International Journal of Science and Research (IJSR)
ISSN: 2319-7064
Impact Factor 2024: 7.101

The Significant Role of District Central Co-Operative Bank in Mobilizing Domestic Savings and Supporting Rural Finance in Madikeri District: An Empirical Analysis

Dr. M. N. Prakasha

Associate Professor, GFGC MADIKERI

Abstract: ***This study tests the hypothesis that District Central Cooperative Banks (DCC Banks) play a significant role in mobilizing domestic savings in India. To gather household savings—especially in rural and semi-urban regions—DCC Banks offer a range of deposit schemes, including savings, current, and fixed deposits, and serve as intermediaries between primary agricultural credit societies (PACS) and state cooperative apex banks134. The study evaluates the effect of DCC Bank schemes on domestic savings rates using econometric models and time-series data from 2000 to 2023. The findings suggest that, while DCC Banks substantially support rural savings and credit delivery, their contribution to the overall domestic savings rate is statistically moderate. Factors such as limited digital outreach, competition from commercial banks, and regulatory constraints—including most DCC Banks' unscheduled status—may account for this result274. In the current financial environment, the results highlight the need for policy reforms and technological upgrades to enhance the efficacy of DCC Banks in mobilizing domestic savings and supporting rural finance.***

Keywords: Dcc bank, Savings, Agriculture, Technology, Domestic.

1. Introduction

India's economic growth is significantly fueled by domestic savings, which provide the capital necessary for investments and underpin financial stability. Among the institutions that play a pivotal role in mobilizing household savings—particularly in rural and semi-urban areas—are District Central Cooperative Banks (DCC Banks). These banks function as vital intermediaries within the cooperative credit structure, linking primary agricultural credit societies (PACS) with state cooperative apex banks. DCC Banks offer a variety of deposit products, including savings accounts, fixed deposits, and recurring deposit schemes, targeting small and marginal depositors who might otherwise have limited access to formal financial services.

With their deep-rooted presence in local communities, DCC Banks have traditionally served as a reliable avenue for rural households to save and access credit. Their operations are especially important in regions where commercial banks and digital platforms have limited reach. By mobilizing local savings, DCC Banks help channel resources into productive activities, supporting agricultural development and rural entrepreneurship.

However, as India's financial sector undergoes rapid liberalization and modernization, DCC Banks face increasing competition from private banks, non-banking financial companies (NBFCs), and digital payment platforms. These developments have raised concerns about the effectiveness of DCC Banks in attracting and retaining deposits, as well as their overall contribution to domestic savings mobilization. This study tests the hypothesis that DCC Banks play a crucial role in the acquisition of domestic deposits in India, particularly in rural and semi-urban regions.

To evaluate the impact of DCC Bank schemes on domestic savings rates, this study employs econometric analysis using time-series data from 2000 to 2023. The research aims to provide insights that can guide policy reforms to strengthen the role of DCC Banks in promoting financial inclusion and supporting sustainable economic development.

The paper is organized as follows: Section 2 reviews the relevant literature; Section 3 describes the methodology; Section 4 presents the results; Section 5 discusses the findings; and Section 6 offers policy recommendations.

2. Literature Review

2.1 Domestic Savings in India

Domestic savings, comprising household, corporate, and public sector savings, play a crucial role in India's capital formation and economic development. Household savings, which historically constitute between 20 and 25 percent of GDP, are shaped by factors such as financial inclusion, prevailing interest rates, and income levels (RBI, various reports). The Reserve Bank of India (RBI) has projected continued growth in household savings, even as modern financial instruments and digital platforms present new opportunities and challenges.

In rural and semi-urban regions, where access to commercial banking services is often limited, households have traditionally relied on alternative financial institutions to deposit their savings. District Central Cooperative Banks (DCC Banks) have emerged as key players in this context, providing accessible and reliable savings options to rural populations. DCC Banks enable financial intermediation by mobilizing local savings and channeling them into productive investments, thereby supporting agricultural growth and rural development.

Several studies (e.g., Reddy, 2017; Thorat, 2019) highlight that cooperative banks, particularly DCC Banks, contribute significantly to financial inclusion by serving remote areas and catering to the needs of small and marginal savers. Their localized operations and community-based approach help build trust and encourage savings behavior among rural households. However, the effectiveness of DCC Banks in mobilizing domestic savings is increasingly challenged by competition from private banks, non-banking financial companies (NBFCs), and digital financial services, which offer greater convenience and higher returns to savers.

Reddy, Y.V. (2017). India and the Global Financial Crisis: Managing Money and Finance. Orient BlackSwan.

Thorat, U. (2019). Financial Inclusion and Growth: The Role of Cooperative Banks in India. RBI Bulletin.

2.2 Role of District Central Cooperative Bank Schemes

The primary objective of DCC Bank schemes is to provide accessible, low-risk savings and credit options to rural and semi-urban households, especially farmers and small entrepreneurs. DCC Banks offer various deposit products such as savings accounts, fixed deposits, and recurring deposits, catering to both regular and long-term savers. Their district-level network and proximity to primary agricultural credit societies (PACS) make them a crucial intermediary in the cooperative credit system, supporting rural financial inclusion and agricultural development52.

Previous research highlights the DCC Banks' role in mobilizing local savings and channeling them into productive rural investments. However, studies such as those by Gururaghavendra & Prasad (2023) note that while DCC Banks substantially support rural savings, their overall contribution to national savings is moderate due to limited outreach and competition from commercial banks and NBFCs. The trust and familiarity that DCC Banks enjoy in rural communities are significant assets, but their impact is constrained by operational and technological limitations53.

2.3 Challenges and Opportunities

DCC Banks face increasing competition from fintech platforms and private financial institutions, which offer higher returns, digital convenience, and a broader range of financial products. The attractiveness of DCC Banks has been further diminished by challenges such as undercapitalization, high non-performing assets (NPAs), and slow adoption of modern banking technologies53. Regulatory complexities, including dual control by state governments and the RBI, add to operational inefficiencies and governance issues53.

Despite these challenges, DCC Banks' deep-rooted presence in rural areas and their community-based approach provide opportunities for strengthening savings mobilization. Capacity-building initiatives, technological upgrades, and diversification of financial services can help DCC Banks remain relevant and resilient in the evolving financial landscape25.

3. Gaps in the Literature

while existing research examines macroeconomic determinants of savings and the role of commercial banks, the specific contribution of DCC Banks to domestic savings remains underexplored. Most studies focus on aggregate savings trends or the performance of large private sector institutions, with limited empirical analysis of DCC Banks' impact. This study addresses this gap by employing econometric methods to test the role of DCC Bank schemes in mobilizing domestic savings.

4. Methodology

4.1 Data Collection

This study uses annual time-series data from 2000 to 2023, sourced from credible institutions:

Domestic Savings Rate (DSR): Measured as a percentage of GDP, obtained from the RBI's Handbook of Statistics on Indian Economy.

DCC Bank Savings Mobilization (DCCB-SM): Total deposits mobilized by DCC Banks (in INR crores), sourced from NABARD and state cooperative bank reports.

Control Variables:
Real GDP growth rate, sourced from RBI.

Average interest rate on DCC Bank deposits, derived from state cooperative bank data.

Financial inclusion index, based on the CRISIL Inclusive report.

4.2 Econometric Model

A multiple regression model is specified to test the hypothesis regarding the impact of DCC Bank savings mobilization on the domestic savings rate:
DSRt=β0+β1DCCB-SMt+β2GDPt+β3IRt+β4FIt+ϵtDSRt=β0+β1DCCB-SMt+β2GDPt+β3IRt+β4FIt+ϵtWhere:
DSRtDSRt: Domestic savings rate at time tt (as a percentage of GDP).
DCCB-SMtDCCB-SMt: DCC Bank savings mobilization at time tt (log-transformed to address scale differences).
GDPtGDPt: Real GDP growth rate at time tt.
IRtIRt: Average interest rate on DCC Bank deposits at time tt.
FItFIt: Financial inclusion index at time tt.
ϵtϵt: Error term, assumed to be normally distributed.

Hypotheses
Null Hypothesis (H0H0): β1=0β1=0DCC Bank savings mobilization has no significant effect on the domestic savings rate.

Alternative Hypothesis (H1H1): β1≠0β1□=0DCC Bank savings mobilization has a significant effect on the domestic savings rate.

Paper ID: SR25621152539 DOI: https://dx.doi.org/10.21275/SR25621152539

International Journal of Science and Research (IJSR)
ISSN: 2319-7064
Impact Factor 2024: 7.101

This model allows for the empirical assessment of the relationship between DCC Bank deposit mobilization and overall domestic savings, while controlling for macroeconomic and financial inclusion factors.

4.3 Estimation Technique

The econometric model is estimated using Ordinary Least Squares (OLS) regression. To ensure the reliability and validity of the results, several robustness checks are performed:

- Stationarity: The Augmented Dickey-Fuller (ADF) test is employed to verify that all variables in the model are stationary, thus avoiding spurious regression results.
- Multicollinearity: The Variance Inflation Factor (VIF) is calculated to detect excessive correlation among the independent variables (DCC Bank savings mobilization, real GDP growth rate, average interest rate on DCC Bank deposits, and financial inclusion index).
- Heteroskedasticity: The Breusch-Pagan test is used to check for heteroskedasticity in the residuals. If heteroskedasticity is detected, robust standard errors are applied to ensure the statistical validity of the coefficient estimates.

These diagnostic procedures help to confirm the robustness of the empirical findings regarding the impact of DCC Bank savings mobilization on the domestic savings rate.

5. Data Limitations

This study relies on aggregate data, which may not fully capture regional differences in the mobilization of savings by District Central Cooperative Banks (DCC Banks). The data on DCC Bank deposits are sourced from official reports and may not account for informal or unrecorded savings activity within local communities. Additionally, certain operational and governance challenges faced by DCC Banks—such as underreporting or delayed data submission—could affect the accuracy and timeliness of the information. Despite these limitations, the dataset provides a reliable foundation for analyzing the overall contribution of DCC Banks to domestic savings mobilization in India.

6. Results

6.1 Descriptive Statistics

Table 1: Summarizes the key variables:

Variable	Mean	Std. Deviation	Minimum	Maximum	Observation
DSR (%GDP)	23.45	2.32	19.80	27.20	24
DCCB-SM (INR cror,log)	12.05	0.58	10.90	13.40	24
GDP Growth (%)	6. 12	1.89	3.20	9,70	24
Interest Rate (%)	6.25	0.85	4.50	7.80	24
Financial inclustion	62.34	12.67	40.20	85.20	24

Note: DCCB–SM refers to the log-transformed value of total deposits mobilized by DCC Banks.

The domestic savings rate (DSR) averaged 23.45% of GDP. DCC Bank savings mobilization showed steady growth, but constituted a relatively modest share of total domestic savings, reflecting the niche role of DCC Banks in the broader financial system.

6.2 Regression Results

Table 2: Regression Results for Domestic Savings Rate (2000–2023)

Variable	Co-efficient	Std. error	T- statistic	P-value
DCCB-SM	0.0012	0,008	1.50	0.148
GDP Growth	0.310	0.043	7.21	0.000
Interest Rate	0.098	0.037	2.65	0.015
Financial inclusion index	0.210	0,050	4.20	0.001
Constant	5.890	1.200	4.91	0.000
R-squared	0.770			
Adjusted R- squared	0.732			
Observation	24			

Interpretation:
DCCB–SM (log): The coefficient (β_1 = 0.012) is not statistically significant (p = 0.148), failing to reject the null hypothesis that DCC Bank savings mobilization has no significant effect on the domestic savings rate.

GDP Growth (β_2 = 0.310, $p < 0.01$): Strongly significant, indicating that higher economic growth is associated with increased domestic savings.

Interest Rate (β_3 = 0.098, $p < 0.05$): Significant, suggesting that higher interest rates on deposits encourage savings. Financial Inclusion Index (β_4 = 0.210, $p < 0.01$): Highly significant, highlighting the importance of financial inclusion for boosting savings.

The model explains 77.0% of the variation in the domestic savings rate, demonstrating its robustness. The results indicate that while DCC Banks support rural savings, their aggregate impact on national savings remains limited compared to broader macroeconomic and financial inclusion factors.

6.3 Robustness Checks

Stationarity: The Augmented Dickey-Fuller (ADF) test confirms that all variables are stationary at levels ($p < 0.05$).

Paper ID: SR25621152539 DOI: https://dx.doi.org/10.21275/SR25621152539

Multicollinearity: Variance Inflation Factor (VIF) values are all below 5, indicating no significant multicollinearity among the independent variables.

Heteroskedasticity: The Breusch-Pagan test ($p = 0.33$) suggests that there is no significant heteroskedasticity in the residuals.

7. Discussion

7.1 Interpretation of Findings

The study reveals that District Central Cooperative Banks (DCC Banks) have a limited impact on aggregate domestic savings rates, which contradicts the hypothesis that they play a significant role in mobilizing national savings. The primary reasons for this finding include strong competition from private banks and non-banking financial companies (NBFCs), which offer higher returns, digital convenience, and a broader range of financial products. Additionally, DCC Banks face challenges such as undercapitalization, regulatory constraints, and limited technological adoption, which restrict their ability to attract and retain deposits.

Despite these limitations, DCC Banks remain crucial in rural and semi-urban areas, where they serve as trusted intermediaries for local savings and credit. However, their overall contribution to national savings is overshadowed by broader macroeconomic factors such as GDP growth, interest rates, and financial inclusion.

7.2 Policy Implications

The results suggest that DCC Banks are not sufficient on their own to mobilize domestic savings at a national level. To strengthen their role, policymakers should consider the following measures:

- **Digital Integration:** Invest in digital banking infrastructure and mobile applications to improve accessibility and convenience for rural customers.
- **Rural Outreach:** Enhance collaboration with self-help groups, primary agricultural credit societies (PACS), and local governments to promote DCC Bank schemes in underserved regions.
- **Product Innovation:** Introduce flexible savings and investment products with competitive returns to attract a diverse range of savers.
- **Awareness Campaigns:** Launch financial literacy initiatives to educate rural households about the benefits of saving with DCC Banks and the risks of informal finance.

7.3 Limitations and Future Research

The study's reliance on aggregate data may obscure regional differences in the adoption and performance of DCC Bank schemes. Future research could use disaggregated data to examine urban-rural disparities and the specific challenges faced by DCC Banks in different states. Qualitative studies could provide deeper insights into savers' preferences and barriers to using DCC Bank services. Additionally, research on the impact of digital transformation and regulatory reforms on DCC Bank efficacy would be valuable for informing modernization strategies.

8. Conclusion

This study finds that District Central Cooperative Banks (DCC Banks) do not play a significant role in mobilizing aggregate domestic savings in India, rejecting the hypothesis of a major national impact. Econometric analysis reveals that while DCC Banks support rural savings and financial inclusion, their effect on the overall domestic savings rate is limited compared to macroeconomic factors such as GDP growth, interest rates, and financial inclusion. The limited effectiveness of DCC Banks is attributed to competition from private financial institutions, regulatory and operational challenges, and limited technological adoption.

To enhance their contribution, DCC Banks should embrace digital platforms, strengthen rural outreach, and innovate their product offerings. These reforms could help revitalize the role of DCC Banks in India's savings ecosystem, supporting financial inclusion and sustainable rural development.

References

[1] Athukorala, P.-C., & Sen, K. (2009). Saving, investment, and growth in India. Oxford University Press.
Reserve Bank of India. (2023). Handbook of Statistics on Indian Economy. RBI Publications.

[2] Gururaghavendra, V., & Prasad, M. (2023). Role of District Central Cooperative Banks in Rural India: Challenges and Opportunities. Indian Journal of Cooperative Banking, 15(2), 45–60.

[3] Sharma, A. (2018). Financial inclusion and savings mobilization in rural India. Indian Journal of Finance, 12(4), 22–35.

[4] Kumar, S., & Sharma, R. (2020). Investor's perception towards cooperative savings schemes: A case study of Himachal Pradesh. ResearchGate. Retrieved from https://www.researchgate.net

[5] NABARD. (2023). Annual Report on Cooperative Banking in India. NABARD Publications.

[6] Vivekananda Journal of Research. (2023). Saving Surge: Analyzing the Growth of Cooperative Saving Schemes in Rural India. Retrieved from https://9vom.in

[7] Sayyed, A., & Sayyad, A. (2015). A study on behavior of investors towards cooperative saving schemes in Pune city. Academia.edu. Retrieved from https://www.academia.edu