय स्थिति और आर्थिक जीवंतता का दर्पण होता है, अब केवल एक वित्तीय मीट्रिक से कहीं अधिक, एक रणनीतिक महत्व रखता है।

"उत्तर प्रदेश - सीडी अनुपात विश्लेषण" रिपोर्ट राज्य में ऋण (credit) और जमा (deposit) की जटिलताओं की जाँच करती है। यह रिपोर्ट जिला-स्तरीय अंतर्दृष्टि और महाराष्ट्र एवं तमिलनाडु जैसी अग्रणी अर्थव्यवस्थाओं के साथ अंतर-राज्यीय तुलनाओं का उपयोग करते हुए, एक डाटा - संचालित परिप्रेक्ष्य प्रदान करता है। अध्ययन में क्लस्टरिंग (clustering) और सहसंबंध (correlation) विश्लेषण जैसे उन्नत सांख्यिकीय उपकरणों का उपयोग किया गया है। इसका निष्कर्ष, ऋण-ब्याज अनुपात में सुधार की दिशा में हुई प्रगति और क्षेत्रीय असमानताओं को दूर करने, ऋण अवशोषण को बढ़ावा देने और बैंकिंग रणनीतियों को व्यापक विकासात्मक लक्ष्यों के साथ सामंजस्य स्थापित करने में आने वाली चुनौतियों, दोनों को रेखांकित करते हैं।

इस अध्ययन की प्रासंगिकता इसकी प्रगतिशील कार्यप्रणाली में निहित है। संरचनात्मक कमियों की पहचान करके, क्षेत्रीय अवसरों को उजागर करके और कार्यान्वयन योग्य रणनीतियों के साथ, यह नीति निर्माताओं, बैंकरों और हितधारकों के लिए तालमेल से काम करने का एक रोडमैप प्रदान करता है।

मेरा दृढ़ विश्वास है कि यह रिपोर्ट उत्तर प्रदेश में वित्तीय सुदृढ़ीकरण में तेजी लाने और संतुलित आर्थिक विकास को बढ़ावा देने के लिए एक मूल्यवान मार्गदर्शक के रूप में काम करेगी।

(पंकज कुमार)

मुख्य महाप्रबंधक

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Executive Summary

The Credit-Deposit (CD) ratio is a vital metric in banking that indicates how efficiently a bank is using its deposits to generate credit. A balanced CD ratio reflects prudent lending and liquidity management, ensuring the bank can meet withdrawal demands while earning income from loans. Tracking this ratio helps regulators monitor financial stability, assess credit growth, and identify potential risks like over-lending or underutilization of funds. Thus, it's a key tool for both banks and policymakers.

In the context of Uttar Pradesh, where economic development and financial inclusion are top priorities, tracking and improving the CD ratio has become a strategic imperative. The report evaluates district-level performance, compares Uttar Pradesh with leading state economies such as Maharashtra and Tamil Nadu, and proposes targeted interventions to enhance credit flow and regional development.

Over the past eight years, Uttar Pradesh has made notable progress in improving its CD ratio, rising from 46.21% in FY 2016–17 to 59.04% in FY 2024–25. However, this figure remains significantly below the national average of approximately 80%. The report highlights that while the state-level CD ratio has improved, a large number of districts continue to underperform.

The analysis reveals that the CD ratio is influenced by a complex interplay of factors, including credit absorption capacity, banking infrastructure, economic output (GDDP), population density, and sectoral credit distribution. For instance, districts with high deposit bases often show lower CD ratios due to conservative lending practices or limited credit demand. Conversely, districts with smaller deposit bases may exhibit artificially high CD ratios, which may not necessarily reflect robust economic activity. Such nuances are critical in interpreting CD ratio data and designing effective policy responses.

The report employs clustering analysis to group districts based on shared characteristics such as agricultural credit, Kisan Credit Card (KCC) penetration, net sown area, and other demographic indicators. This approach enables targeted planning and resource allocation.

From a banking perspective, the report identifies Public Sector Banks as holding the largest share of deposits but maintaining conservative lending practices, resulting in lower CD ratios. In contrast, Small Finance Banks and Private Sector Banks demonstrate more aggressive credit deployment, with some institutions exceeding 100% CD ratios. This also is impacted by the low deposit base of these banks.

Sectoral analysis reveals that agriculture and MSMEs are key drivers of credit demand in Uttar Pradesh. The report emphasizes the need to promote Udyam registrations, support micro and small enterprises, and expand KCC coverage to unlock credit potential. It also highlights the importance of aligning government schemes with banking initiatives to promote inclusive growth and financial deepening.

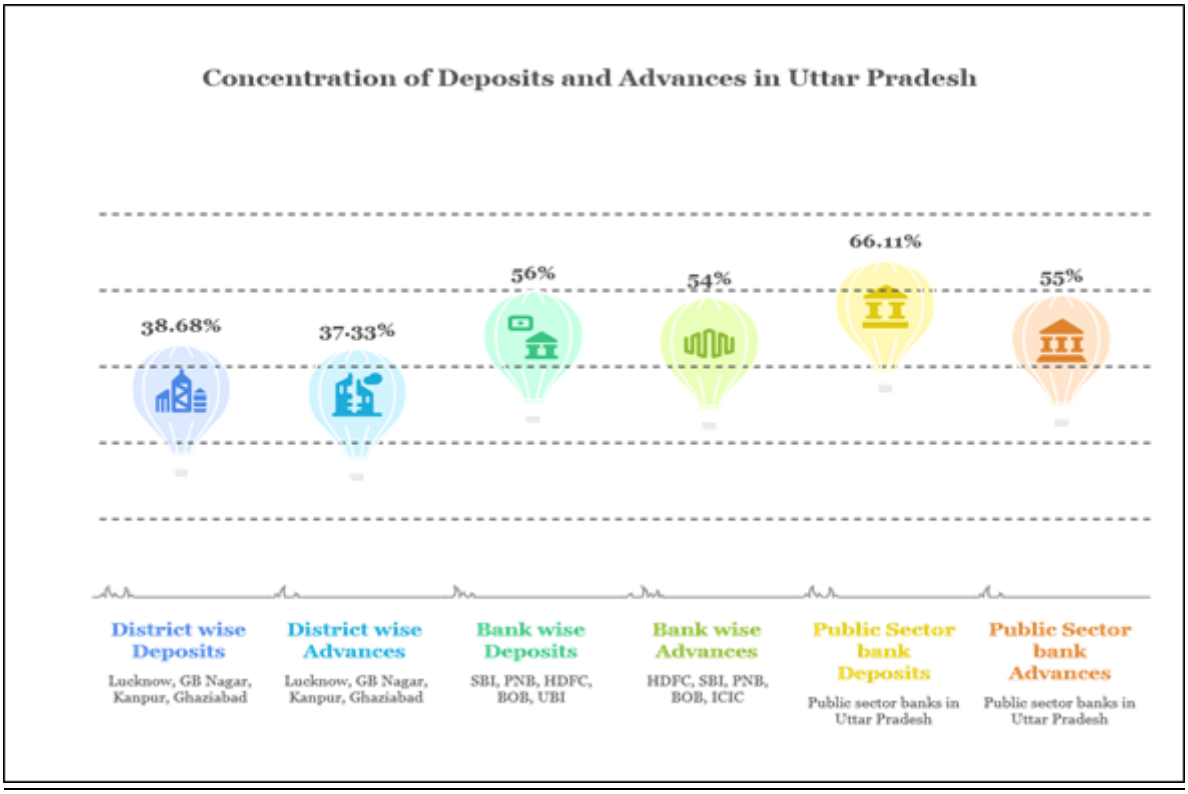
Geographically, the report identifies Bundelkhand and Eastern Uttar Pradesh as regions requiring focused attention. These areas exhibit low CD ratios and limited financial infrastructure, despite having significant agricultural and demographic potential. In addition, it also reveals that more than one-third of the credit and also the advances are centered at four pockets in the state which are: Ghaziabad, GB Nagar, Kanpur and Lucknow. Emulating Tamil Nadu's model of regionally balanced development could help Uttar Pradesh achieve more equitable growth.

In conclusion, the report underscores that improving the CD ratio in Uttar Pradesh is not merely a banking objective but a broader developmental goal. It requires coordinated efforts across government, financial institutions, and civil society. Key recommendations include:

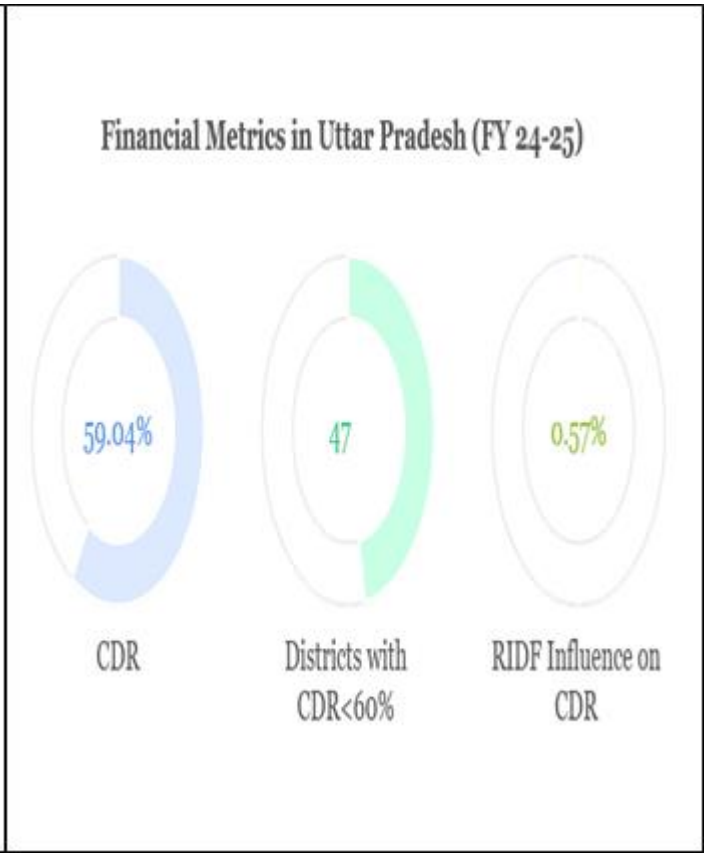
- Enhancing credit mobilization in underperforming districts through targeted interventions.
- Strengthening public sector banks' lending capacity while ensuring prudent risk management.
- Promoting formalization of MSMEs and expanding agricultural credit through KCC saturation.
- Aligning government schemes with banking initiatives to support priority sectors.
- Investing in human capital and infrastructure to unlock economic potential.
- Using appropriate data/metric for policy feedback.

With 60% of Uttar Pradesh's population in the working-age bracket, the state has a unique opportunity to leverage its demographic dividend. Banking can play a pivotal role in channelling savings into productive investments and supporting entrepreneurship.

Key Facts – Uttar Pradesh



Key Facts – Uttar Pradesh



Chapter 1 – Introduction

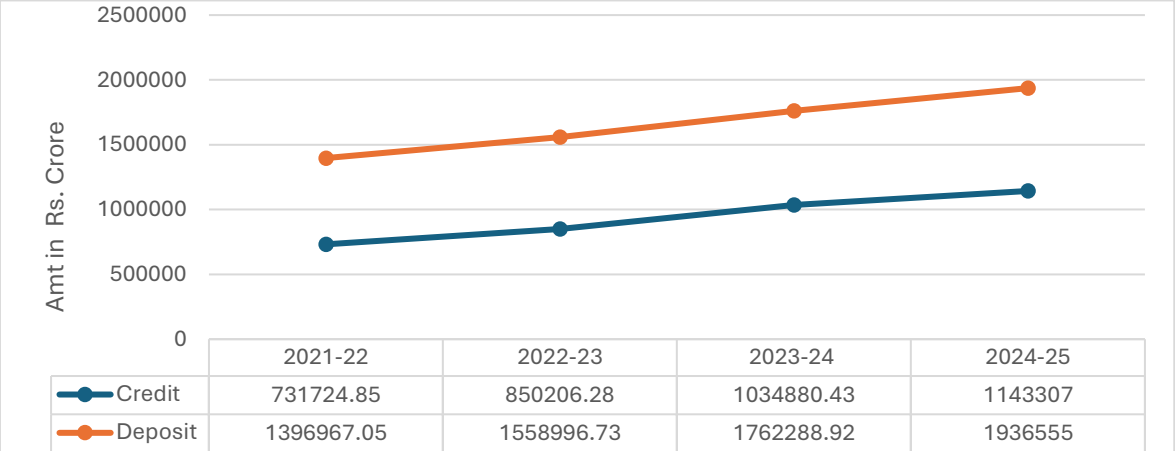
Commercial Banks deploy their resources, broadly, by way of lending, investing, keeping cash balances and maintaining balances with the RBI. Exercising of any of these options by banks needs to be assessed in relation to deposits, which are the major liabilities of banks. The credit (lending) to deposit ratio reveals the role of banks in 'promoting productive sectors and contributing to economic growth' *(RBI, Report on Trends and Progress of Banking in India 2003-04: 63*), and so a higher Credit Deposit ratio implies greater credit orientation of banks. The CD ratio informs the extent of banks credit in relation to deposits. Thus, the CD ratio is dependent upon the factors that influence credit absorption capacity of the economy, and the policy used to determine the direction of flow of credit.

CD ratio is a key indicator of how effectively a region's banking system channels deposit mobilization into productive credit. A high CD ratio typically suggests active credit deployment and financial intermediation, whereas a low CD ratio may indicate under-utilization of banking resources or risk-averse lending behaviour.

Uttar Pradesh has taken upon to ensure credit availability to foster capital formation and economic growth. CD ratio has been made one of the parameters to judge credit flow in the districts. The aim is to stimulate economic activities, attract investment and enhance financial inclusion through expanded banking services.

The state's CD ratio has gone up considerably in the past 8 years. According to SLBC data, the CD ratio has gone up from 46.21 percent in FY 16-17 to 59.04 percent in 24-25. However, this is still lower than India's average CD ratio, which stands at around 80 percent.
A large number of the districts in Uttar Pradesh are underperforming in terms of CD ratio, as compared to All India Average. Though Uttar Pradesh as a whole, is improving its CD ratio, only a handful of districts like Muzaffarnagar, Budaun, Sambhal, Shahjahanpur and Lalitpur fared well, if All India average is taken as the parameter (i.e. ~80 percent in FY 24-25). Excluding these regions, the state's performance would be grimmer. This trend of low CD ratio is visible across a large number of districts in all regions.

In Uttar Pradesh, during the period between FY 21-22 to FY 24-25, deposits grew at a CAGR of 8.5% whereas advances grew at a CAGR of 11.80%.



	2021-22	2022-23	2023-24	2024-25
Credit	731724.85	850206.28	1034880.43	1143307
Deposit	1396967.05	1558996.73	1762288.92	1936555

Fig 1.1: Trends in Credit and Deposit – Uttar Pradesh

The report aims to make comparison across geographies, both inter and intra state; analyze various parameters to provide fresh insights into the CD ratio for targeted interventions for enhancing credit flow. A state wise heatmap of India is placed below for geographical comparison.

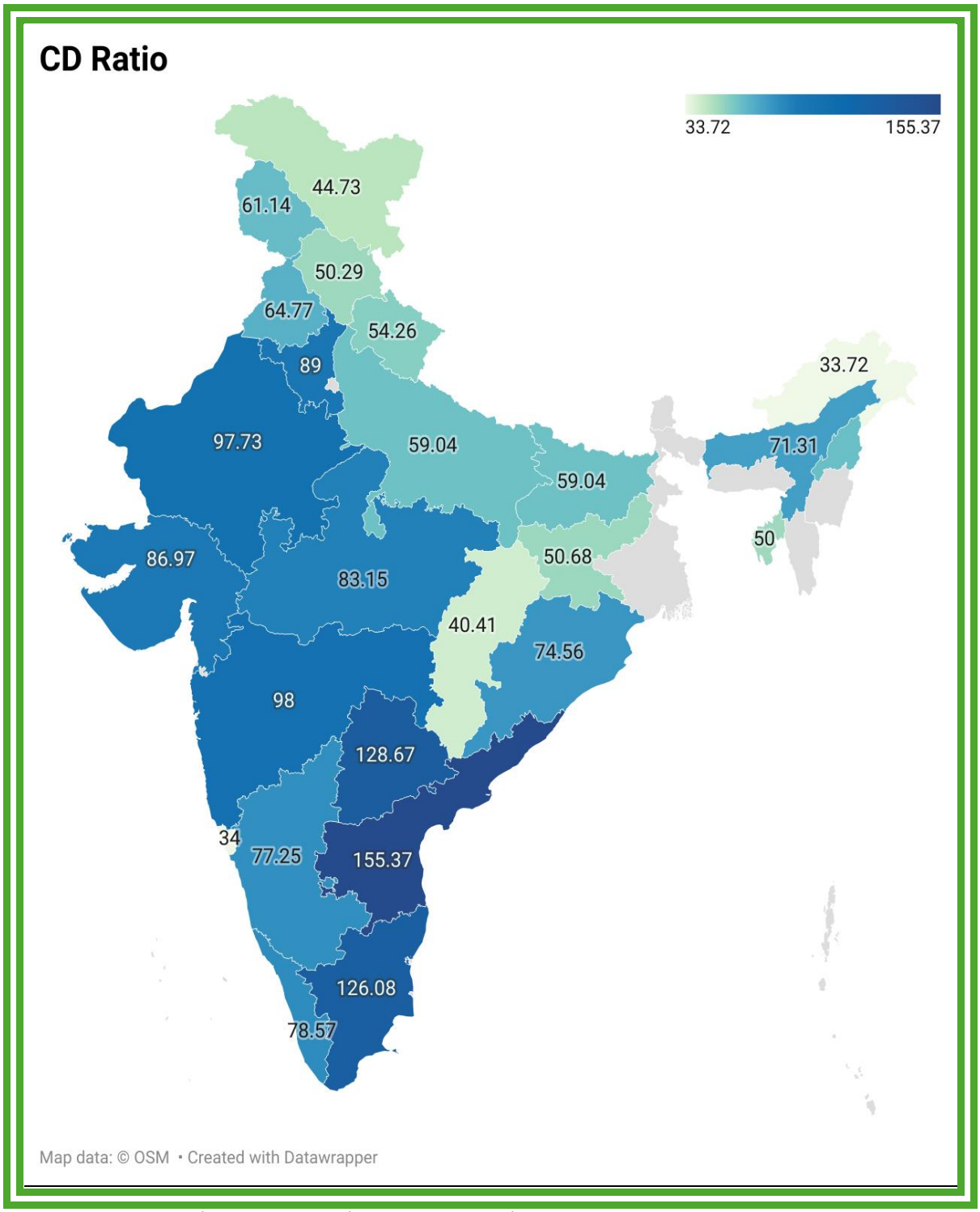


Fig 1.2: CD ratio – Across Major States (as on 31.03.25)

Chapter 2: New Perspectives on CD ratio and comparison within Top Three Economies of India

Uttar Pradesh is the third largest economy of India, as on date. The size of the state (area as well as population), population density and network of bank branches present a huge opportunity to be tapped. With the state government taking the lead in this direction, things are poised for a momentous change. In this section, analysis has been done regarding comparative position of the state vis a vis the other top 02 economies in India, i.e. Maharashtra and Tamil Nadu.

Key Parameters

Table 2.1: Key parameters across states (FY 24-25)

State	Total Advances (₹ cr)	Total Deposit (₹ cr)	Avg. Advance per district^ (₹ cr)	Avg Deposit per district (₹ cr)	CD Ratio (%)	Area (sq. km)	Bank Branches	GSDP (25-26) (₹ lakh cr)
Uttar Pradesh	1143307	1936555	14097	25821	59.04	278039	20658	30.80
Tamil Nadu	1826991	1449128	42064	34875	126.08	135469	13925	35.67
Maharashtra	4493759	4584857	124827	127357	98	306240	17752	49.39

^excluding outside advances
#Source: SLBC of States

Uttar Pradesh having highest number of bank branches, it's CD ratio and advances are low compared to Maharashtra and Tamil Nadu which have significantly higher advances per district. This calls for increase in banking service efficiency.

SDG Ranking

Table 2.2: SDG Ranking (FY 23-24)

State	Overall Score	Rank	SDG 9 (industry, Innovation and Infrastructure)
Uttar Pradesh	67	23	53
Maharashtra	73	15	58
Tamil Nadu	78	03	67

Note: Performance categorized into four levels: Achiever (100), Front Runner (65-99), Performer (50-64), and Aspirant (0-49).

As per NITI Aayog data, Maharashtra and Tamil Nadu have been performing better than Uttar Pradesh in SDG India rankings. In 2023-24 ranking, Uttar Pradesh was one of the 32 states and UTs in the front-runner category (which saw 10 new entrants in FY 23-24). Between 2018 and 2023-24, Uttar Pradesh (increase in score by 25) was the fastest moving state.

Sectoral Share in ACP achievements

Table 2.3: Sectoral Share in ACP Achievements (FY 24-25)

State	Agriculture Credit (%)	MSME Credit (%)	OPS credit (%)
Uttar Pradesh	43	54	3

State	Agriculture Credit (%)	MSME Credit (%)	OPS credit (%)
Maharashtra	25	68	7
Tamil Nadu	61	34	5

While Priority sector lending in Tamil Nadu has a clear agricultural credit orientation, Maharashtra Priority Sector lending is heavily MSME-driven. Uttar Pradesh on the other hand, has a bias towards MSME (agriculture 43% and MSME 54% share in 2024-25), which may be reflecting the effect of recent government initiatives for the sector. All three states allocated a small portion to Other Priority Sectors, with Uttar Pradesh having lowest share at 3%.

Larger share of agriculture in PSL lending in Tamil Nadu also demonstrates that higher CD ratio is possible, despite a high share of agriculture in lending.

CD ratio Comparisons

Tamil Nadu's CD ratio (126.08%) above 100% reflects mature, credit-intensive districts (e.g., Chennai, Coimbatore). The lowest CD ratio reported across any district is 80.92% while few districts are highly over leveraged with CD ratio above 200%.

Maharashtra (CD ratio-98.01) has CD ratios varying widely, with urban centres like Mumbai pulling the average up.

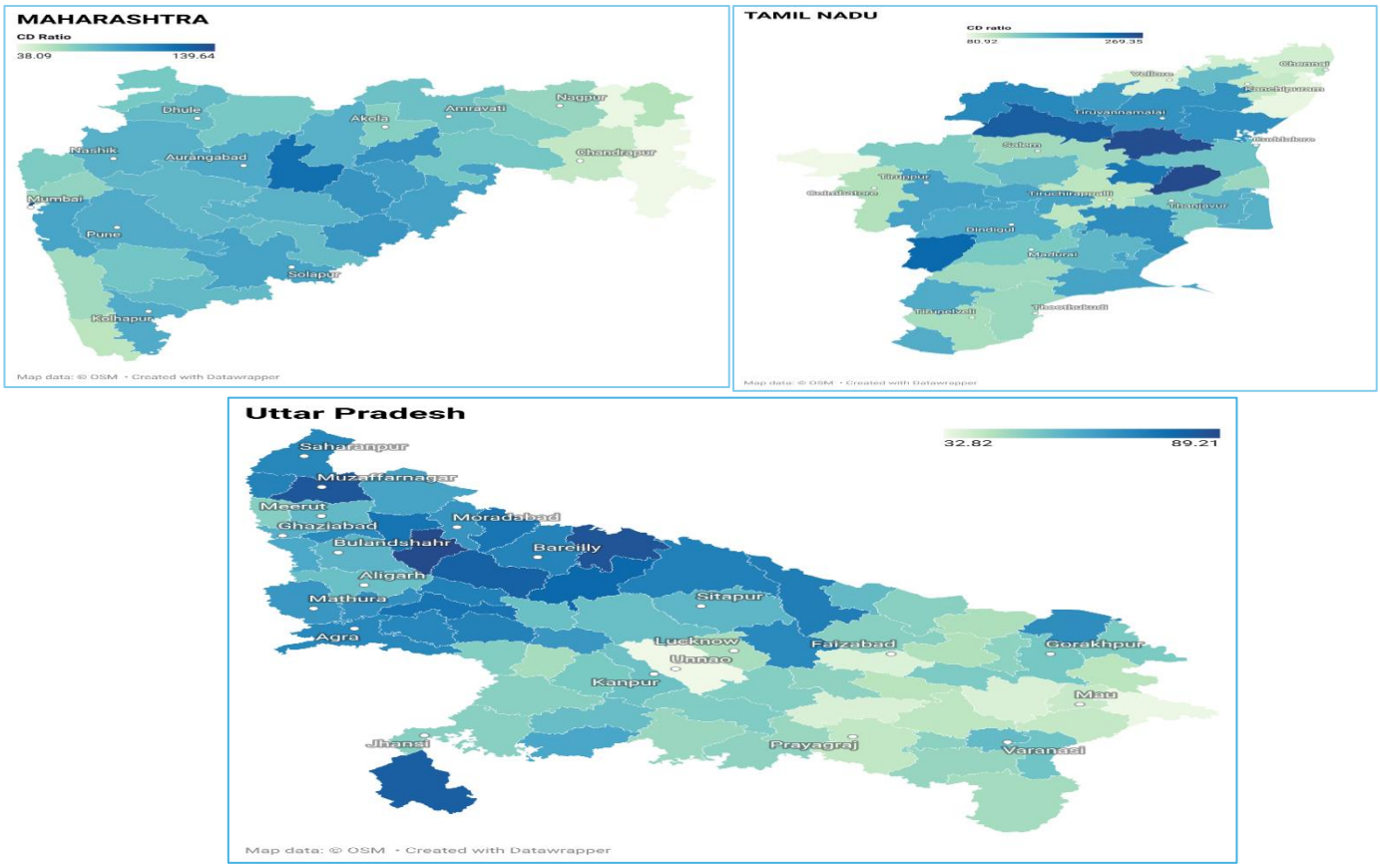


Fig 2.1: CD ratios across districts of Maharashtra, Tamil Nadu and Uttar Pradesh

Table 2.4: Statistical Analysis of CD ratio of Uttar Pradesh

State	Maximum CDR	Minimum CDR	Mean	Mode	Standard Variation
Uttar Pradesh	89.21	32.82	57.04	44.18	14.15
Maharashtra	125.40	36.79	79.27	84.71	19.58
Tamil Nadu	269.35	80.92	160.08	269.35	49.06

Key Insights

- Tamil Nadu shows high credit deployment relative to deposits and highest standard deviation among all states.
- Maharashtra's CD ratios are neither too high nor too low, showing a balanced credit-deposit relationship with moderate variation. Maharashtra's mode (84.71) is near the mean, showing more evenly distributed credit activity.
- Uttar Pradesh has low credit penetration and more uniformity across districts, possibly pointing to underutilization of banking credit. The state's mode (44.18) is close to its minimum, indicating many districts have low CD ratios.

Distribution of CD ratio across Districts - comparison

A comparison Sheet of Uttar Pradesh vis a vis two major state economies (Maharashtra and Tamil Nadu) is attached as an annexure VI-VIII to the report.

a. CD ratio wise status for FY 24-25 of the states is as follows: -

Table 2.5: CD ratio – Range Variations

	Number of Districts			% of Districts		
CD ratio Range	**UP**	**MH**	**TN**	**UP**	**MH**	**TN**
<40%	07	01	0	9	2	0
40%-60%	40	04	0	53	11	0
60%-80%	22	15	0	29	41	0
>80%	06	17	38	8	46	100
Total	**75**	**37**	**38**	**100**	**100**	**100**

In FY 23-24 also, 47 districts of Uttar Pradesh were in <60% CD ratio range (64% of total) while the same percentage for Maharashtra and Tamil Nadu was 22% and 0%, respectively.

Maharashtra is positioned between UP and TN in terms of CD ratio performance:

- Better than UP in terms of both spread and high-performing districts. Compared to Uttar Pradesh, Maharashtra performs significantly better in terms of credit penetration, with more than five times the proportion of districts above 80%.
- Not as concentrated in the high CD ratio category as TN, but more diversified, which may reflect regional economic variations and targeted credit strategies.

Tamil Nadu is one of the few states in India that have regionally well spread economic activities. All the districts of Tamil Nadu have CD ratio > 80%, a degree of balanced development across all regions. As the most urbanized state in the country, the average distance of a village from a town is a little more than 10 kilometers as per Census 2011. This shows that urbanization is spatially well spread and so are the economic activities in Tamil Nadu. Emulating such a regionally balanced development may also help Uttar Pradesh in increasing the CD ratio of all districts.

V. Comparison of Advance and Deposit on the basis of Population, area and Branch network

The average values of each parameter across the states (for all districts) are as follows: -

Table 2.6: Average values across state (FY 24-25)

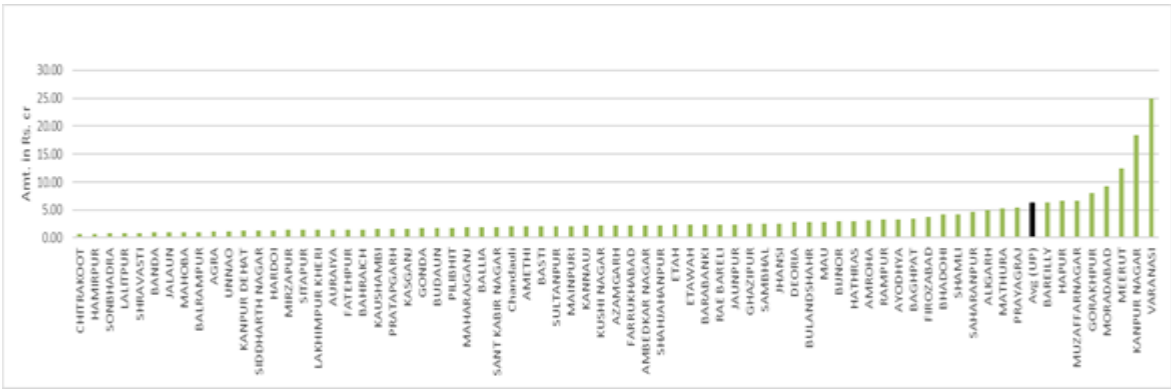
Parameter	MH	TN	UP
Deposit/Branch (₹ cr)	146.89	66.80	70.19
Advance/Branch (₹ cr)	140.76	95.95	39.20
Advance/Sq.km (₹ cr)	475.23	50.92	6.21
Deposit/Sq.km (₹ cr)	377.14	44.03	11.20
Deposit/capita (₹ lakh)	2.77	1.21	0.79
Advance/capita (₹ lakh)	2.97	1.64	0.45

a) Advance and Deposit per Sq. Km

All the districts of Uttar Pradesh are behind the average of Maharashtra in terms of Advance per sq. km (Rs. 475.23 Cr) as well deposit per sq. km (₹ Rs. 377.14 Cr).

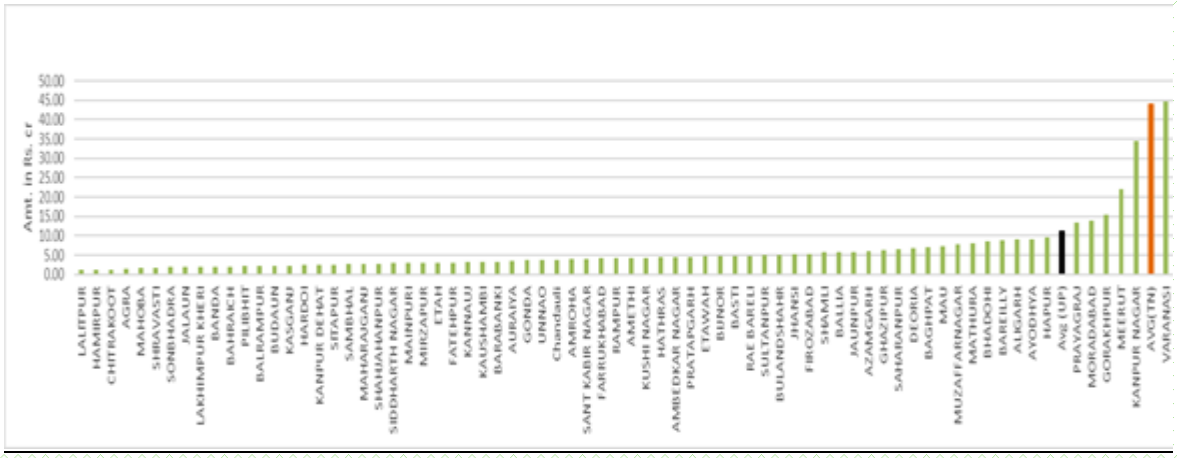
Only 03 districts (Lucknow, Ghaziabad and GB Nagar) are higher than Tamil Nadu advance/sq.km average. In term of deposit/sq. km, 04 districts are higher than Tamil Nadu (Varanasi, Lucknow, Ghaziabad and GB Nagar).

Advance/Sq. Km



***Outliers in adv./sq. km -** AVG(TN), LUCKNOW, GHAZIABAD, G B NAGAR, AVG(MH)

Deposit/Sq. Km



***Outliers in Dep./sq. km -** LUCKNOW, GHAZIABAD, G B NAGAR, AVG(MH)

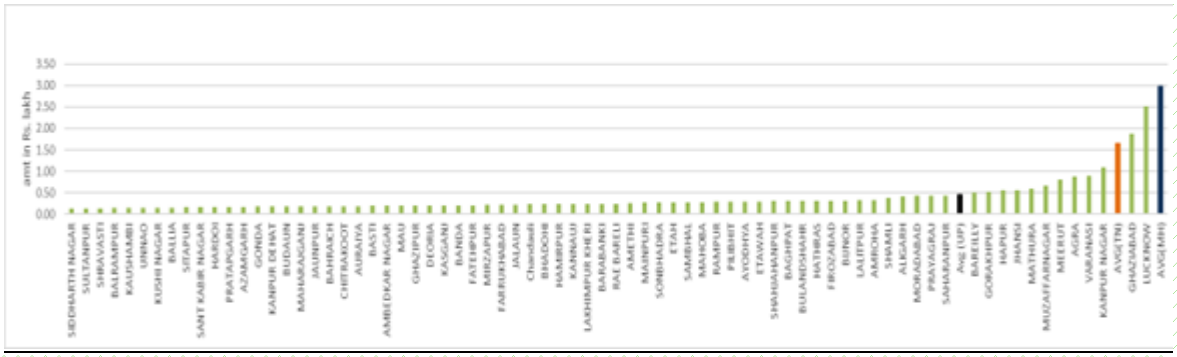
Fig 2.2: Advance and Deposit per sq. km.

b) Advance and Deposit per Capita

74 districts of Uttar Pradesh are less than the average of Maharashtra in terms of Advance per capita (₹ 2.97 Cr). 72 districts of Uttar Pradesh are less than the average of Maharashtra in terms of deposit per capita (₹ 2.77 Cr).

Only 03 districts (Lucknow, Ghaziabad and GB Nagar) have advance/capita higher than that of Tamil Nadu average. 69 districts of UP are below the average deposit/capita of Tamil Nadu.

Advance/Capita



***Outliers in Adv/capita -** G B NAGAR

Deposit/Capita

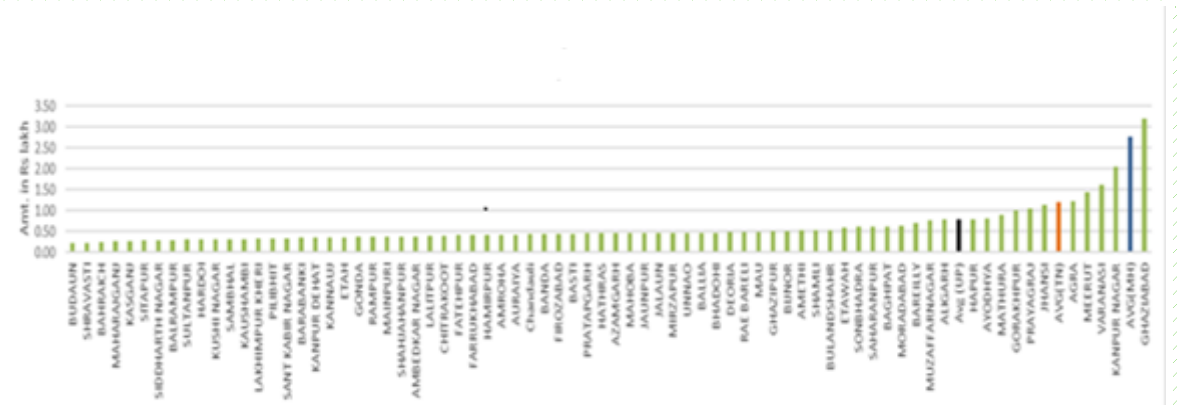


Fig 2.3: Advance and Deposit per capita

c) Advance and Deposit per Branch

55 districts of Uttar Pradesh have deposits/branch less than that of Tamil Nadu average while, on comparison with Maharashtra average, 71 districts are on the lower side (except Ghaziabad, GB Nagar, Kanpur Nagar and Lucknow).

On comparison of Advance/branch parameter, 72 districts are below the Tamil Nadu average (except Ghaziabad, Lucknow and GB Nagar), while 74 districts have adv. Per branch less than Maharashtra average (except GB Nagar).

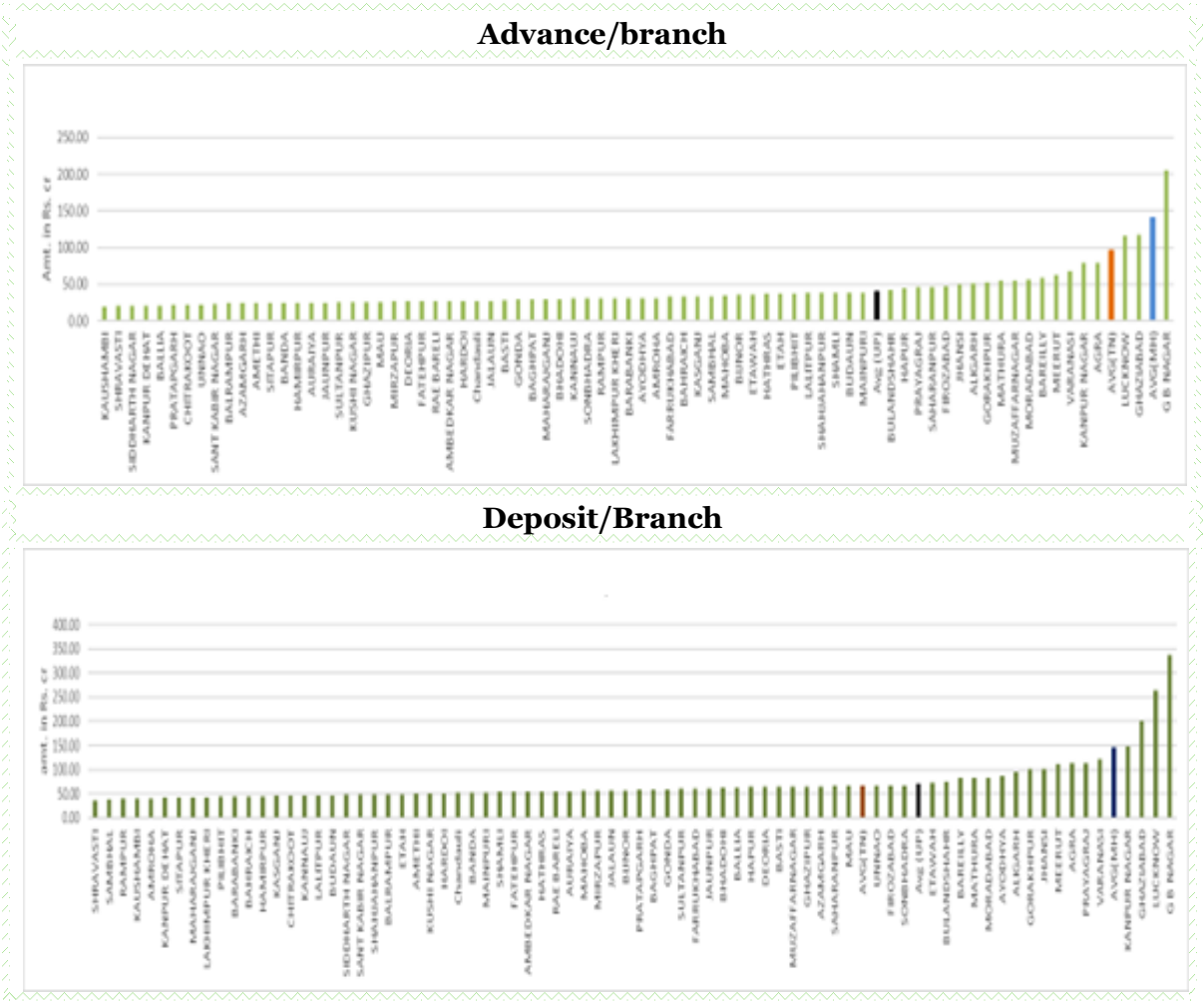


Fig 2.4: Total Advance and Deposit per branch

Note: ■ – Average (UP); ■ - Average (Tamil Nadu); ■ - Avg Maharashtra

d) Agriculture Lending per ha (using NSA)

The agriculture lending per hectare of Uttar Pradesh (₹1.16 lakh/ ha) is only marginally higher than that of Maharashtra average (₹1.07 lakh/ha). Considering the advantages of Uttar Pradesh (perennial rivers, alluvium soil and multiple agro - climatic zones), there is further scope to enhance the agriculture lending.

In case of Tamil Nadu, agriculture lending per hectare is ₹10.21 lakh per hectare, the highest among the states. An exceptionally high lending can be attributed to following factors in the state:

- Tamil Nadu is one of the leading Horticulture States in the country contributing 6.09% of national horticulture production and 5.47% of total horticulture crops in terms of area at

national level. Rapid growth of demand for horticulture commodities and products had resulted in shift or diversification from traditional food crops to horticulture crops like banana, coconut, mango, vegetables, medicinal / herbal / aromatic plants etc[1].

- Animal husbandry stands as a cornerstone of agriculture, sustaining over two-thirds of Tamil Nadu's rural population. This sector is not just a source of livelihood; it acts as a robust contributor to the rural economy. Livestock sector contributes about 5.69% to GSVA of the State and 45.32% to agriculture and allied activities[2].
- Also, Tamil Nadu is a strong player in Agro food processing industry and its share of Indian output is about 7 per cent[3].
- A strong institutional support from its extensive cooperative banking network, effective government schemes that encourage formal borrowing, and high demand for credit from numerous small and marginal farmers. The state's history of prioritizing agricultural finance and its high per capita income also enable greater credit absorption.

All these initiatives have helped in a higher lending under agriculture sector to the state. These initiatives can be emulated in Uttar Pradesh also, to push agricultural lending.

e) CD ratio and GDDP (Nominal GDDP; current prices)

The average Nominal GDDP per district (FY 23-24; current prices) of Maharashtra is ₹ 1.19 lakh cr while that of Uttar Pradesh (FY23-24) is ₹ 0.34 lakh cr. On a close observation of district wise GDDP of Maharashtra and Uttar Pradesh, most of the districts of Uttar Pradesh are below ₹ 50,000 crore GDDP (only 10 districts out of 75 are above it) while in Maharashtra, a considerable number of districts (21 districts out of 36) are above ₹ 50,000 crore GDDP mark.

A comparison of District wise GDDP with respect to Maharashtra average is presented at table no. 2.5. As per the FY 2023-24 GDDP data series, only 01 district in Uttar Pradesh (GB Nagar) is having GDDP higher than that of Maharashtra average. Even Prayagraj, which is one of top economies of Uttar Pradesh in terms of GDDP, has GDDP lower than Maharashtra Average, reflecting in lower CD ratio.

Due to unavailability of data, a look was taken at previous year's GDDP at current prices (FY 22-23) of Tamil Nadu. The average GDDP per district (at current prices) was ₹ 62,983.27 crore in FY22-23, almost double of average Uttar Pradesh GDDP (per district) at current prices (FY23-24).

Low GDDP may be one of the factors that has resulted in lower CD ratio of Uttar Pradesh. Improving district economies, with targeted focus on agriculture and MSME, will help improve the district economies and in turn, CD ratio.

[1] Source: NABARD State Focus Paper, Tamil Nadu (2025-26)

[2] Source: NABARD State Focus Paper, Tamil Nadu (2025-26)

[3] Source: NABARD State Focus Paper, Tamil Nadu (2025-26)

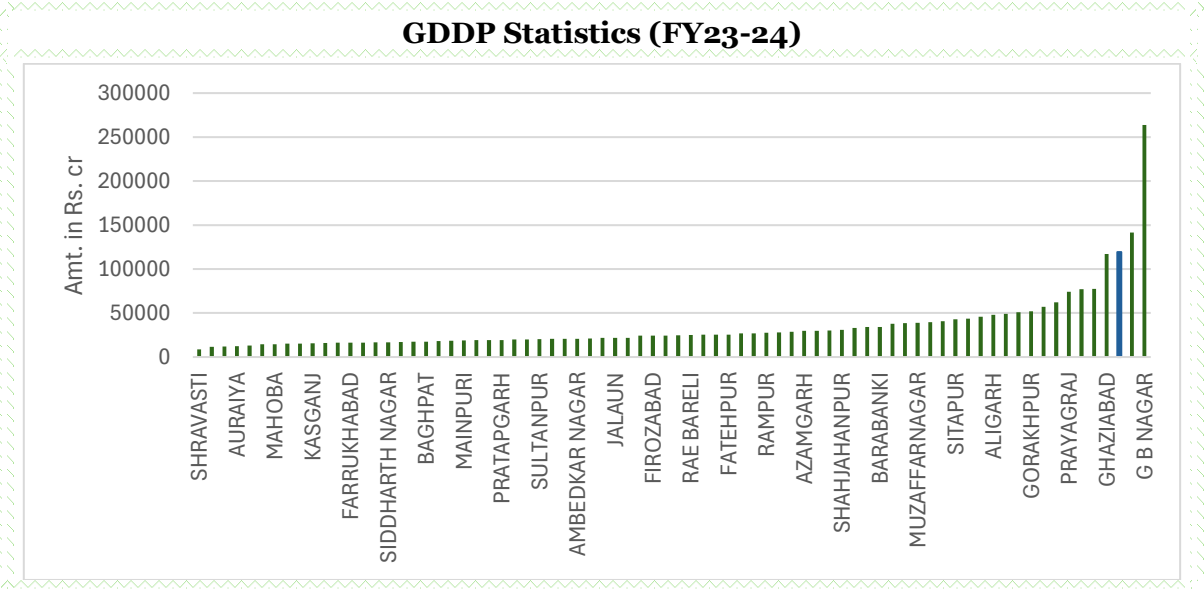


Fig 2.5: GDDP Statistics (FY 23-24)

Note: ■ Average (UP); ■ Average (Tamil Nadu); ■ Avg (Maharashtra)

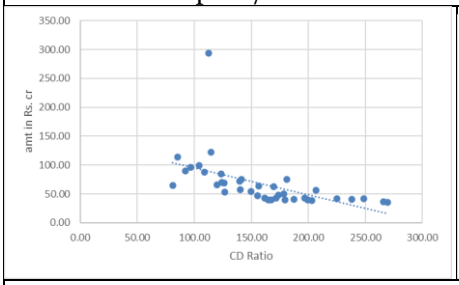
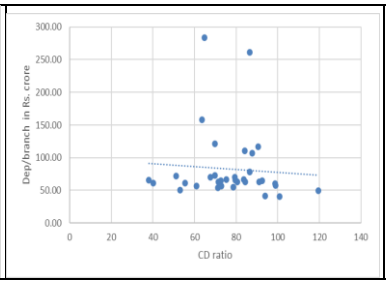
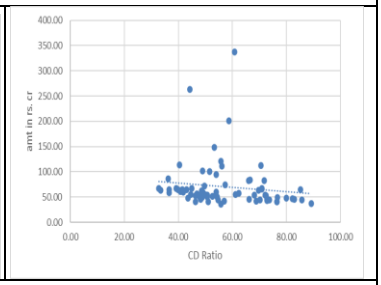
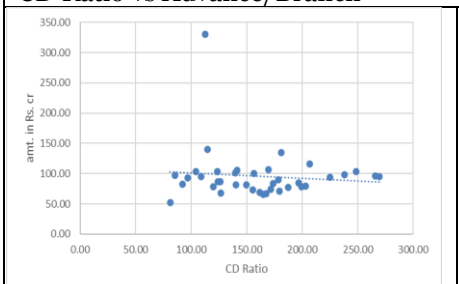
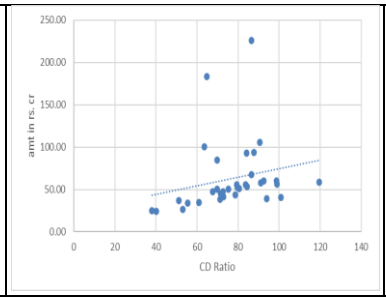
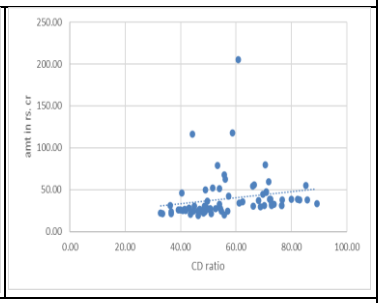
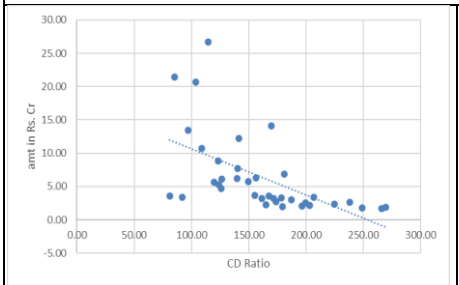
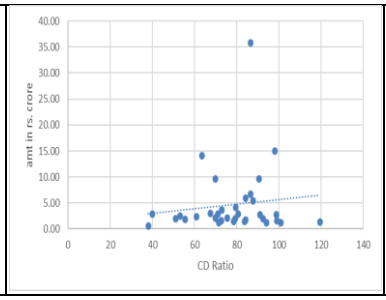
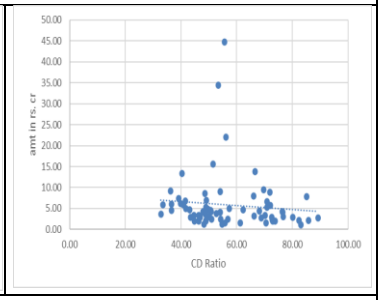
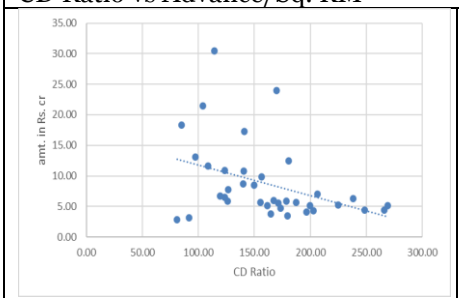
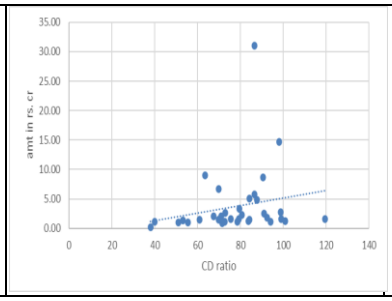
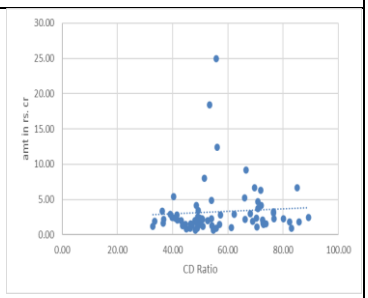
If any of the colored lines is not appearing in the graphs above, it has been removed for better scale and visuals.

CD ratio can be high even with high Agricultural Lending

Tamil Nadu has higher Agri credit in priority sector lending (61%), highest CD ratio (126%) and higher score in SDG index (78), implying that growth in Agriculture sector can lead to growth in overall economy and CD ratio of state as well.

Inter-state Correlation between Parameters

Analysing the correlation between credit, deposit, and other socio-economic indicators—such as GDDP, population, and geographical area—across the three states provides understanding of the factors influencing the CD ratio. This comparative analysis helps identify the parameters which are most closely linked to improvements in Credit-Deposit performance.

TN	MH	UP
CD Ratio vs Deposit/Branch		
		
There is a negative correlation in all three states. Note: - Outliers (MH): - Mumbai, Mumbai Suburban		
CD Ratio vs Advance/Branch		
		
A slight positive correlation exists. Outliers (MH): - Mumbai, Mumbai Suburban		
CD ratio Vs Deposit per Sq. KM		
		
While Maharashtra shows a positive correlation, other two show negative correlation, though to varying degrees. The overall trend remains inconclusive. Outliers (MH): - Thane, Mumbai & Mumbai suburban Outliers (TN): - Chennai Outliers (UP): Lucknow, GB Nagar, Ghaziabad		
CD Ratio vs Advance/Sq. KM		
		
There is no uniformity in the patterns. Outliers(MH): - Thane, Mumbai & Mumbai suburban		

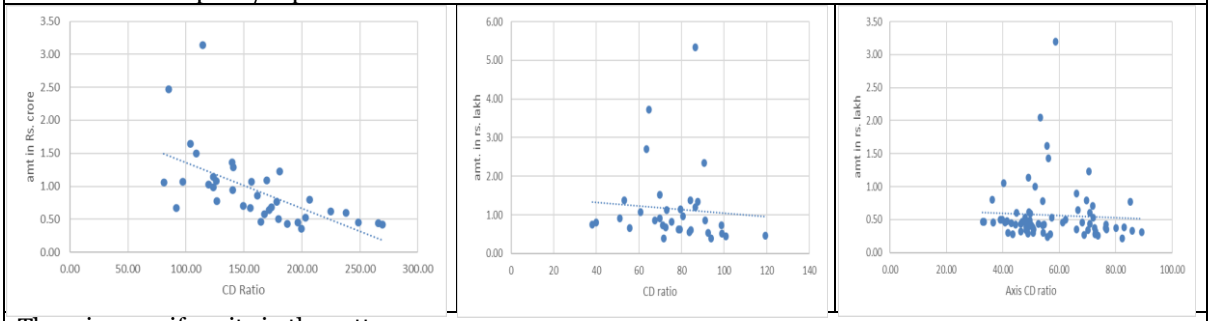
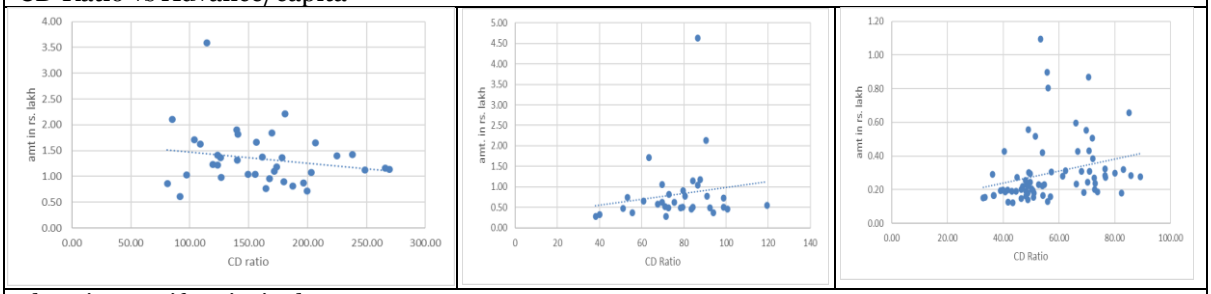
Outliers (TN): - Chennai Outliers (UP): Lucknow, GB Nagar, Ghaziabad
CD Ratio vs Deposit/capita

There is no uniformity in the patterns. Outliers (MH): - Mumbai & Mumbai suburban Outliers (TN): - Chennai Outliers (UP): Lucknow, GB Nagar
CD Ratio vs Advance/capita

There is no uniformity in the patterns. Outliers (MH):– Mumbai, Mumbai Suburban Outliers (TN): - Chennai Outliers (UP): Lucknow, GB Nagar, Ghaziabad

Fig 2.6: Trends in correlation in important metrics across Uttar Pradesh, Maharashtra and Tamil Nadu (FY 24-25)

The correlation discussed above points out that Advance per Branch is highly correlated with CD ratio. Therefore, from a banking perspective, to track improvements in CD ratio, Advance per Branch can be a suitable metric for monitoring incremental change in CD ratio.

I. Myth: Increase in ACP Achievements will Increase CD ratio

Although this is true to a certain extent, there are some points to be considered:

a. ACP usually pertains to PSL, which is just a portion of total lending (In Uttar Pradesh for example, it was only 54% of lending in FY 24-25).
b. Further, the type of loaning (short-term vs long term) has a direct bearing on the CD ratio. In Uttar Pradesh, for example, even if the lending has increased, it has a huge portion of short-term lending, which leads to low increase in ACP O/S YoY. Therefore, the CD ratio doesn't increase commensurately with ACP achievements.

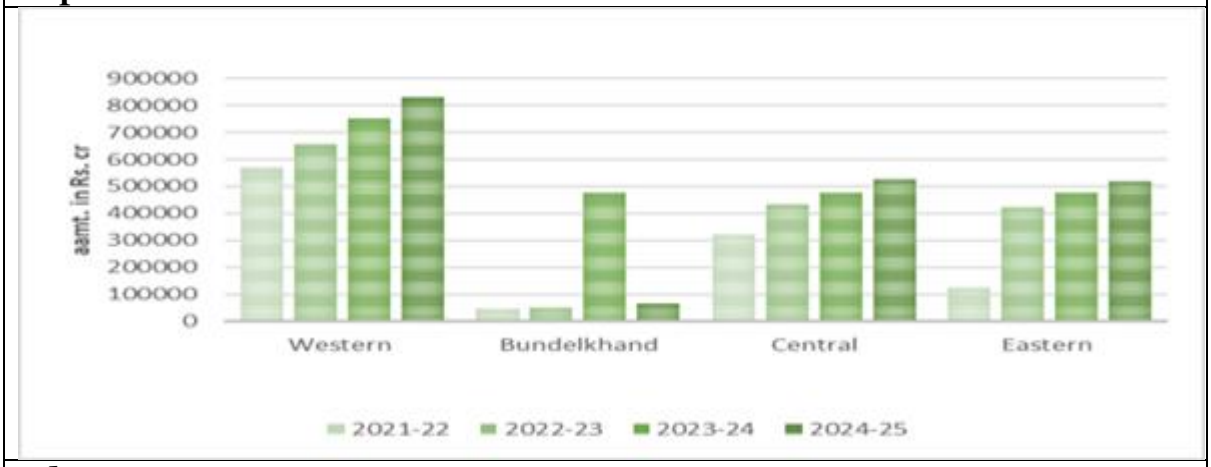
For example, in FY 23-24, ACP O/S in Uttar Pradesh was ₹ 5.78 lakh crore. In FY 24-25, the ACP o/s was only ₹ 6.76 lakh crore, an increase of only Rs. 0.98 lakh crore, much lower than the ACP disbursement of ₹ 4.37 lakh crore in FY 24-25. This implies that most of loans disbursed under ACP achievements are short-term loans.

Chapter 3: Regional Trends in Uttar Pradesh

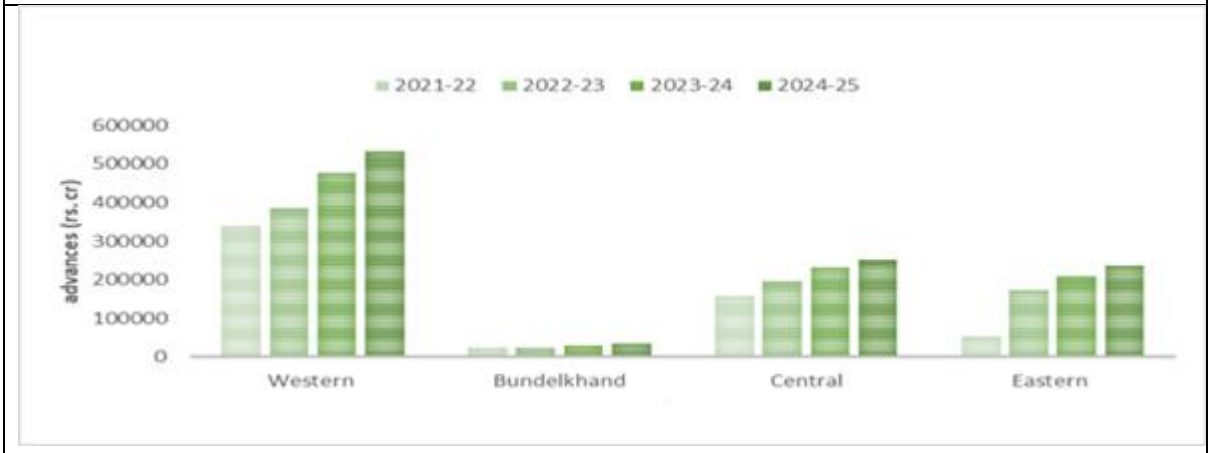
Analysing credit-deposit trends in Uttar Pradesh is essential for understanding the state's financial dynamics and guiding economic development. It reveals patterns in savings and lending, highlights regional disparities, and supports targeted policy interventions to promote inclusive growth. The trends analysed in this chapter are with respect to 4 regions of Uttar Pradesh, viz. Western, Bundelkhand, Central and Eastern regions. Region wise classification of districts is given in Annex I.

a. Geographical Trends

Deposits



Advances



CD Ratio

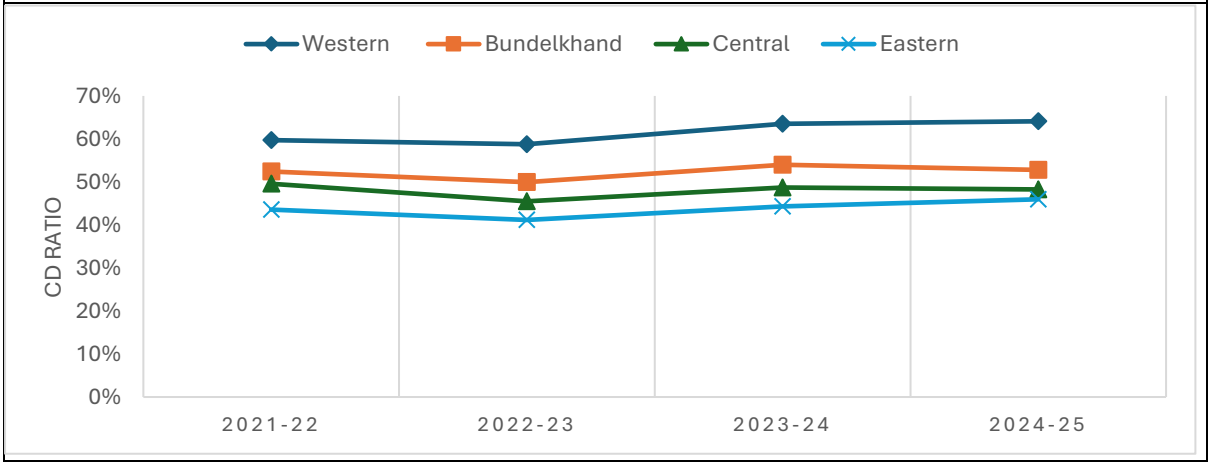


Figure 3.1: Geographical Trends in Uttar Pradesh.

The financial landscape across Uttar Pradesh's regions reveals distinct patterns in deposit mobilization, credit deployment, and overall banking efficiency.

- Western region consistently leads with the highest deposit and advance volumes, coupled with a stable and high CD ratio (~65–70%), indicating a mature and efficient financial ecosystem.
- Central Uttar Pradesh exhibits balanced growth in both deposits and advances, maintaining a moderate CD ratio (~50–55%), which reflects steady economic activity and financial stability.
- In contrast, Bundelkhand shows a sharp rise in deposits but minimal growth in advances, resulting in a persistently low CD ratio (<30%). This suggests underutilization of funds and limited credit access, highlighting the need for targeted financial inclusion and lending initiatives.
- Eastern Uttar Pradesh, while starting from a lower base, demonstrates rapid growth in both deposits and advances, with a gradually improving CD ratio (~35% to ~45%), signalling positive momentum in financial outreach and economic development.

b. Region-wise growth in deposit and advances: During the period between FY 21-22 to FY 24-25, for Uttar Pradesh state as a whole, deposits grew at a CAGR of 8.5% whereas advances grew at a CAGR of 11.80%.

Table 3.1: CAGR (Advances and Deposits)

	Deposit CAGR	Advance CAGR	Difference (%)
Western	9.86	11.80	1.94
Central	13.04	12.29	(-)0.75
Bundelkhand	9.08	9.30	0.22
Eastern	43.31	45.27	1.96

Region-wise growth and trends are as under:

- In the Western region, the advance growth has outpaced deposit CAGR by 1.94%, leading to an increase in CD ratio from 59.74% to 64% over 04 years.
- During the same time, Deposit CAGR has been more than Advances CAGR for Central region, which has led to CD ratio decreasing from 49.74% to 48%.
- The Eastern Region, on the other hand, has shown an impressive increase in deposits as well as advances over the 04 years. However, the difference between Deposit and Advance is a meagre 1.96% only, because of which, much increase in CD ratio over the years is not observed (43.54 to 46).
- In Bundelkhand region, there has been no major difference between deposit and advance growth over the years, therefore, leading to stagnation in CD ratio.

c. Statistical analysis of CD ratio, Advances and Deposits - Region wise - Key results

To statistically validate the observed variations in credit, advances, and CD ratios across different regions of Uttar Pradesh, a region-wise comparative analysis was done. For this purpose, the Analysis of Variance (ANOVA) technique was used to determine whether the differences among the regions were statistically significant.

Further, after a significant ANOVA, post-hoc test (Tukey's HSD) was used to make multiple pairwise comparisons between all possible pairs of group means. The results confirmed some observations region wise.

CD Ratio Distribution Across Regions (for all 75 districts)

The boxplot reveals that CD Ratios vary across different regions:

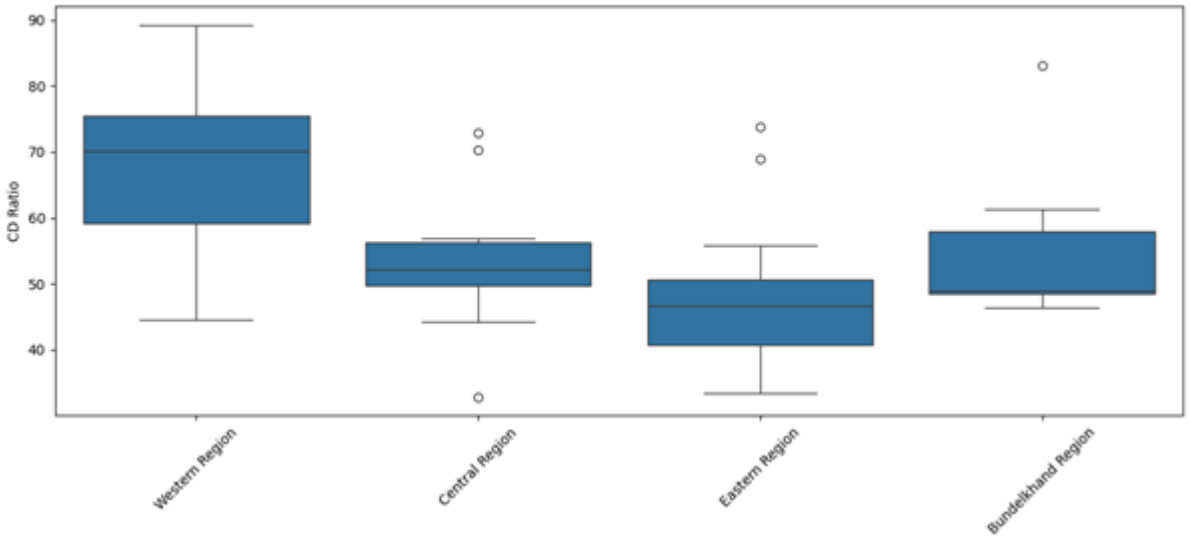


Fig 3.2: CD Ratio Distribution across regions

Tukey's HSD Test

The summary of the significant pairwise differences in CD Ratio between regions based on Tukey's HSD test is given below (table 3.2):

Table 3.2: CD ratio- Pairwise difference

Region 1	Region 2	Mean Difference	p-value	Significance
Bundelkhand Region	Western Region	**+11.99**	0.0478	Significant
Central Region	Western Region	**+14.38**	0.0027	Significant
Eastern Region	Western Region	**+21.02**	<0.0001	Significant

- Western Region has a significantly higher CD Ratio compared to Bundelkhand, Central, and Eastern Regions.
- The Eastern Region shows the largest gap when compared to the Western Region.

The district-wise breakdown of CD Ratio by Region without removing outliers is given below (table 3.3):

Table 3.3: CD ratio – Statistical Analysis

Region	Mean CD ratio	Median CD ratio	Std Dev	Max CDR District	Max CD ratio	Min CD Ratio District	Min CD ratio
Bundelkhand	55.93	49.03	12.99	Lalitpur	83.02	Banda	46.40
Central	53.54	52.17	11.63	Lakhimpur Kheri	72.90	Unnao	32.82
Eastern	46.91	46.68	9.11	Bahraich	73.75	Ballia	33.44

Western	67.92	70.14	11.43	Sambhal	89.21	Auraiya	44.61

- Western Region has the highest average CD Ratio and the widest spread.
- Eastern Region has the lowest average CD Ratio.
- Districts like Sambhal and Bahraich stand out with exceptionally high CD Ratios. Causes for the same have been analysed in later part of the report.

The boxplot is given below:

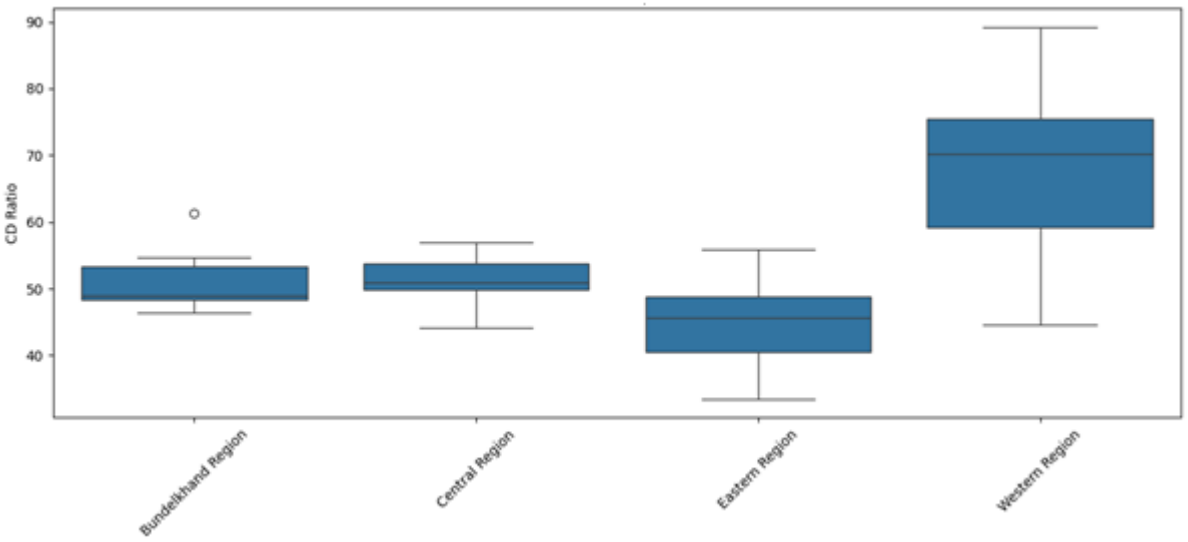


Fig 3.3: CD Ratio Distribution (outliers removed)

District-wise breakdown of CD Ratio by Region after removing outliers using the Inter-quartile range (IQR) method is given in table 3.4:

Table 3.4: CD Ratio Statistics (after removing outliers)

Region	Mean CD ratio	Median CD ratio	Std Dev	Highest District	CD ratio	Lowest District	CD ratio
Bundelkhand	51.41	48.95	5.58	Mahoba	61.26	Banda	46.40
Central	51.35	50.98	4.08	Sitapur	56.91	Lucknow	44.18
Eastern	45.03	45.67	6.15	Shravasti	55.84	Ballia	33.44

- Western Region has the highest average and variability in CD Ratio.
- Eastern Region shows the lowest mean CD Ratio, with relatively consistent values.

Advances Distribution (for all 75 districts)

When the region wise outliers below were removed, the p- value was less than 0.05, indicating a statistically significant difference in the average advances across regions. The districts identified as outliers are given in table 3.5.

Table 3.5: Outliers for advances distribution

District	Region	Advances (₹ In Cr)
Jhansi	Bundelkhand	12,846
Kanpur Nagar	Central	58,071
Lucknow	Central	1,33,762

District	Region	Advances (₹ In Cr)
Gorakhpur	Eastern	26,606
Prayagraj	Eastern	29,449
Varanasi	Eastern	38,288
G B Nagar	Western	1,39,993
Ghaziabad	Western	62,800
Agra	Western	44,425

This is consistent with the observations that at state level, Kanpur Nagar, GB Nagar, Ghaziabad and Lucknow were outliers. Regionally, the number of outliers increases significantly, indicating that there are pockets of credit activity.

After removing region-wise outliers using the IQR method, the analysis revealed statistically significant differences (as given in table 3.6).

Table 3.6: Advances: Distribution

Region 1	Region 2	Mean Difference	p-value
Bundelkhand Region	Western Region	**+7039.49**	0.0156
Eastern Region	Western Region	**+4819.79**	0.0057

- Western Region has significantly higher Advances compared to both Bundelkhand and Eastern Regions when outliers are excluded.

The impact of outliers is further visible in the below mentioned tables (12 and 13), which shows their impact on region wise statistics:

District-wise breakdown of Advances, with outliers across regions is given below:

Table 3.7: Advances statistics

Region	Mean Advances	Median Advances	Std Dev	Highest District	Amount (₹ cr)	Lowest District	Amount (₹ cr)
Bundelkhand	4,852	4,219	3,639	Jhansi	12,846	Chitrakoot	2,172
Central	25,313	8,686	41,320	Lucknow	1,33,762	Kanpur Dehat	3,741
Eastern	8,493	5,849	8,471	Varanasi	38,288	Shravasti	1,678
Western	17,743	7,651	26,604	GB Nagar	1,39,993	Auraiya	3,035

- Western and Central Regions have the highest variability in Advances, driven by large urban centres like GB Nagar and Lucknow.
- Bundelkhand and Eastern Regions show more modest and consistent Advances, with lower standard deviations.

The district-wise breakdown of Advances by Region after removing outliers using the IQR method is given below:

Table 3.8: Advances (after removing outliers)

Region	Mean Advances	Median Advances	Std Dev	Highest District	Amount (₹ cr)	Lowest District	Amount (₹ cr)
Western Region	10,559	7,413	7,453	Meerut	32,065	Auraiya	3,036
Central Region	7,663	7,981	2,387	Lakhimpur Kheri	11,039	Kanpur Dehat	3,741

Region	Mean Advances	Median Advances	Std Dev	Highest District	Amount (₹ cr)	Lowest District	Amount (₹ cr)
Eastern Region	5,739	5,712	1,969	Jaunpur	9,708	Shravasti	1,678
Bundelkhand	3,520	3,592	989	Lalitpur	4,543	Chitrakoot	2,172

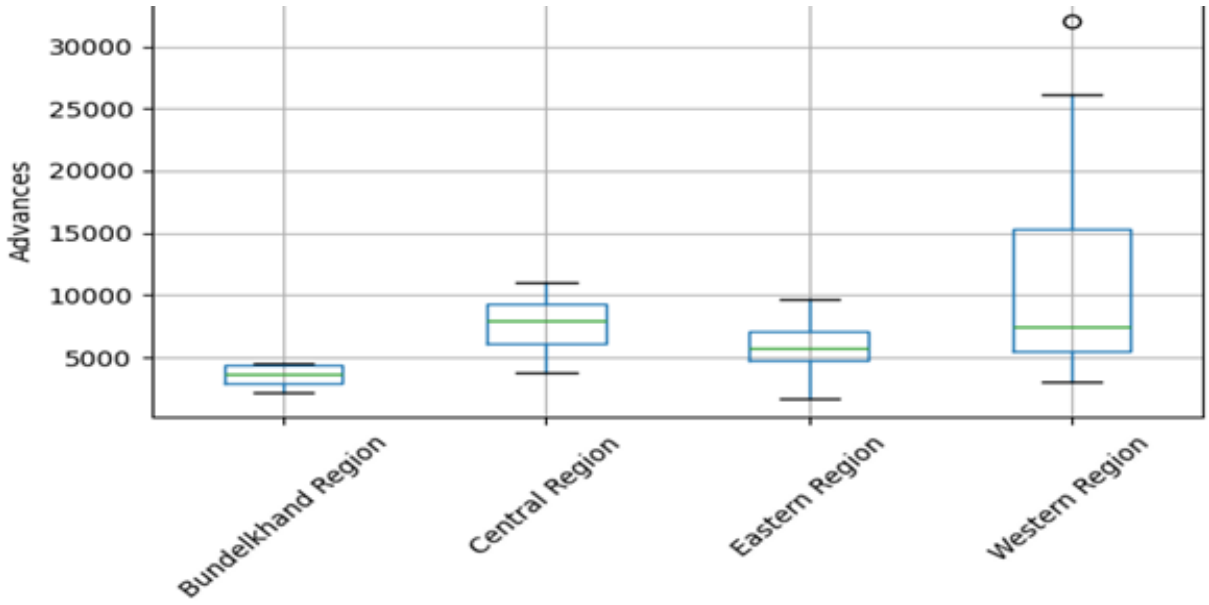


Fig 3.4: Box Plot: Advances by Region (excluding outliers) (amt. in ₹ cr)

Deposits Distribution in region (for all 75 districts)

While analyzing deposits, it was surprising that the outlier districts of advances, were also the outliers in terms of deposits (except an addition of Meerut district).

Table 3.9: Deposit Distribution - Outliers

District	Region	Total Deposits (₹ cr)
Jhansi	Bundelkhand	26,203
Kanpur Nagar	Central	1,08,825
Lucknow	Central	3,02,777
Gorakhpur	Eastern	51,656
Prayagraj	Eastern	72,931
Varanasi	Eastern	68,739
GB Nagar	Western	2,30,463
Ghaziabad	Western	1,07,055
Agra	Western	62,967
Meerut	Western	57,148

All pairwise comparisons between regions show no significant differences in Total Deposits.

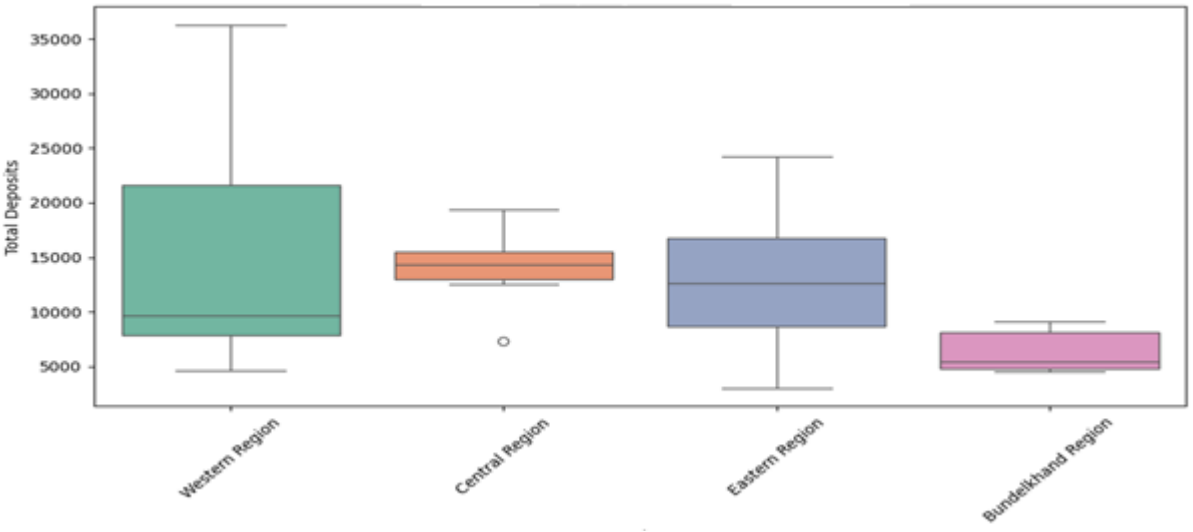


Fig 3.5: Deposits by Region (outliers removed) (amt. in ₹ cr)

Further, unlike the case of deposits, Deposit per Branch is not significantly different across regions. Outliers exist in case of Deposit per branch but do not drive regional trends. Results of additional tests run during the course of analysis are:

a. Advances are more regionally differentiated than Deposits. This suggests that while deposit mobilization is relatively uniform, credit deployment varies significantly across regions.
b. Western Region has significantly higher Advances per Branch compared to all other regions. There are statistically significant differences in Advances per Branch across regions.
c. There are statistically significant differences in Advances per sqKm across regions. Western Region has significantly higher Advances per sqKm than all other regions.
d. There are statistically significant differences in Deposit per sq Km across regions. Eastern and Western Regions have significantly higher Deposit per sq Km than Bundelkhand Region.
e. The differences in Advances per Capita across regions are not statistically significant. However, after removing outliers, Western Region has significantly higher Advances per Capita than Central and Eastern Regions.
f. The differences in Deposit per Capita across regions are not statistically significant. However, Western Region has significantly higher Deposit per Capita than Eastern Region.
g. The differences in GDDP FY24 across regions are not statistically significant.

Table 3.10: GDDP Statistics

(amt in ₹ cr)

Region	Mean	Median	Std Dev	Max Value	Max District	Min Value	Min District
Bundelkhand Region	19278	17523	6995	33252	Jhansi	11634	Chitrakoot
Central Region	47736	34259	36493	141613	Lucknow	24517	Kanpur Dehat
Eastern Region	25254	20655	14076	74323	Prayagraj	8593	Shravasti

Region	Mean	Median	Std Dev	Max Value	Max District	Min Value	Min District
Western Region	41446	26153	47628	263871	GB Nagar	12257	Auraiya

However, after removing outliers, Western Region has significantly higher GDDP FY24 than Eastern Region. The values, after removing outliers are:

Table 3.11: GDDP Statistics (after removing outlier)

(amt in ₹ cr)

Region	Mean	Median	Std Dev	Max Value	Max District	Min Value	Min District
Bundelkhand Region	16948	16875	3626	21741	Jalaun	11634	Chitrakoot
Central Region	32347	31480	7784	43559	Lakhimpur Kheri	24517	Kanpur Dehat
Eastern Region	21196	20178	6948	40562	Sonbhadra	8593	Shravasti
Western Region	30797	24589	16555	77547	Agra	12257	Auraiya

The outliers in terms of GDDP are:

Table 3.12: Outliers in terms of GDDP

(amt in ₹ cr)

Region	District	GDDP FY24
Bundelkhand	Jhansi	33252
Central	Kanpur Nagar	76968
Central	Lucknow	141613
Eastern	Gorakhpur	51845
Eastern	Prayagraj	74323
Eastern	Varanasi	51036

Most of these districts are, again, outliers in advances and deposits also, affirming a close relationship between the three.

Myth: Regions are a proxy for measuring CD ratio and related parameters of the state

1. Region-wise trends cannot be conclusive for districts as there are pockets of high/low CD ratio in each region. The names of districts are enumerated below: -

Low CD Ratio in Western Region: - Auraiya (45), Etawah (50), Baghpat(49)

Low CD Ratio in Central Region: - Unnao (33), Fatehpur (50), Lucknow (44)

High CD Ratio in Eastern Region: - Bahraich (74), Shrawasti (56), Maharajganj (69)

High CD Ratio in Bundelkhand Region: - Lalitpur (83), Mahoba (61)

Note: Figures in brackets indicate CD Ratio as on 31 March 2025.

2. Trends in absolute number of advances in the state indicate that there are 03 districts of Purvanchal Region that lie in the top 10: Prayagraj, Varanasi and Gorakhpur. They also have high deposits in the state. Yet, they are not the highest CD ratio regions.

3. CD Ratio distribution across regions (figure 3.2) : The analysis revealed following observations:

a. Western Region had the highest average as well as variability in CD ratio.
b. Western and central regions had the highest variability in advances, driven by large urban centres, like GB Nagar and Lucknow.
c. Deposit mobilization is relatively uniform across regions. Deposit per branch is not significantly different across regions.

d. Intra state Trends

Variation in CD ratio in Uttar Pradesh – District Wise

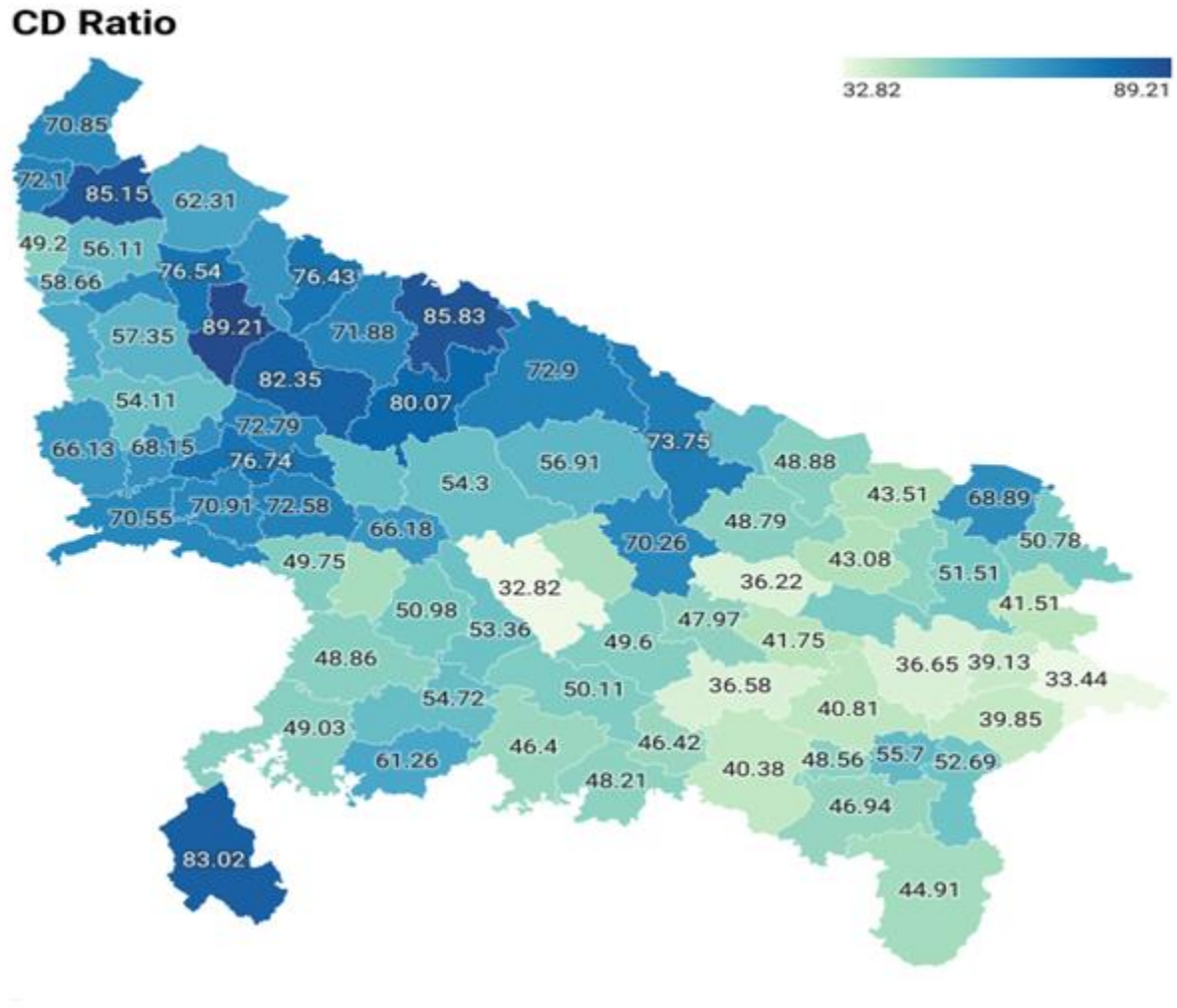


Fig 3.6: District Wise CD ratio – Uttar Pradesh

The variation in CD ratio of districts in Uttar Pradesh is large, from 36.22% to 89.21%.

Credit Deposit Ratio is influenced by the absolute amounts of credit and deposits. In depth study of district wise ratios reveals that, there are cases where CD ratio is benefiting from a low deposit effect. For the purpose of analysis, low deposit districts are defined as those which have less than 0.50% share in state deposits. These are bottom 27 districts in terms of deposits in Uttar Pradesh. Approximately 50% of these districts (13 districts out of 27) have a CD Ratio > 60%. None of these districts lie in top 27, according to advances. Rather 17 districts of this list form the bottom 17 districts according to advances also. A few examples of such districts are –

a. Sambal - deposit base of ₹ 6795 cr – but highest CD ratio in Uttar Pradesh (89%)
b. Pilibhit – ₹ 7817 cr deposit base
c. Lalitpur- ₹ 5417 cr. deposit base
d. Budaun – ₹ 9415 cr deposit

All of the above 04 districts lie in top 5 in Uttar Pradesh in terms of CD ratio.

Further, there are districts where due to large deposits, the CD ratio gets adversely affected. For example:

a. Ayodhya: The CAGR of advances is around 29%, much higher than that of Uttar Pradesh, but due to huge deposit base of ₹ 23075 cr, it has a CD ratio of only 36%.
b. Azamgarh, similarly, has a deposit of ₹ 24219 cr, leading to CD ratio less than 40%.
c. Prayagraj, despite having huge advances of ₹ 29448 cr (one of the topmost districts in terms of advances), has a disproportionately high deposit of ₹ 72,930 cr, making it a low CD ratio district.

If the trend of deposits is observed, bottom 10 districts in terms of deposits are the most important in term of banking activity – Lucknow, GB Nagar, Kanpur Nagar, Ghaziabad, Prayagraj, Varanasi, Agra, Meerut, Gorakhpur and Bareilly – are also the top 10 in terms of credit in the state. However, except Bareilly and Agra, all of these districts have a CD Ratio less than/around 60%. Their low CD Ratio is partly due to concentration of deposits in these districts.

Comparing District wise Credit and Deposits (in absolute terms)

The captioned comparison of credit and deposits across districts in terms of absolute numbers, reflects a situation wherein both credit and deposit are concentrated in only a few districts (figure 3.7). The 04 districts of G B Nagar, Ghaziabad, Kanpur Nagar and Lucknow, together account for approx. 39% and 37% of the deposits and outstanding credit in the state, respectively.

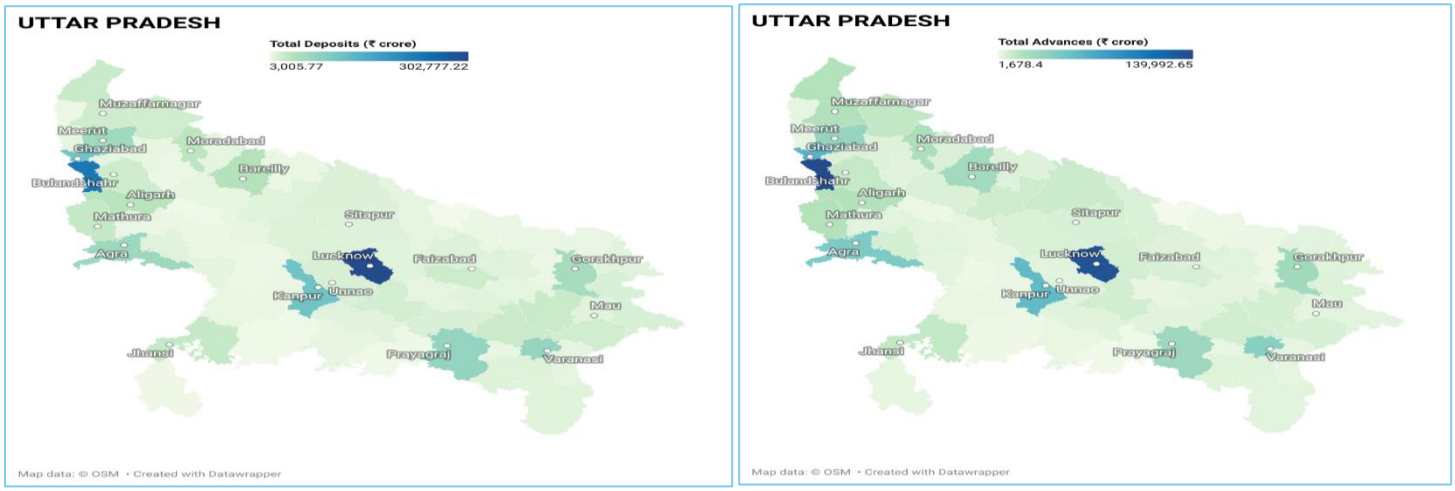


Fig 3.7: Deposits and credit outstanding in district (absolute terms)

Deposit and Credit in terms of per unit area (Sq. km)

In terms of deposit and credit per sq. km, the districts of G B Nagar, Ghaziabad, Gorakhpur, Kanpur Nagar, Lucknow, Meerut, Prayagraj, Varanasi have the highest values (figure 3.8). This can be largely attributed to these being large urban conglomerates with high per unit area potential for deposit mobilisation, higher credit absorption capacity due to industrial presence and good infrastructure network.

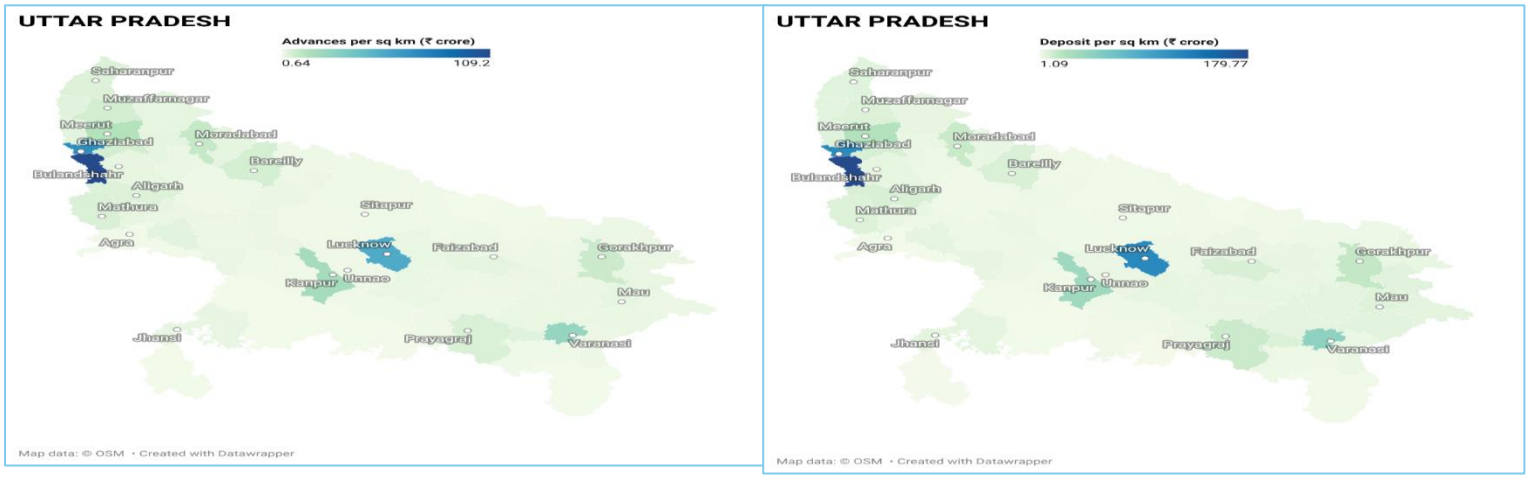


Fig 3.8: District wise per unit area (sq. km) deposits and advances in UP.

Deposit and Credit in per capita terms: In terms of deposit and advances per capita also, the districts of G B Nagar, Ghaziabad, Kanpur Nagar, Lucknow, Meerut and Varanasi have the highest per capita deposits and advances amongst all the districts of Uttar Pradesh (Figure 3.9).

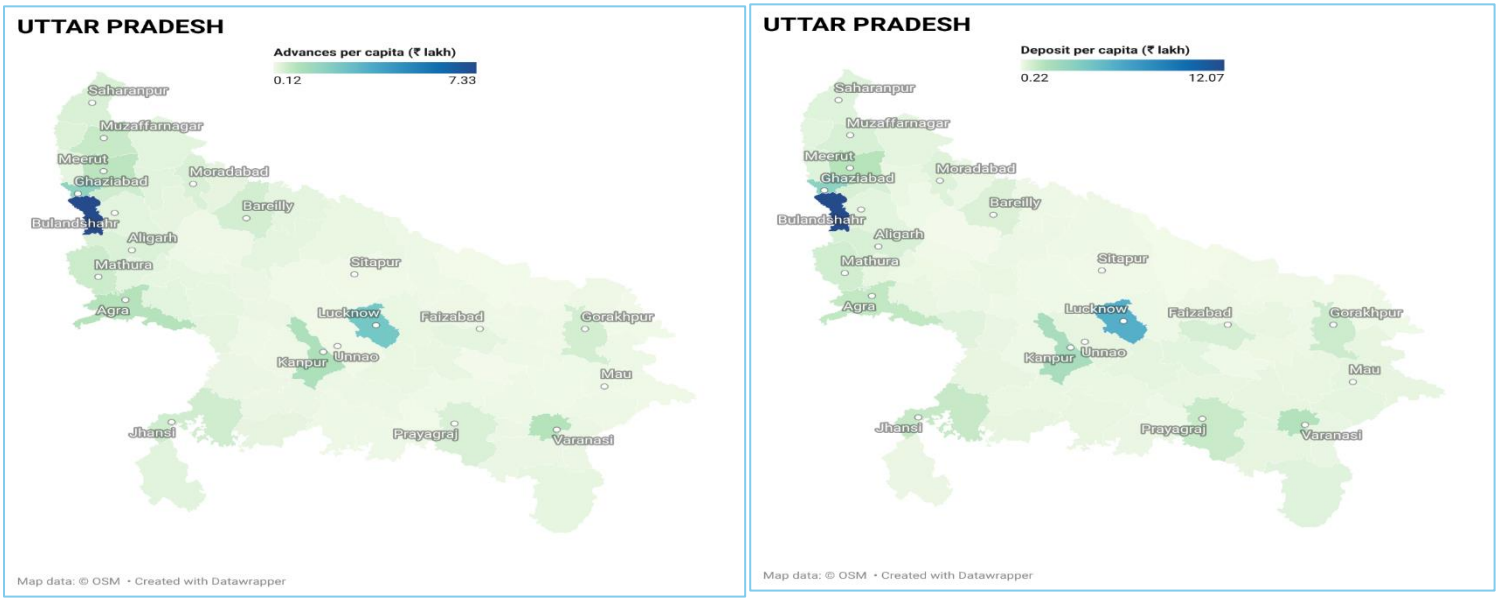


Figure 3.9: District wise advances and deposits per capita

Another important takeaway that emerges from this analysis is that in districts with highest CD ratio viz., Sambhal, Pilibhit and Lalitpur, the per capita deposit and credit are amongst the lowest in the state. This signifies that even in districts with high CD ratio, there is lot of potential for credit and deposit mobilisation.

Deposit-to-GDDP and Credit-to-GDDP Ratios *(Financial Deepening Indicators)*

These are critical indicators used to assess how deeply the financial sector is integrated into a region's economy.

Deposit to GDDP ratio indicates the **level of financial savings relative to economic output**. A high ratio suggests strong financial inclusion and confidence in the banking system. Low values may point to limited formal savings or reliance on cash/informal channels/poor access to banks.

Credit to GDDP- Reflects the **extent to which banking credit supports the real economy**. Higher ratios typically signal better financial access for businesses, farmers, and consumers. Low values may indicate credit constraints or risk aversion from banks and also suggest under leveraging of credit for economic growth.

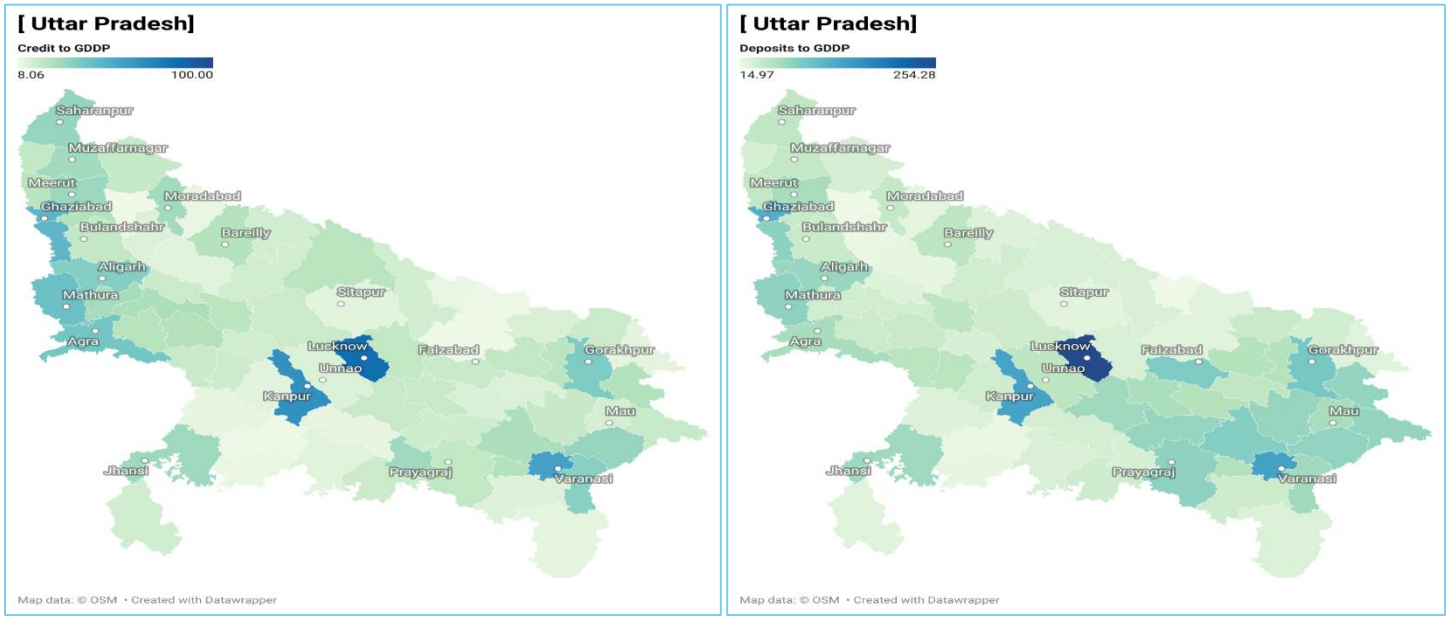


Figure 3.10: Credit to GDDP and Deposit to GDDP for Districts of UP

Low Deposit to GDDP ratio indicates limited formal savings or poor absorption of banking services. Further, low credit to GDDP ratio suggests under-leveraging of credit for economic growth. Most of the districts of Uttar Pradesh lie in low credit to GDDP as well as deposit to GDDP ratio.

The districts of G B Nagar, Ghaziabad, Gorakhpur, Kanpur Nagar, Lucknow, Meerut, Prayagraj, Varanasi continue to perform well in Credit to GDDP and Deposit to GDDP indicators as well. Thus, re-emphasizing the potential for economic growth through improvement in deposit mobilisation and credit deployment in other districts.

Udyam Registrations and MSME credit

Data from 59 districts shows that clear relationship exists between Udyog Adhaar portal registered units and advances. More Udyog registered formal units may be emphasized upon. This will help in the formalization of more units in the state and eventually help them grow. The higher financing of units in Maharashtra and Tamil Nadu is a result of formalization of the MSME sector.

Further, as per Invest UP data, 99.60 % of the units are micro units. There is a need to handhold them so that they grow into small and medium enterprises. This will facilitate higher loan taking capacity for the units.

Correlation between different parameters

The correlations between the 21 parameters of a district were calculated along with the R square; to ascertain the interrelationship of these parameters and through R square how well one parameter explains another in the relationship; higher the better. The 21 parameters are Total Deposits, Advances, CD Ratio, Number of Branches, Area of the district, Estimated Population (2025) *, Deposit/ Branch, Advances/ Branch, Advances/ sq. Km, Deposit / sq. km, Advance per Capita (Rs lakh), Deposit per Capita, ACP Achievement (24-25) and GDDP.

The Correlation matrix and the R square is given below in the two heat maps.

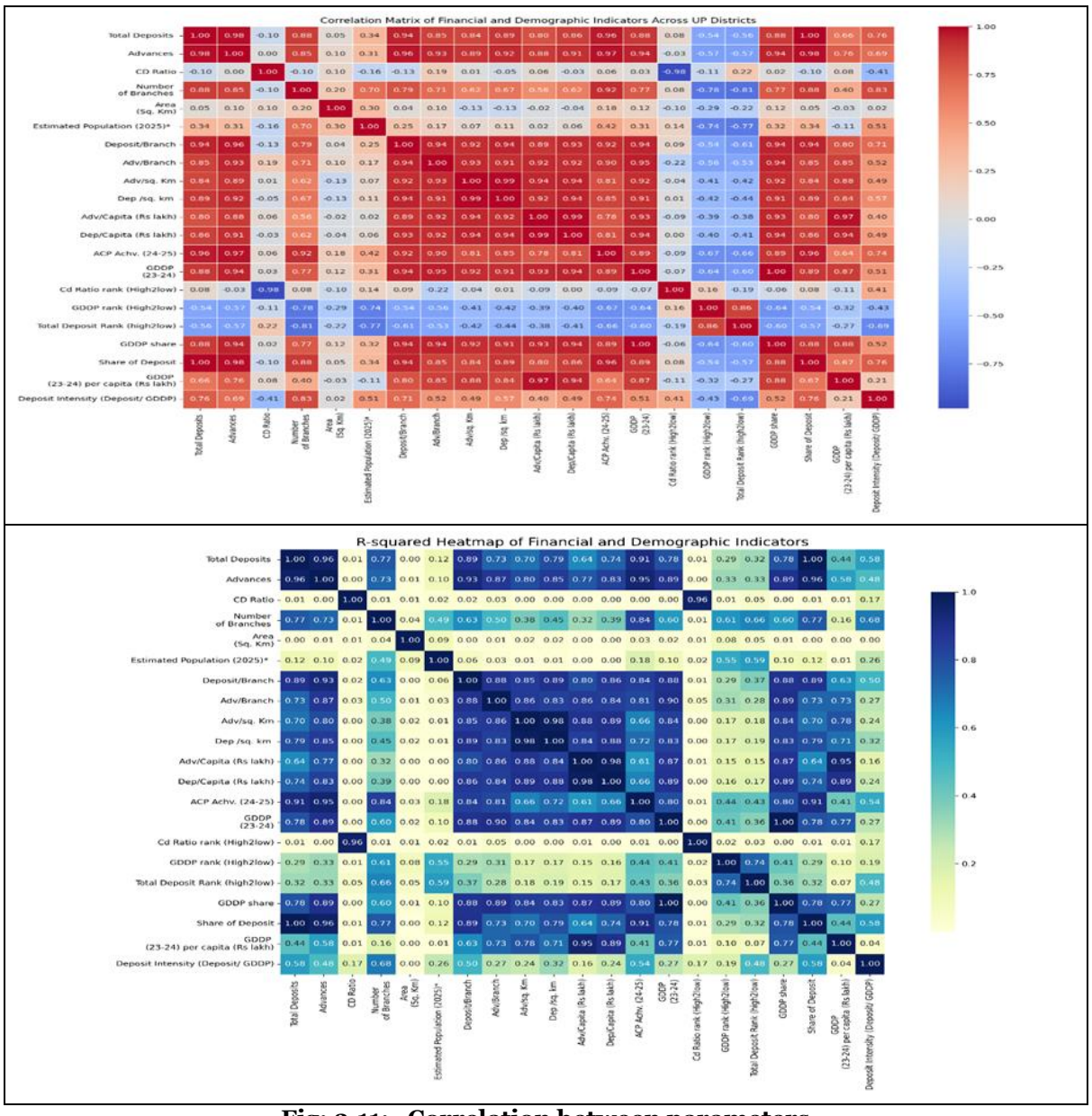


Fig: 3.11: Correlation between parameters

The major observations are given below:

i. Only 25 districts had deposit intensity more than the state average. Out of these districts only 09 districts had CD ratio more than the state average. This is a pattern similar to the one observed at the national level also.

ii. The total deposits and the total advances in districts are perfectly correlated and these two parameters are able to explain each other. Even per square KM, per capita and per branch Advances and Deposits are correlated.
iii. Contribution of a district's credit to credit in the state and contribution of a district's deposit to total deposits in state are strongly correlated (3 districts viz Agra, GB Nagar and Lucknow are outliers).
iv. GDDP and Advances are strongly correlated. GDDP and Deposits are moderately correlated. But GDDP per capita and Advance and also Deposit per capita are strongly correlated.
v. Interestingly, no correlation has been found between CD Ratio and the remaining 20 parameters, except CD Ratio Rank, which by design would be correlated.
vi. High CD ratio does not mean high GDDP.

I. Relationship between Advances and GDDP

Generally, it is felt that a high advances will lead to higher GDDP. A Correlation Analysis between Advances and GDDP gives a Correlation Coefficient: 0.94 (with a less than 1% P-value). This indicates a very strong positive correlation between total advances and GDDP across districts in Uttar Pradesh. Credit provides working and investment capital for production, trade, services and infrastructure which translates into growth in GDDP. GB Nagar, Ghaziabad and Lucknow were the outlier based on their unusually high values in either Advances or GDDP.

II. Relationship between Deposit and CD Ratio

Another general perception is that low deposit will necessarily lead to high CD ratio. The Rank Correlation Analysis of CD Ratio Rank of the district and Total Deposit Rank of the district among the 75 districts does not show any relationship. (Correlation Coefficient: -0.19, P-value: 0.1118). The weak correlation suggests that CD ratio is not strongly linked to the size of deposits in a district. Some districts may have high deposits but conservative lending, while others may aggressively lend despite smaller deposit bases. Among the thirty districts having CD ratio higher than the state's average CD Ratio, every fifth district (Agra, Bareilly, Mathura, Muradabad, GB Nagar and Ghaziabad) have deposits more than the average deposit per district.

III. Relationship between Advances and CD Ratio

Similarly, it is assumed that districts having higher advances will have higher CD ratio. Among the 30 districts having CD ratio higher than the state's average, 7 districts (Muzaffarnagar, Bareilly, Saharanpur, Agra, Moradabad, Mathura, GB Nagar and Ghaziabad) showed this behaviour. The remaining 23 districts (Sambhal, Pilibhit, Lalitpur, Budaun, Shahjahanpur, Etah, Amroha, Rampur, Bahraich, Lakhimpur kheri, Kasganj, Mainpuri, Shamli, Firozabad, Barabanki, Hapur, Maharajganj, Hathras, Kannauj, Bijnor, Mahoba and Bulandshahr) had advances less than the average advance per district.

e. Bank wise trends in credits and deposits

Table 3.13: Top 5 Banks by CD Ratio

Bank Name	CD Ratio (%)
HDFC	101.50
Bank of Maharashtra	93.47
RBL	92.93
Kotak Mahindra Bank	88.62
Bandhan Bank	86.88

These banks show aggressive lending relative to their deposits. Best practices of these banks can be replicated by other banks. Small finance banks or payments banks have limited business in the state and therefore have high CD Ratio owing to base effect. They have been excluded in this discussion.

It needs to be noted that some banks with most dense branching network in the state, like State Bank of India, Bank of Baroda, Punjab National Bank etc do not have high CD ratio.

Table 3.14: Bottom 5 banks by CD ratio

Bank Name	CD Ratio (%)
IDFC First	36.47
Karnataka Bank	37.01
Central Bank of India	42.17
South Indian bank	42.17
State Bank of India	43.01

The Payments Banks have no advances, hence a CD ratio of zero. The bottom 05 banks show conservative lending.

Bank Category-Wise Trends

Table 3.15: Bank Wise Trends in Deposit and Advances

Category	Total Deposit*	Total Advances*	Avg. CD Ratio (%)
Public Sector Bank	Very High (12.80)	Very High (6.27)	Low (~49%)
Private Sector Bank	High (4.73)	High (3.77)	High (~81%)
Regional Rural Banks	Moderate (1.36)	Moderate (0.82)	High (80%)

*Figure in bracket indicate amt in ₹ lakh cr.

- **Small Finance Banks** are aggressively lending, with CD ratios exceeding 100%, indicating high credit penetration.
- Private Sector Banks have been lending in proportion to their deposit base and therefore, have fared well in CD ratio.
- **Public Sector Banks** hold the largest share of deposits but maintain conservative lending practices. Their lending is not in proportion to their deposit base. This has led to lower CD ratio in Public Sector Banks in Uttar Pradesh.

It is therefore imperative for Public Sector Banks to increase their CD ratio, in order to achieve the state government's targets.

Key insights for various banks (excluding UPSGV Bank ltd. and Small Finance Banks) for FY 23-24 and FY 24-25:

Table 3.16: Top 5 Banks by Deposit Growth

Bank	Deposit Growth (₹ cr)
State Bank of India	8,640 cr (20%)
Union Bank of India	7,963 cr (7%)
Canara Bank	6,322 cr (5%)
Punjab National Bank	3,514 cr (11%)
Bank of Baroda	9,188 cr (8%)

Note: Figures in bracket indicate share in total deposits of Uttar Pradesh.

Table 3.17: Top 5 Banks by advances Growth

Bank	Advances Growth (₹ cr)
HDFC	7,102 cr (16%)
State Bank of India	5,268 cr (14%)
Union Bank of India	3,320 cr (4%)
Canara Bank	2,760 cr (4%)
ICICI	2,360 cr (7%)

Note: Figures in bracket indicate share in total advances of Uttar Pradesh.

- State Bank of India and Union Bank of India are leading in both deposit and lending growth, indicating strong overall performance.
- HDFC Bank shows the most aggressive credit expansion among private banks.
- Public Sector Banks continue to dominate in volume, while Private Banks are gaining ground in credit growth and efficiency.

I. Myth - High Deposits lead to Low CD ratio

Advances and Deposits do not work in isolation. Mobilising deposits helps to higher advances. It is the ability to mobilize the deposits that leads to higher CD ratio in long term.

In Uttar Pradesh, 38% of the deposits as well as 35% of advances in FY24-25 are from 04 districts, viz GB Nagar, Lucknow, Ghaziabad and Kanpur Nagar. Thus, the ability of bank to provide credit and avenues of credit disbursal play a more important role in higher CD ratio.

II. Myth: Imperfectness of CD ratio as a metric: High CD ratio means higher Advances/ Low Deposits and vice versa

1. Among the top 10 CD ratio districts of Uttar Pradesh, none of the districts were in top 10 in terms of advances.
2. Prayagraj, which is one of the districts in top 10 in terms of advances as well as deposits, has a low CD ratio of just 40.38.
3. None of the districts having CD ratio <40% appear in the bottom of advances (absolute amount) in the state.
4. Kasganj (72) and Mahoba (61) which are amongst the top performers in terms of CD ratio, are in lowest 10 in terms of advances.

Note:

1. *Box Plot: Box plots, also known as box-and-whisker plot, provides a compact summary of data distribution. The box shows the middle 50% of the data, the line inside the box is median, whiskers indicate the maximum and minimum value (excluding outliers) and dots represent the outliers.*

2. *ANOVA Analysis: Analysis of variance (ANOVA) is a statistical test used to assess the difference between the means of more than two groups. ANOVA simultaneously compares arithmetic means across groups to determine whether the differences observed are due to random chance or if they reflect genuine, meaningful differences.*
3. *Tukey's HSD Test: ANOVA indicates if there are significant inter-group differences. TUKEY's HSD test is done after ANOVA to ascertain exactly which group is different.*

Chapter 4: Alternative District Clustering - Other than Regional Approach

It is a general practice to adopt geographical region wise clustering of the districts for improved insights about a parameter. However, in case of CD ratio it has been observed that within the region-based clustering the districts have significant variation in the CD ratio, as shown in the table given below.

Region	Mean CD Ratio	Standard Deviation	Range	
			Maximum	Minimum
Bundelkhand	55.93	12.99	83.02	46.40
Central	53.54	11.63	72.90	32.82
Eastern	46.91	9.11	73.75	33.44
Western	67.92	11.43	89.21	44.61

Table 4.1: Region wise statistical analysis of CD ratio

The interrelationships between key financial indicators—such as advances, deposits, CD ratio, and deposit intensity—and economic output (GDDP) across districts in Uttar Pradesh can provide alternative model for grouping/ clustering the districts for the purpose of CD ratio analysis. Such analysis can help to identify the trends in groups of districts in Uttar Pradesh. The behavior could be used to identify pockets of under achieving districts, that can be targeted to increase credit.

Alternative Approach to Geographical Region based Clustering

K-Means clustering is a widely used method in data analysis and machine learning for automatically grouping data into distinct categories based on similarity. The technique does not require prior knowledge of the data labels. Principal Component Analysis (PCA) is used to simplify complex datasets by reducing the number of variables. PCA is useful when dealing with large datasets that contain many interrelated variables.

K- Means Clustering analysis and PCA based on parameters like advances, deposits, GDDP, population, and district area provide a clearer picture of financial and economic disparities across Uttar Pradesh. By identifying districts with similar profiles, it enables more precise targeting of various initiatives. The K- Means and PCA was done with following combinations of district parameters:

i. Area – Population – Advance – Deposit – GDDP
ii. Advance per Capita – Deposit per Capita – GDDP per capita
iii. Advance per sqKm – Deposit per sqkm – GDDP per sqkm
iv. Advance – Deposit – GDDP
v. Advance per Capita – Deposit per Capita
vi. Advance – Deposit
vii. Advance – Deposit – Population
viii. Deposit – GDDP
ix. Deposit per Capita – GDDP per Capita
x. Advance - GDDP
xi. Advance per Capita – GDDP per Capita

The clustering graphs are given at Annexure – IV. Two combinations of the parameters of K-Means and PCA are discussed here.

Clustering parameters: Advances and GDDP

The relationship between credit expansion and economic growth has long been a subject of scholarly debate. While some economists argue that the development of the financial system is merely a consequence of economic growth, others contend that the expansion of credit plays a pivotal role in driving growth itself.

Grappling with the same dilemma, an attempt was made to examine the same in a working paper by RBI[4]. The empirical findings of the paper suggest that a long-term co-integration relationship exists in the manufacturing sector between credit and GDP. A separate analysis reveals that there is a strong positive correlation between advances and GDDP (regardless of the causal relationship between the parameters), as shown in plot below:

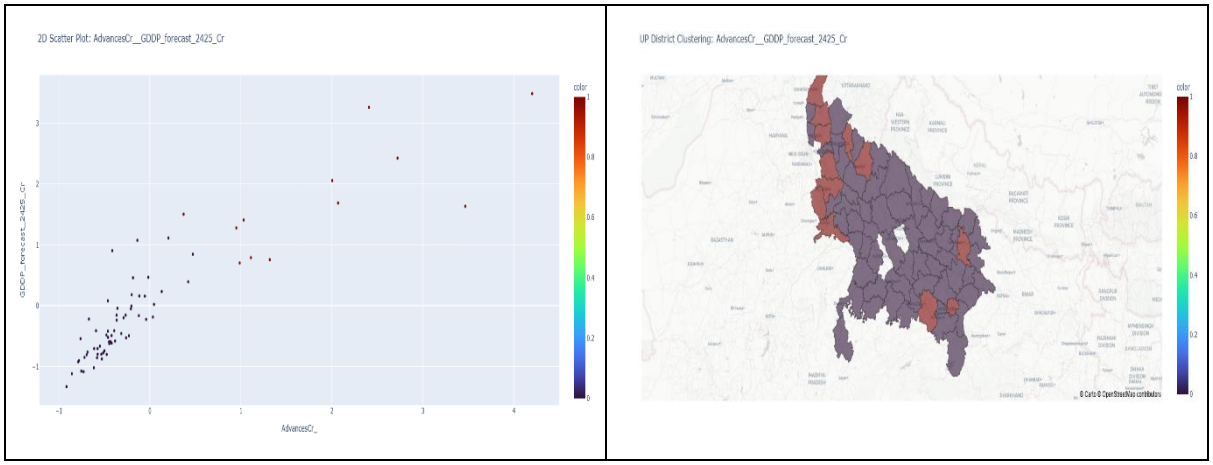


Fig 4.1: Clustering Analysis (Advances and GDDP)

The higher performing cluster (districts like Agra, Prayagraj, Meerut, Varanasi, etc.) are also some of the topmost in terms of advances in the state. More importantly, most of the districts of Uttar Pradesh get clustered at the lower end of the graph, probably due to low industrialization.

Clustering parameters: Population, Deposit and Advances

Working age population has a very strong positive correlation with GDP, per capita income, capital formation, gross fiscal deficit. As of 2021, 60% of Uttar Pradesh's population fell within the working-age bracket of 15 to 59 years, presenting a strategic opportunity to capitalize on the demographic dividend. UP is a young population and is likely to be so for the coming decades[5].

To analyze the relationship between advances, deposit and population through PCA two clusters were formed. The results of the clustering are placed below:

[4] Working Paper No. 531; Charan Singh Et. Al.; December 2016

[5] Analyzing Population Dynamics of Uttar Pradesh and its Macroeconomic Implications; Ekta Yadav et. Al.; IJNRD; June 2022

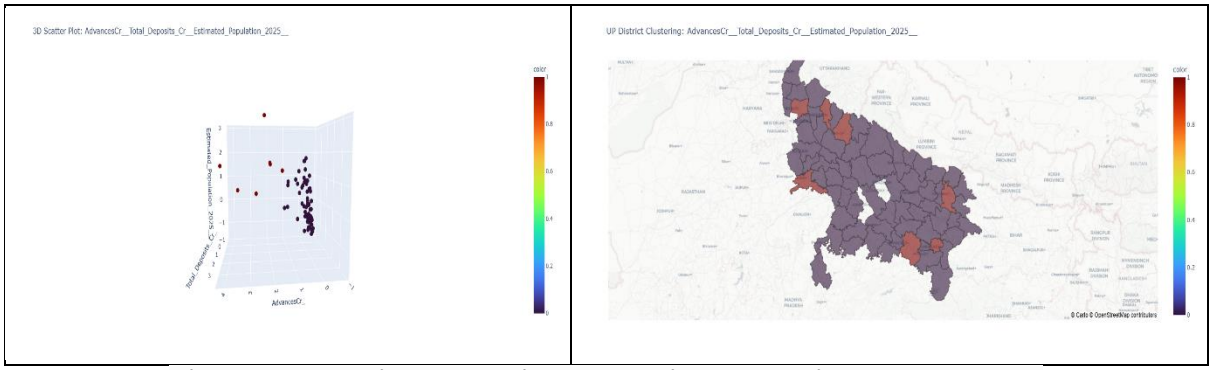


Fig 4.2: Clustering Analysis (Population, Deposit and Advances)

Barring a few districts in cluster 2 (Prayagraj, Varanasi, Meerut, Agra, Bareilly, Moradabad and Gorakhpur), most of the districts lie in low GDDP/low advances/low deposit in Uttar Pradesh.

Both the above combinations of parameter have two distinct clusters which are not geographical region specific. The clusters formed in the remaining combination of parameters given earlier also are not geographic region specific. Hence, an alternative to clustering on regions may provide new insights and being based on the socio economic indicators will be more appropriate.

The of K- Means and outliers analysis of 75 districts have put the four districts viz. GB Nagar, Ghaziabad, Kanpur Nagar and Lucknow in one group, 'Group A'.

Excluding these four districts the K-Means and PCA have given two clusters of various pairing of the districts. 46 districts always fall in the same clusters on the K-Means analysis of above 11 combinations of parameters. The summary of clusters formed are given at Annexure II.

No. of districts	No. of parameters combinations in which the district is in the same cluster as that of 46 districts
46	11
3	10
4	9
3	8
3	7
2	6
1	4
4	1
2	0

Table 4.2: Analysis of Clustering of districts on different parameters

In order to have an optimal number of groups of districts, following groups based on the number of parameters combinations in which the district are in the same clusters, as given above are made.

No. of parameters combinations in which the district is in the same cluster as that of 46 districts	No. of districts	Group
11	46	
10	3	
9	4	
8	3	B

No. of parameters combinations in which the district is in the same cluster as that of 46 districts	No. of districts	Group
7	3	C
6	2	
4	1	D
1	4	
0	2	

Table 4.3: Grouping of districts on basis of parameters

Accordingly, the 75 districts in Uttar Pradesh have been divided into 04 groups based on 11 parameters. List of group wise districts is attached at Annexure III. The clustering aimed to group districts with similar profiles across these indicators. As a second level check, these districts were analyzed on their basic statistics for confirming that these groups have distinct characteristics from each other.

Group Wise Comparison of Deposits

(amt in ₹ cr)

Group	Mean	Median	Std Dev	Skewness	Kurtosis	Max Value	Max District	Min Value	Min District
A	187280	169644	96256	0.27	-1.65	302777	Lucknow	107055	Ghaziabad
B	54697	57148	15365	-0.44	-1.34	72931	Prayagraj	33162	Aligarh
C	23158	26203	7644	-0.94	-0.46	30515	Moradabad	10631	Hapur
D	11674	9987	5470	0.80	-0.17	24371	Saharanpur	3003	Shravasti

Table 4.4: Group wise deposits statistics

There are statistically significant differences in Total Deposits across groups.

Group Wise comparison of Advances

(amt in Rs. cr)

Group	Mean	Median	Std Dev	Skewness	Kurtosis	Max Value	Max District	Min Value	Min District
A	98657	98281	44249	0.00	-1.98	139993	GB Nagar	58071	Kanpur Nagar
B	30693	29449	8663	0.28	0.07	44425	Agra	17945	Aligarh
C	15357	17579	5238	-0.68	-1.02	20337	Moradabad	7413	Hapur
D	6288	5712	2857	1.31	2.61	17266	Saharanpur	1678	Shravasti

Table 4.5: Group wise Advances Statistics

There are statistically significant differences in Advances across groups.

Group Wise Comparison of CD Ratio

Group	Mean	Median	Std Dev	Skewness	Kurtosis	Max Value	Max District	Min Value	Min District
A	54	56	7	-0.63	-1.15	60.74	GB Nagar	44	Lucknow
B	57	56	11	0.11	-0.26	71.88	Bareilly	40	Prayagraj
C	67	67	13	-0.06	-0.56	85.15	Muzaffarnagar	49	Jhansi
D	56	51	15	0.48	-0.88	89.21	Sambhal	33	Unnao

Table 4.6: Groupwise Statistics of CD Ratio

GroupWise Interpretation:

1. Group A (GpA)

Observations

- Highest Mean and Median values across financial indicators (Deposits, Advances, GDDP).
- Low Skewness and Kurtosis, indicating a more balanced and less extreme distribution.
- Narrow Inter-Quartile Ranges, suggesting consistency among districts in this group.

Interpretation: GpA districts are economically advanced and show uniform development.

2. Group B (GpB)

Observations

- Moderate Mean and Median, but with higher Skewness, especially in financial metrics.
- Higher Kurtosis in some parameters, indicating presence of outliers.

Interpretation: GpB districts are developing but have disparities within the group.

3. Group C (GpC)

Observations

- Lower central values compared to GpA and GpB.
- Moderate Skewness and Kurtosis, suggesting uneven development.

Interpretation: GpC districts are transitioning, with some showing potential for growth.

4. Group D (GpD)

Observations

- Lowest Mean and Median across most parameters.
- High Skewness and Kurtosis, indicating significant inequality and presence of outliers.
- Wide IQRs, reflecting variability in development.

Interpretation: GpD districts are economically weaker and more heterogeneous.

An analysis of all districts reflected that:

- Mean and Median values lie between GpB and GpC.
- Interpretation: The overall state profile is skewed by high-performing districts in GpA.

➢ Further Comparison of the Mean and Median values of Total Deposits across the four groups (GpA, GpB, GpC, GpD) and All Districts

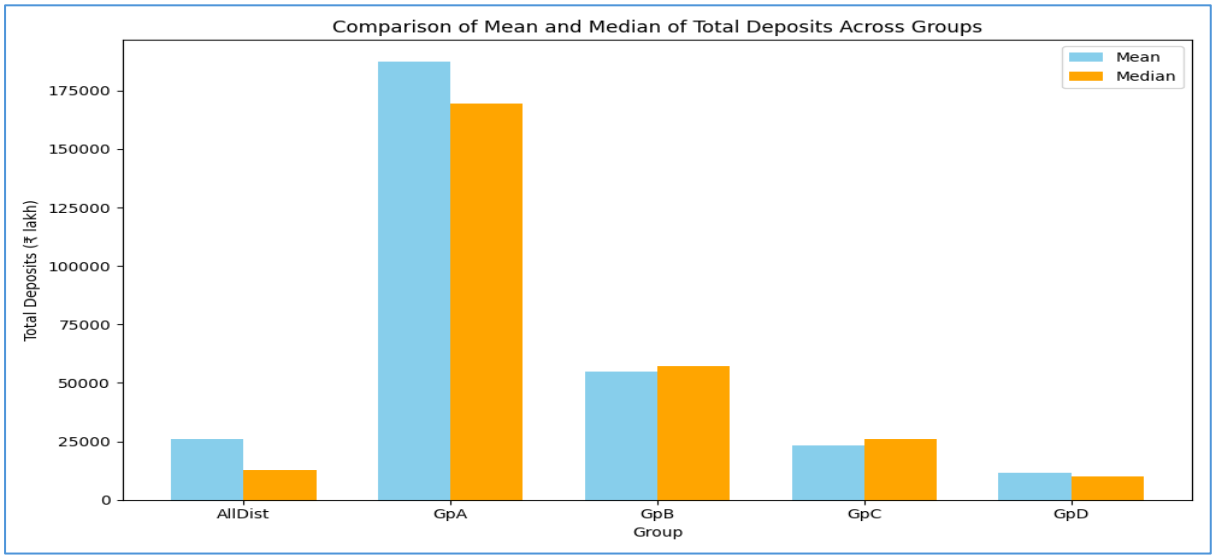


Fig 4.3: Comparison of mean and median of total deposits across groups

Observations

- GpA stands out with the highest mean and median, indicating strong and consistent deposit levels.
- GpB follows, with a median slightly higher than the mean, suggesting a few lower outliers.
- GpC shows a median higher than the mean, indicating a left-skewed distribution.
- GpD has the lowest mean and median, reflecting lower deposit levels overall.
- AllDist shows a mean significantly higher than the median, suggesting the presence of high-value outliers skewing the average.

➢ Comparison of Mean and Median values for Advances across the four groups (GpA, GpB, GpC, GpD) and All Districts:

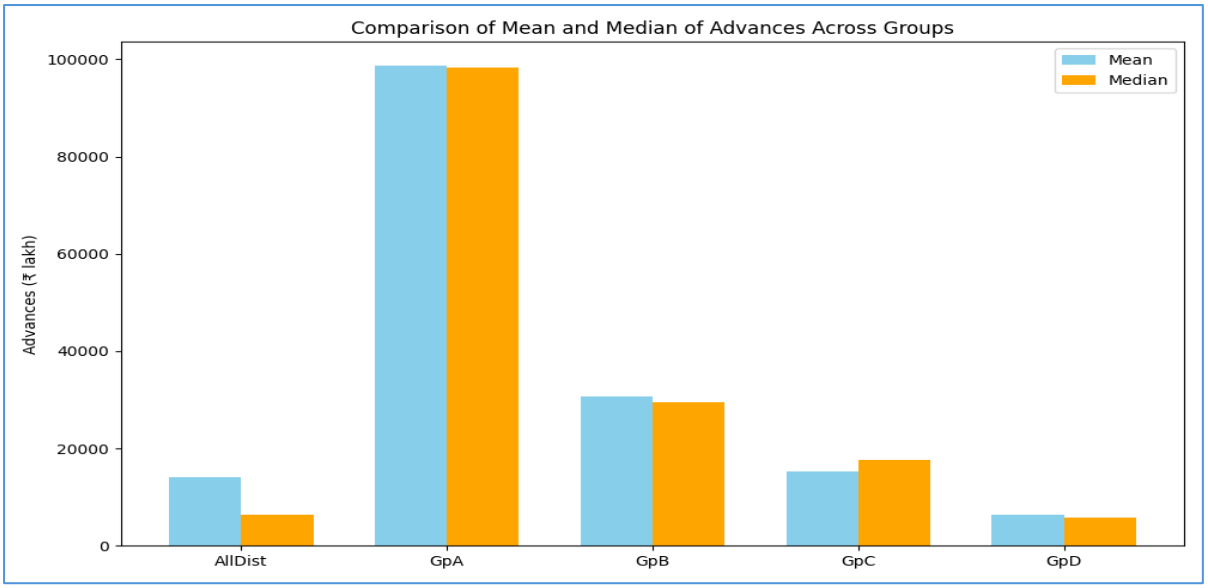


Fig 4.4: Comparison of mean and median of Advances across groups

Observations

- GpA has the highest mean and median, indicating strong credit activity across its districts.
- GpB follows with moderate values, showing balanced performance.
- GpC and GpD have significantly lower values, with GpD being the lowest.
- All Dist shows a mean higher than the median, suggesting the presence of high-value outliers.

A summary of the group dynamics is given below:

Group	Districts	Characteristics	Banking Activity
A	G B Nagar, Ghaziabad, Kanpur Nagar, Lucknow	Economically Advanced, Uniform Development level	Strong Credit Growth; also High Deposit Concentration
B	Agra, Aligarh, Bareilly, Gorakhpur, Meerut, Prayagraj, Varanasi	Developing, however, Disparities within group	Balanced Credit and Deposit Activity
C	Hapur, Jhansi, Mathura, Moradabad, Muzaffarnagar	Transition to higher growth levels; Potential has to be tapped	Significantly Low Credit and Deposit Activity; Top 10 CD ratio Districts are from Group D
D	Remaining 59 out of 75 districts	Weak Development	

Table 4.7: Inter group comparison summary and results

Clustering Analysis for Agriculture Credit

1. Clustering parameters: Agri Credit, Number of KCC and NSA among districts

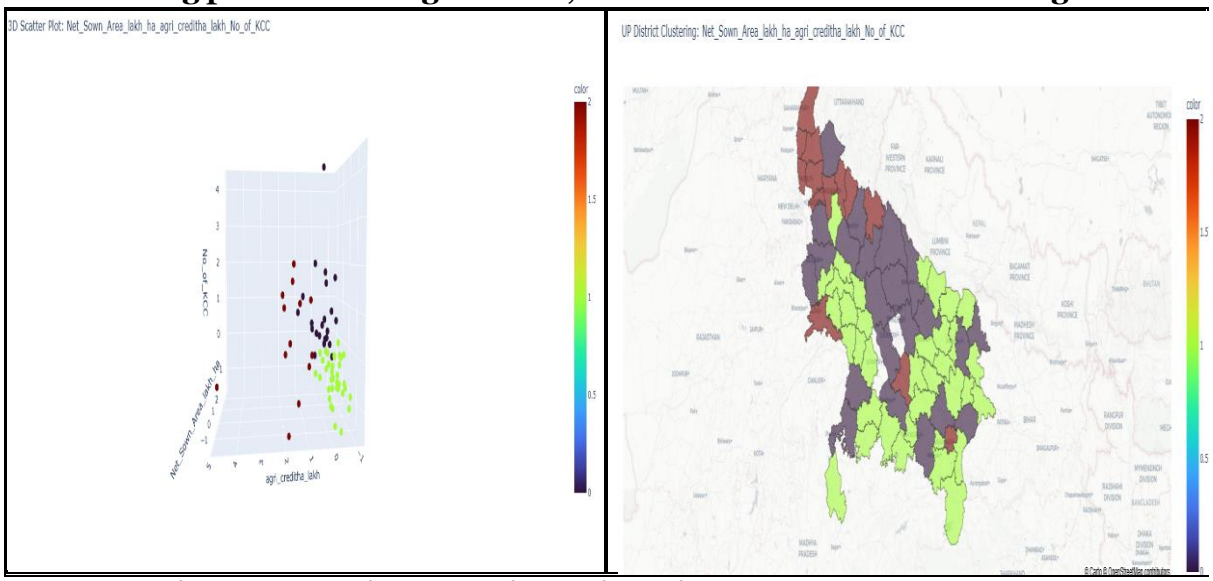


Fig 4.5: Clustering Analysis (Agri credit, KCC and Net Sown Area)

3 clusters are formed in Uttar Pradesh, if a combination of Net Sown Area, Agri Credit and number of KCC are used as parameters. The characteristics of 3 clusters can be defined as :

- Cluster 1 (Green): Districts like SK Nagar, Kaushambi, Kanpur Dehat, etc; It likely represents regions with low sown area, low credit, and fewer KCCs.
- Cluster 2(Grey): Districts like Sitapur, Hardoi, Ghazipur, Bareilly, Bulandshahr etc; High performing regions with extensive sown area, high credit access, and widespread KCC usage.
- Cluster 3: (Orange): Districts like Pilibhit, Agra, Amroha, Moradabad, etc; moderately performing regions.

2. <u>Clustering parameters: Agri Credit and No. Of KCC accounts</u>

To further analyze the current scenario with respect to agriculture credit vs number of KCC clustering analysis was done for Uttar Pradesh. The plot's outcome seems to be interesting:

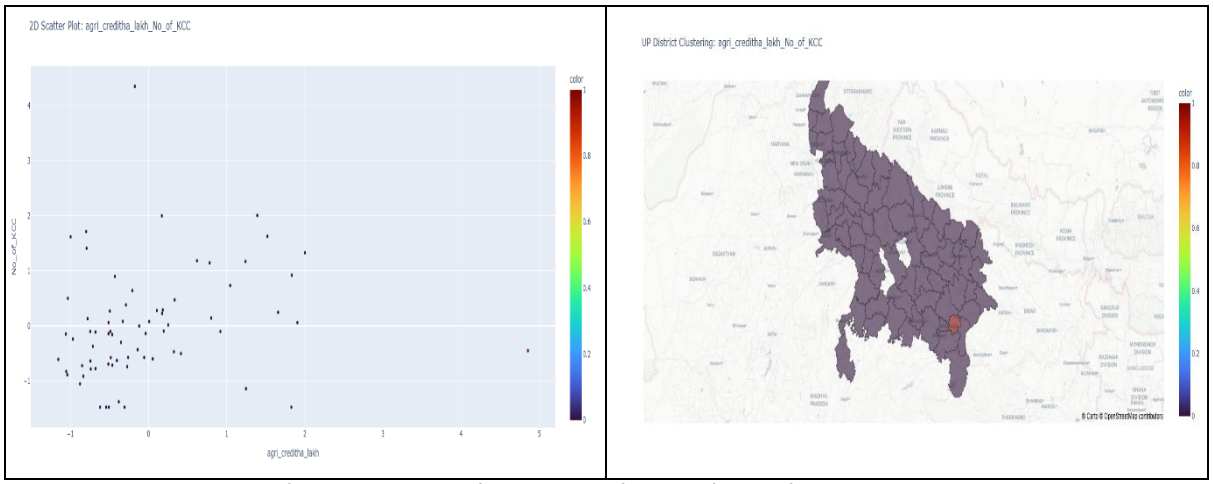


Fig 4.6: Clustering Analysis (Agri credit and KCC)

The whole of Uttar Pradesh (except Varanasi) gets clustered into one zone, suggesting that there is underperformance with respect to agriculture credit and KCC. Some regions like Barabanki, seem to have high KCC numbers but their agriculture credit seems to be

disproportionately less. Varanasi, a single district in a separate cluster, has disproportionately higher credit than it's KCC numbers.

Nevertheless, the whole state getting clustered into one shows the underperformance in agriculture credit, which is also reflected in underachievement of Annual Credit Plan (ACP) performance (agriculture) of state as well as stagnation of UP's share in India's ACP achievements.

A moderate positive correlation between Net Sown Area and agricultural credit suggests that regions with more cultivated land tend to receive more agricultural credit. Further, a stronger positive correlation between agricultural credit and number of KCC implies that higher credit availability is closely linked with more KCCs, reflecting financial inclusion.

Chapter 5: Conclusion

There are a few conclusions that may be drawn from various analysis in the paper. A summary is presented under:

i. In terms of regions, there is a need to focus upon Bundelkhand and Eastern region. Credit mobilization and absorption capacity needs to be enhanced in both these regions. Tamil Nadu presents a regionally balanced model of economic development. The state may consider emulating the same, by focusing on backward regions.

ii. In districts with Low deposit to GDDP ratio, focus should be on increasing financial inclusion, which help increase savings and push for more livelihood activities. This will help in deposit as well as credit mobilization.

iii. Bank wise, Public-Sector Banks, which still hold a major share of deposits need to improve their performance. Their lending capacity needs to be enhanced. Small Finance Banks are lending aggressively in the state.

iv. On a holistic perspective, there are lessons to be learnt from Maharashtra and Tamil Nadu. Investments in human capital like health, education and infrastructure need to be done. This will create a conducive atmosphere for entrepreneurship and unlock economic potential of human capital in the state.

v. Clustering results show the importance of KCC, Udyami registrations and demographic dividend in increasing CD ratio.

vi. High credit and high GDDP have a strong correlation. Research shows a long-term relationship between industrial growth, which can increase GDDP, and increasing advances.
Weak correlation between CD ratio and deposits points towards the fact that high deposit is not a deterrent to high CD ratio. It is the credit mobilization capacity that matters.

vii. High advance in a district or low deposit does not ensure higher CD ratio.

viii. Following strategies emanate out of intergroup comparisons:
   - Group A has high deposit as well as credit activity. The momentum needs to be maintained.
   - Group B: Developing districts. There is a need to decide on a direction for the development taking place. For example, if it is an agriculturally developed district, push may be given for more agro-processing units.
   - Group C are transitioning districts. There is a need to handhold them. Learning from the developed counterparts and their best practices will be a suitable approach for them as it will be tailored to their specific scenarios.
   - Group D are economically weaker districts. There is a need to promote human capital and make long term plans for their development.

ix. Advance per branch is a consistent metric across multiple states and can be used for tracking CD ratio. A push for higher advance per branch will help in increasing the CD ratio in the state.

There is a need to increase advances in all districts in the state. Advance/branch may be a metric for bankers to monitor the advances in a state. Various thought points are proposed in this regard for stakeholders:

i. Block wise/branch wise analysis of credit, advances and CD ratio may be carried out and targeted measures should be initiated geographically. Credit starved pockets may be identified and acted upon in this exercise.

ii. Convergence under different schemes, viz, PM Vishwakarma, CM YUVA, ODOP and GI Initiatives may be promoted for enhancing credit absorption capacity and better credit off-take.

iii. Scientific formulation of Potential Linked Credit Plan and Annual Credit Plans. Area Development schemes may be incorporated as far as possible.

iv. **Higher ACP achievements:**

a. Focus on decreasing gap between PM Kisan and KCC
b. Increase financing to Udyam registered entities
c. Innovative, customized solutions may be initiated for formulation of Area Development Plans, financing of small and medium farmers, FPO and Dairy; focus on enhancing productivity of crops; Animal husbandry farmers to get KCC
d. Focus on enhancing ticket size under priority sector lending especially per KCC limit and per SHG credit

Annexure I

Uttar Pradesh – Region Wise Districts

Sr. No	Region	Name of the District
1	Western Region	AGRA
2		ALIGARH
3		AMROHA
4		AURAIYA
5		BAGHPAT
6		BAREILLY
7		BIJNORE
8		BUDAUN
9		BULAND SHAHAR
10		ETAH
11		ETAWAH
12		FARRUKHABAD
13		FIROZABAD
14		GAUTAMBUDH NAGAR
15		GHAZIABAD
16		HAPUR
17		HATHRAS
18		KANNAUJ
19		KASGANJ
20		MAINPURI
21		MATHURA
22		MEERUT
23		MORADABAD
24		MUZAFFAR NAGAR
25		PILIBHIT
26		RAMPUR
27		SAHARANPUR
28		SAMBHAL
29		SHAHJAHANPUR
30		SHAMLI
31	Central Region	BARABANKI
32		FATEHPUR
33		HARDOI
34		KANPUR DEHAT
35		KANPUR NAGAR
36		LAKHIMPUR KHIRI
37		LUCKNOW
38		RAEBAREILY
39		SITAPUR

40		UNNAO
41	**Bundelkhand**	BANDA
42		CHITRAKOOT
43		HAMIRPUR
44		JALAUN
45		JHANSI
46		LALITPUR
47		MAHOBA
48	**Eastern Region**	AMBEDKAR NAGAR
49		AMETHI
50		AYODHYA
51		AZAMGARH
52		BAHRAICH
53		BALARAMPUR
54		BALLIA
55		BASTI
56		BHADOHI
57		Chandauli
58		DEORIA
59		GHAZIPUR
60		GONDA
61		GORAKHPUR
62		JAUNPUR
63		KAUSHAMBI
64		KUSHI NAGAR
65		MAHARAJGANJ
66		MAU
67		MIRZAPUR
68		PRATAPGARH
69		PRAYAGRAJ
70		SANT KABIR NAGAR
71		SHRAWASTI
72		SIDDHARTH NAGAR
73		SONBHADRA
74		SULTANPUR
75		VARANASI

Annexure III

Chapter 5 – 04 groups formed for intergroup comparison

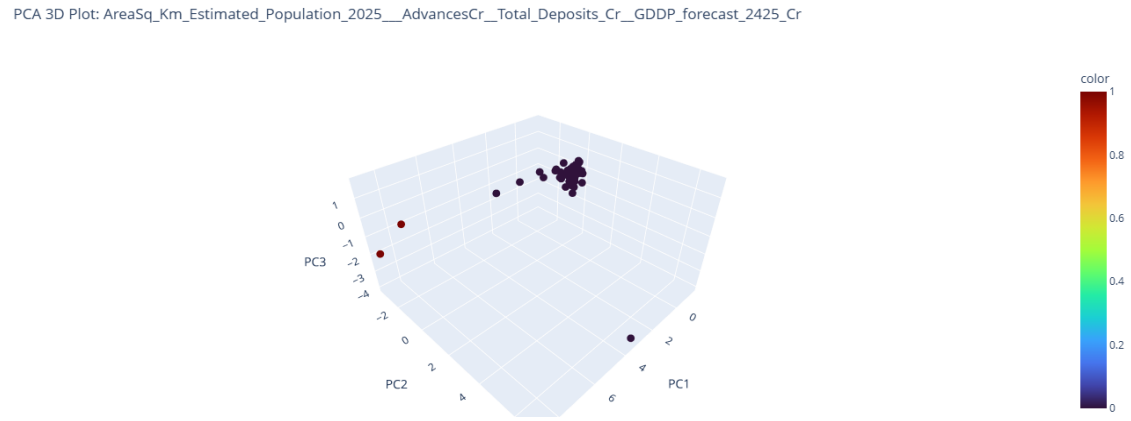
(amt in ₹ Cr)

Group	Name of the District	Total Deposits	Advances	CD Ratio
A	G B NAGAR	230462.95	139992.65	60.74
A	GHAZIABAD	107054.73	62800.41	58.66
A	KANPUR NAGAR	108824.71	58071.43	53.36
A	LUCKNOW	302777.22	133761.79	44.18
B	AGRA	62966.62	44425.26	70.55
B	ALIGARH	33161.98	17944.99	54.11
B	BAREILLY	36274.05	26073.59	71.88
B	GORAKHPUR	51656.11	26605.61	51.51
B	MEERUT	57148.07	32064.78	56.11
B	PRAYAGRAJ	72930.6	29448.77	40.38
B	VARANASI	68739.36	38287.97	55.7
C	HAPUR	10630.65	7412.86	69.73
C	JHANSI	26203.15	12846.31	49.03
C	MATHURA	26582.29	17578.9	66.13
C	MORADABAD	30514.85	20336.56	66.64
C	MUZAFFARNAGAR	21857.96	18611.96	85.15
D	AMBEDKAR NAGAR	10558.67	5346.62	50.64
D	AMETHI	9889.08	4744.1	47.97
D	AMROHA	9033.45	6914.58	76.54
D	AURAIYA	6804.34	3035.29	44.61
D	AYODHYA	23075.18	8357.87	36.22
D	AZAMGARH	24219.91	8876.73	36.65
D	BAGHPAT	9220.75	4536.99	49.2
D	BAHRAICH	10297.73	7594.54	73.75
D	BALLIA	17406.72	5820.82	33.44
D	BALRAMPUR	7212.88	3525.95	48.88
D	BANDA	9094.28	4219.78	46.4
D	BARABANKI	13083.54	9192.18	70.26
D	BASTI	12721.88	5480.47	43.08
D	BHADOHI	8629.25	4190.52	48.56
D	BIJNOR	21310.53	13279.31	62.31
D	BUDAUN	9315	7670.55	82.35
D	BULANDSHAHR	21670.29	12428.46	57.35
D	Chandauli	9799.12	5163.19	52.69
D	CHITRAKOOT	4504.35	2171.67	48.21
D	DEORIA	17213.74	7145.26	41.51

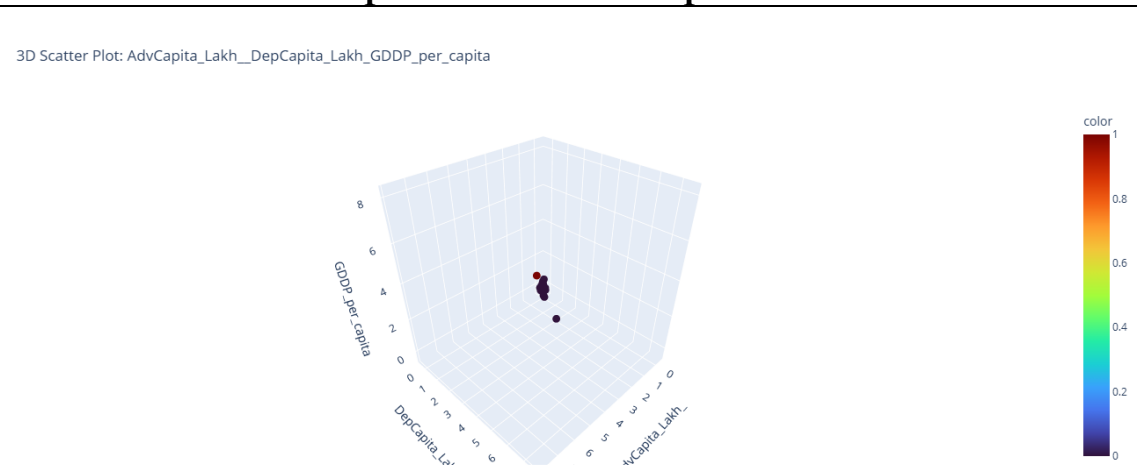
D	ETAH	7303.48	5605.05	76.74
D	ETAWAH	10793.12	5369.21	49.75
D	FARRUKHABAD	9014.39	4874.46	54.07
D	FATEHPUR	12529.83	6279.19	50.11
D	FIROZABAD	12673.63	8986.43	70.91
D	GHAZIPUR	20884.12	8323.3	39.85
D	GONDA	14574.49	7111	48.79
D	HAMIRPUR	5416.39	2964.04	54.72
D	HARDOI	14331.31	7782.48	54.3
D	HATHRAS	8198.68	5587.4	68.15
D	JALAUN	8983.57	4389.3	48.86
D	JAUNPUR	23790.26	9708.49	40.81
D	KANNAUJ	6773.69	4482.68	66.18
D	KANPUR DEHAT	7338.69	3741.41	50.98
D	KASGANJ	4583.46	3336.37	72.79
D	KAUSHAMBI	5931.82	2753.44	46.42
D	KUSHI NAGAR	12519.4	6356.96	50.78
D	LAKHIMPUR KHERI	15142.05	11038.86	72.9
D	LALITPUR	5471.89	4543	83.02
D	MAHARAJGANJ	8291.96	5711.96	68.89
D	MAHOBA	4619.84	2830.09	61.26
D	MAINPURI	8027.93	5826.33	72.58
D	MAU	12605.19	4932.49	39.13
D	MIRZAPUR	13406.56	6292.52	46.94
D	PILIBHIT	7817.7	6709.95	85.83
D	PRATAPGARH	16786.87	6140.93	36.58
D	RAE BARELI	19379.97	9612.71	49.6
D	RAMPUR	9987.06	7632.89	76.43
D	SAHARANPUR	24370.85	17265.85	70.85
D	SAMBHAL	6795.66	6062.46	89.21
D	SANT KABIR NAGAR	6736.09	3249.26	48.24
D	SHAHJAHANPUR	13014.27	10420.57	80.07
D	SHAMLI	7002.08	5048.18	72.09
D	SHRAVASTI	3005.77	1678.47	55.84
D	SIDDHARTH NAGAR	8286.29	3605.28	43.51
D	SITAPUR	14372.97	8180.07	56.91
D	SONBHADRA	13089.71	5878.8	44.91
D	SULTANPUR	13161.01	5494.78	41.75
D	UNNAO	16696.67	5479.76	32.82

Annexure V

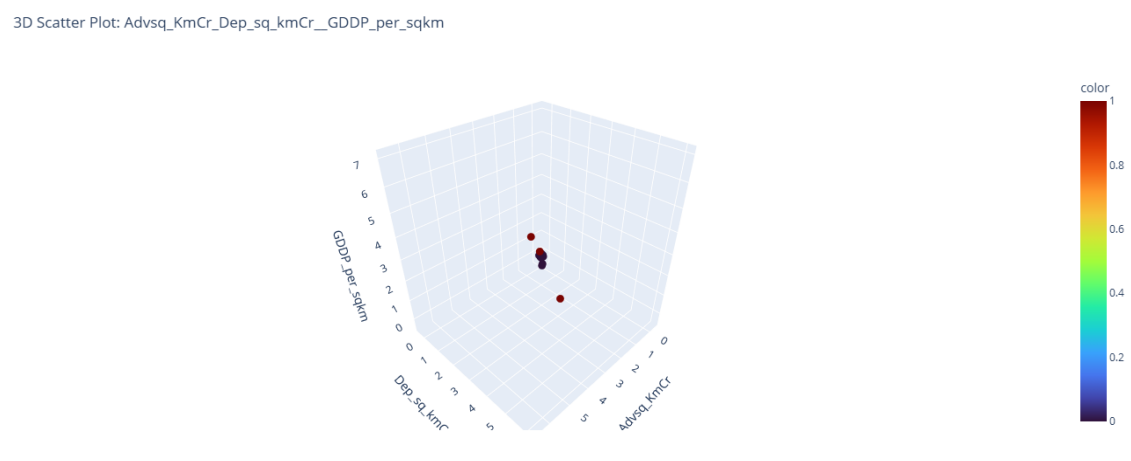
Clustering Graph for 11 parameters (75 districts)



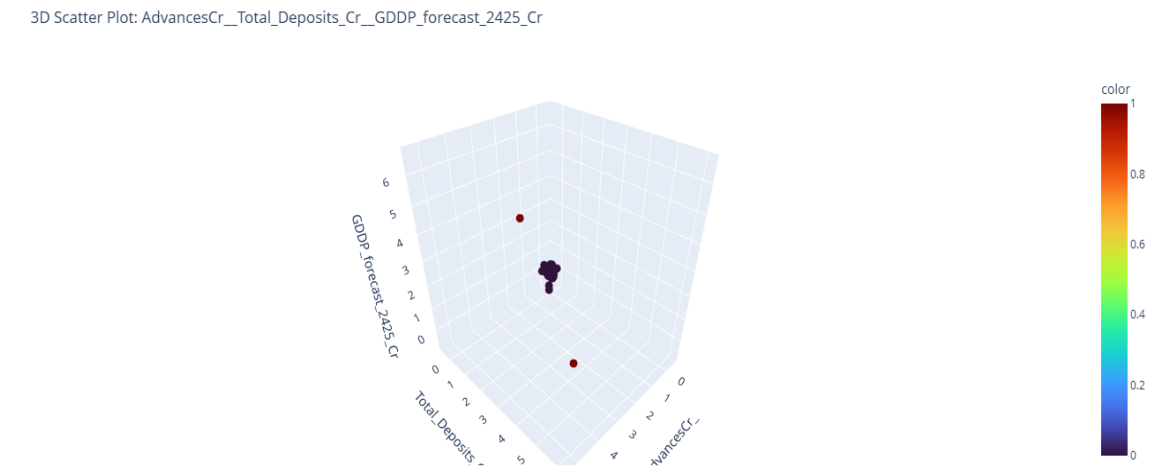
Area-Population-Advance-Deposit-GDDP



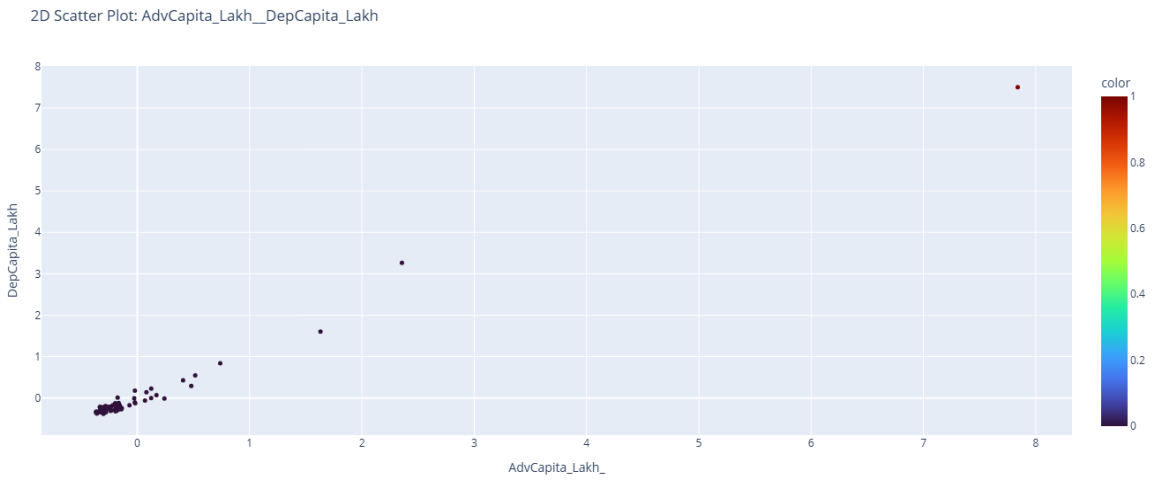
Advance per capita-Deposit per capita-GDDP per capita



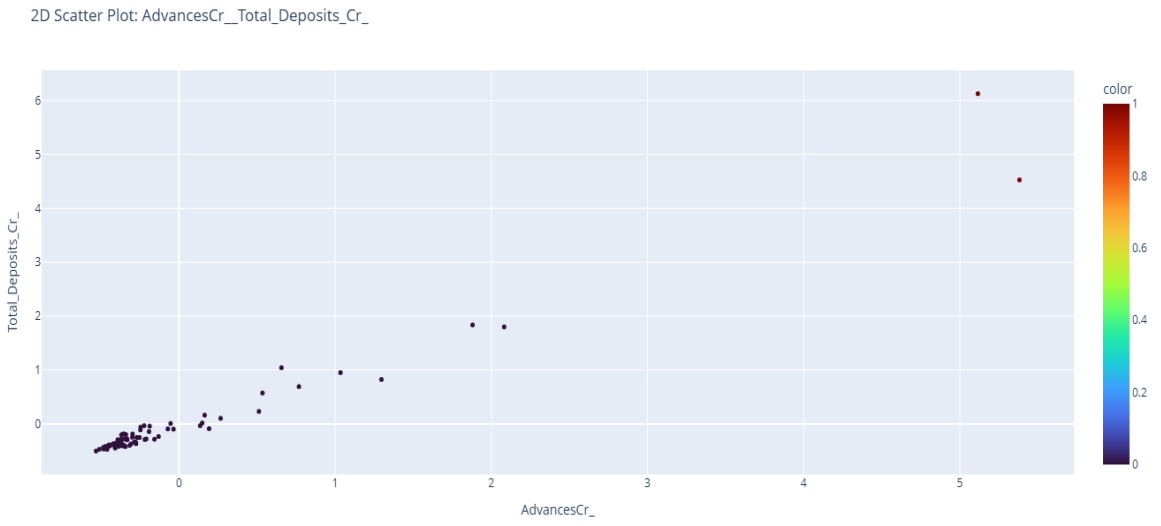
Advance per sq. km-Deposit per sq.km-GDDP per sq.km



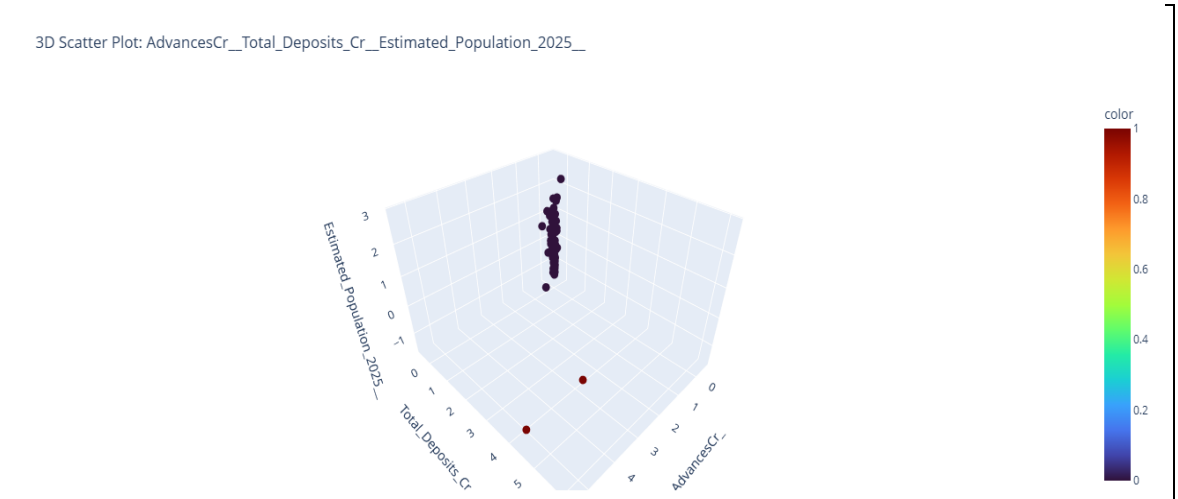
Advance-Deposit-GDDP



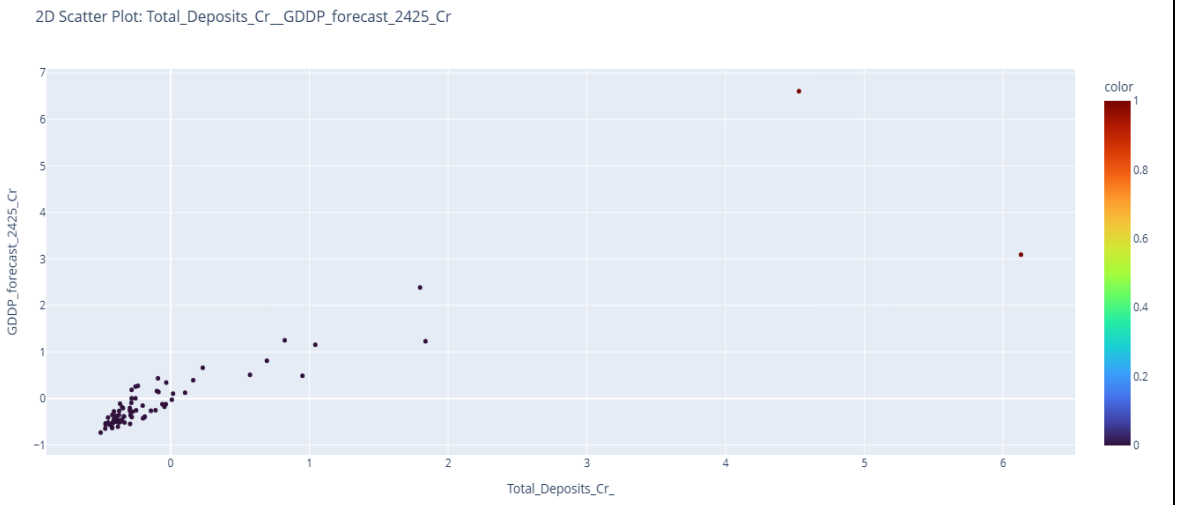
Advance per capita-Deposit per capita



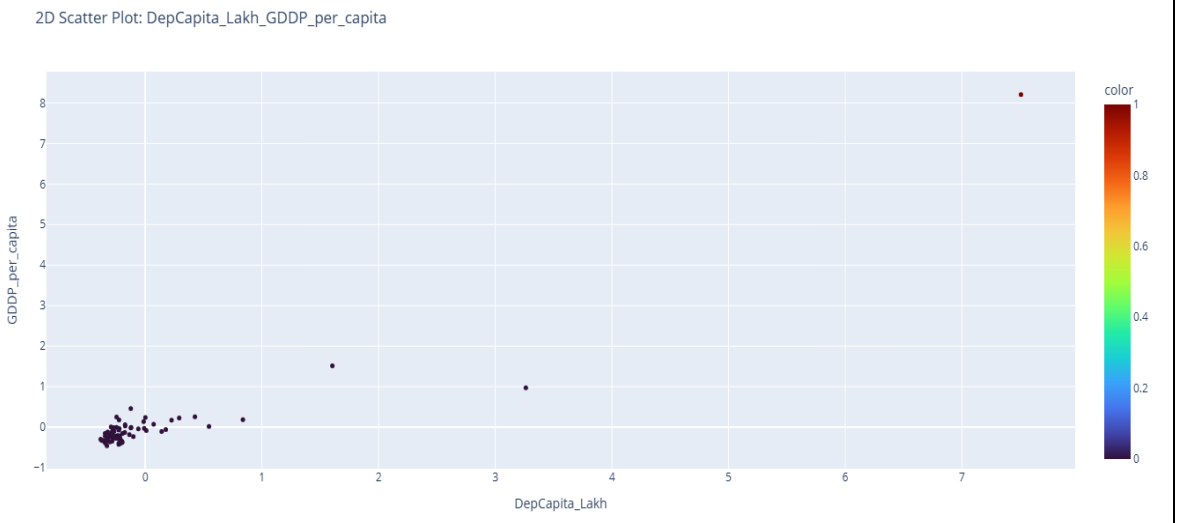
Advance-Deposit



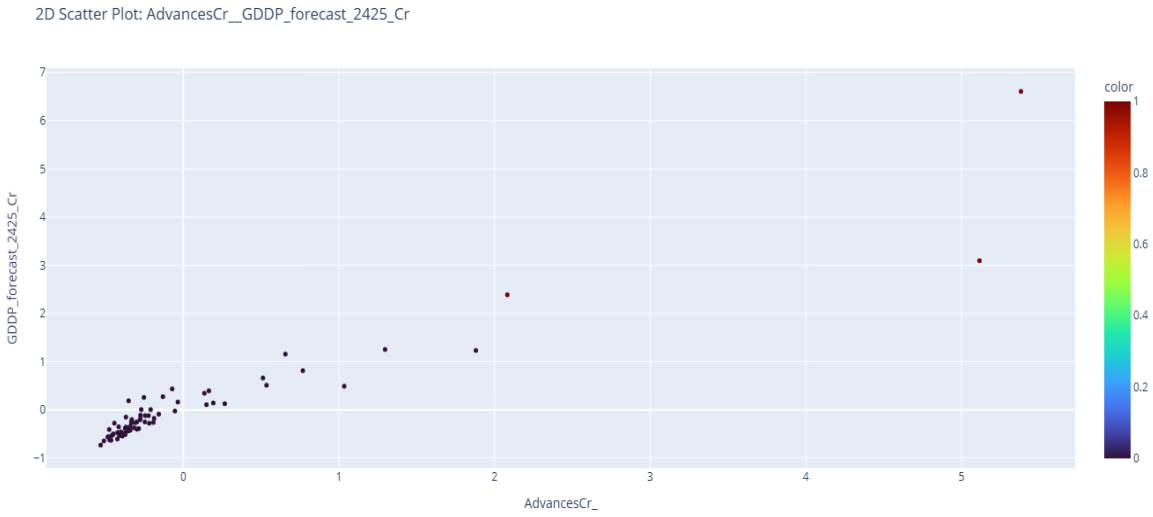
Advance-Deposit-Population



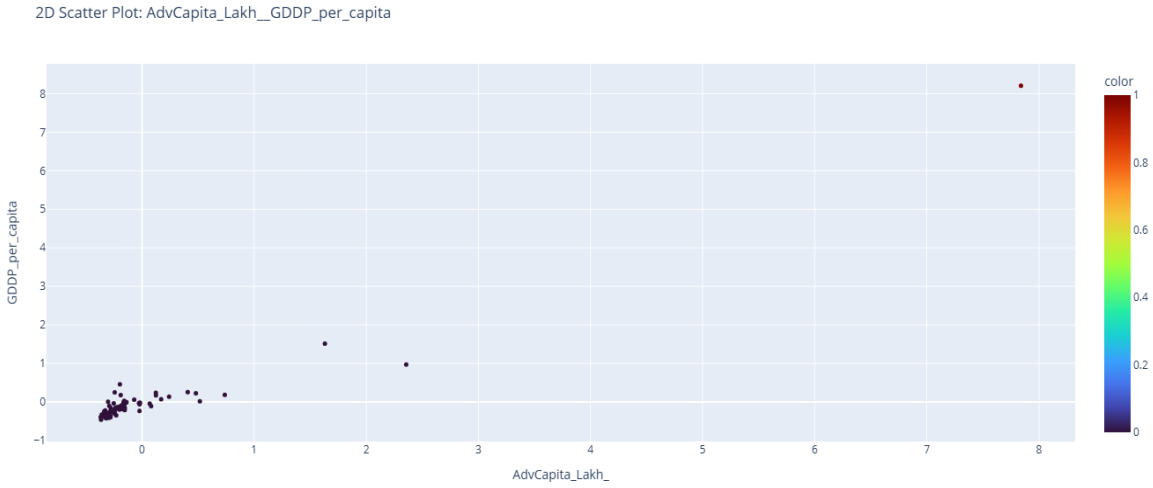
Deposit-GDDP



Deposit per capita- GDDP per capita



Advance-GDDP



Advance per capita-GDDP per capita

Annexure IX

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