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Impact of Business Diversification on Productivity and Profitability of District Central Co-operative Banks of Punjab

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Abstract

Financial sector reforms posed two-fold challenges before the co-operative banks. On the one hand, they are supposed to provide cheap and timely credit to rural masses and on the other, they have to ensure their profitability and viability in turbulent interest regimes. Financial sector reforms, globalization of financial services and technology revolution have strengthened the commercial banking system to a great extent and have improved their internal working system. All these changes have resulted in improved productivity and profitability of the commercial banking system which enabled them to offer low cost services to customers. But all these changes have created problems for Co-operative Banking system. Due to its inbuilt weaknesses, structural loopholes and dependence upon agrarian loans, Co-operative Banks were not able to sustain their profitability. To be able to create a balance between their social objectives and economic compulsions these banks were required to change their working strategy. As a result, co-operative banks diversified their areas of operation. The present study finds out the impact of this diversification on productivity and profitability of Co-operatives. Punjab state was the locale of the study. Out of 20 District Central Co-operative Banks in the state sample of the study consists of six banks and the data pertains to a period of eight years, i.e., from 2000-2007. Three banks each showing the highest and the lowest profitability to business ratio is selected. Business diversification index has been developed to find out the impact on productivity and profitability. The paper concludes that business diversification in cooperative banks is not profitable. The shift of funds from agricultural to non-agricultural sector resulted by and large, into huge NPAs, which affected the banks' performance badly. This gives an insight to the reasons responsible for present condition of the co-operative banks.

Key Words

Diversification, Productivity, Profitability, Business per branch, Profit per branch, Business per employee, Profit per employee

INTRODUCTION

The co-operative credit structure in India is almost a century old. The co-operative banks with their rural ethos and large network are, without doubt, the best agencies for dispensation of short-term agricultural credit. They were the only institutions providing institutional credit to agriculture till the commercial banks emerged on the scene in a big way, particularly, after their nationalization in 1969 and social banking became their major thrust. Until the late sixties, farmers and rural borrowers could look to only one institutional credit agency in the co-operative sector to meet all their credit needs whether it related to seasonal agricultural operations, investment in land or redemption of debts. For historical reasons, two parallel wings of co-operative credit institutions have come into existence and developed, one for purveying short-term and medium term credit to the cultivators and the other for dispensing long-term credit at first for debt redemption and subsequently for investment in agriculture. Co-operative credit institutions have been accredited with playing a significant role in the deployment of credit for agriculture and rural sector. During the past few years, a supportive climate has been created for the development of co-operatives as democratic and autonomous businesses providing them with the opportunities for diversification. With the persistent efforts of the National Co-operative Union of India, the Central Government recently passed the Multi-State Co-operative Societies Act and also formulated a national co-operative policy that provides greater autonomy to co-operatives.

The Indian co-operative banks have a unique position in the rural credit delivery system of India. This sector of banking industry plays a crucial role in the dispensation of credit for agriculture and rural development. Over the years, they have remained the prime institutional agencies with their vast network, wider coverage and outreach extending to remotest parts of the country. Challenges before the co-operative banks are two-fold. On the one hand, they are supposed to provide cheap and timely credit to rural masses and on the other, they have to ensure their profitability and viability in turbulent interest regimes. Financial sector reforms, globalization of financial services and technology revolution have strengthened the commercial Banking system to a great extent and have improved their internal working system. All these changes have resulted in improved productivity and profitability of the commercial banking system which enabled them to offer low cost services to customers. But all these changes have created problems for co-operative banking system. Due to its inbuilt weaknesses, structural loopholes and dependence upon agrarian loans co-operative banks were not able to sustain their profitability. To be able to create a balance between their social objectives and economic compulsions these banks were needed to change their working strategy. As a result, co-operative banks diversified their areas of operation.

REVIEW OF LITERATURE

Various studies have been conducted to find the importance and different roles being performed by cooperatives. Aggarwal (1991) observed that since a large segment of social banking operations is done through concessional interest rates, subsidies and waiving off of loans, the profitability is marred by this. He also observes that bank size is a determinant of its profitability level through working of economics of scale. Amandeep (1993) studied the trends in profitability in commercial banks and examined the factors responsible for the erosion of banks' profitability. The results contradicted the traditional belief that priority sector financing and rural banking are responsible for declining of banks' profitability. His findings showed that organizational structure, fund management or overall inefficiency in operations is more responsible for declining profitability of these banks. Shah and Mishra (1993) have defined 'sound performance' in co-operative as characterized by financial viability, adherence to basic principles of co-operation, satisfaction of member objectives, centrality to member's economics, growth in membership and business, and member involvement in the co-operative affairs. Hunderkar (1995) examined productivity aspects in RRBs , suggested that (a) profit planning and cost control measures should be improved; (b) labour productivity improvement measures to be taken; (c) promote customer services by product development and diversification strategies; (d) market development strategies for mobilizing more savings to be initiated; (e) management audit for controlling other administrative costs to be done; (f) streamline the recovery process and (g) the funds of bank should be effectively managed. Niranjanraj and Chitanbaram (2000) observed that co-operative banks also need attention in developing models for evaluating their performance as they too are important part of Indian Financial Market. They opined that while measuring the performance of the DCCBs one has to consider not only their economic performance but their performance as co-operative organizations. They developed a model to assess performance of co-operative banks. They considered 23 parameters falling into four major groups for measuring the performance of DCCBs and assigned appropriate weights to each parameter. Mohan (2004) analyzed the impact of economic reforms on the banking sector in India. He observed that from the position of net loss in mid 1990s to recent years, the share of public sector banks in the profit of the commercial banking system has become broadly commensurate with their share in assets, indicating a broad convergence of profitability across various bank groups. He concluded that the increasing sophistication flexibility and complexity of products and servicing offerings make the effective use of technology critical for managing risk associated with banking business. Hsiu-Ling, et al. (2007) empirically examine the impact of financial development and bank characteristics on the operational performance of commercial banks in the Chinese transitional economy. Pooled cross-section (banks) and time-series data are employed in the empirical estimation, with the sample comprising a total of 14 Chinese banks. The period under consideration extends from 1996-2004. Fixed effects and random effects models are estimated. Empirical results exhibit higher levels of moneterization that can translate into better ROA performance for banks. The longer a bank has been in existence, the worse its ROA performance is found to be. Rather than leading to improved profitability, Chinese banks' efforts to develop non-traditional banking business actually have a negative impact on the ROA. The ROA performance of larger Chinese banks (in terms of assets) is found to be inferior to that of the smaller shareholding commercial banks.

From time to time various researchers have attempted to study the role of co-operatives in rural credit, and their competitiveness with commercial banks. Co-operative banks have progressed a lot after financial sector reforms especially in their new role i.e., non-agriculture sector credit. There is hardly any study which attempts to find out the impact of this diversification the working of co-operatives. So, the present study is an attempt to bridge that gap, and hence, finds out the impact of diversification on productivity and profitability of co-operative banks in Punjab.

NEED, OBJECTIVES AND RESEARCH METHODOLOGY

Business diversification process in co-operative banks started long time back in the year 1992 but its impact on working of co-operative banks has not been studied yet. No major study has been conducted to assess the impact on the performance of this co-operative credit structure under the aegis of new economic policy regime. Hence, a need was felt to study the comparative impact of business diversification on productivity and profitability of the co-operative banks in Punjab. The present study is an endeavor to examine impact of diversification on the productivity and profitability of various district credit co-operative banks of Punjab and to identify the gaps in the performance in terms of productivity and profitability and to suggest ways to improve the productivity and profitability of these district credit co-operatives banks of Punjab.

Sampling Design

Punjab state was the locale of the study. There are 20 district central co-operative banks in the state. The universe of the study includes these 20 banks and the data pertains to a period of eight years, i.e., from 2000-2007. The average profitability of these banks was compared to their business ratio is calculated, and then based on their profitability to business ratio these banks are arranged in an ascending order. Of these, three banks each showing the highest and the lowest profitability to business ratio is selected. These banks are:

Low Profit Banks

- District Central Co-operative Bank, Bathinda
- District Central Co-operative Bank, Amritsar
- District Central Co-operative Bank, Ferozepur.

High Profit Banks

- District Central Co-operative Bank, Nawanshahr
- District Central Co-operative Bank, Ludhiana
- District Central Co-operative Bank, Ropar.

Regression Analysis

In order to see the impact of business diversification on assets structure, liabilities structure and profitability of co-operative banks, regression analysis was done. Before going for regression analysis, business diversification index was developed for each year for each selected bank.

Business Diversification Index (BDI) : Business diversification was measured by the proportionate share of loans advanced to other than agricultural sector. Then the proportionate share during the base year of the study was taken as unity (1) and indices for successive years were accordingly developed. The trends in BDI were also calculated by using the trend analysis as mentioned above.

Regression Equations

Two types of regression equations were applied to see the impact of BDI on productivity and profitability. The equations were used as under :

- Y = a + bx and
- Log Y = Log a + b Log x

Where, Y = parameter of assets/ liabilities/profitability

a = a constant term

x = BDI

b = regression coefficient of BDI.

Finally linear form of regression equation was chosen for the study, keeping in view the following criteria :

(i) Higher value of R^2

(ii) Economic significance of BDI.

(iii) Logical significance of BDI

Business diversification was measured as an index of diversification. The loans advanced to other than agricultural sector were taken as the parameter of business diversification in cooperative sector. The proportion of loans advanced to other than agricultural sector was calculated for each year under study. Then the proportion worked out for the base year was treated as unity and on the basis of this, the indices for the remaining years of the study were computed.

Limitations of the Study

The data base of the study has been 2000 to 2007. The latest data could not be collected because of the delay in the audit process of some of the DCCBs under study and as such to maintain the uniformity in the data base, the time frame of the study has been 2000 to 2007. It is significant to mention here that for few of the DCCBs for which the data was available, the trend has been similar and does not affect the findings of this study.

RESULTS AND DISCUSSION : TRENDS IN BUSINESS DIVERSIFICATION

Before going in for seeing the impact of business diversification on profitability and productivity of cooperative banks, it is relevant here to study the trends in diversification itself during this period under study. The trends in business diversification in the selected district central cooperative banks are presented in table 1(a) and 1(b)

It is clear from the analysis that there was business diversification in the cooperative banks but not in the increasing order during the period under study. It remained fluctuating in DCCB, Ropar. It increased from 1.00 in 2000 to 1.46 in 2002, which declined consistently to 1.13 during 2006 and then increased to 1.24 in 2007. These fluctuations turned the positive compound growth rate (0.21 per

Table 1 (a)

Diversification Trends in Low Profit DCCBs

Year	Amritsar	Ferozepur	Bathinda
2000	1.00	1.00	1.00
2001	0.80	1.61	1.12
2002	0.82	3.21	0.99
2003	0.80	3.76	1.07
2004	0.83	3.52	1.19
2005	0.73	1.99	1.23
2006	0.52	1.06	1.02
2007	0.52	0.70	0.91
C.G.R	-8.04	-6.99	0.44
t-value	4.91*	0.73	0.26

* Significant at 1% level

Table 1 (b)

Diversification Trends in Low Profit DCCBs

Year	Nawanshahr	Ludhiana	Ropar
2000	1.00	1.00	1.00
2001	1.06	1.02	1.22
2002	1.00	0.97	1.46
2003	1.88	0.76	1.42
2004	1.03	0.81	1.23
2005	0.91	0.81	1.12
2006	0.95	0.53	1.13
2007	0.94	0.46	1.24
C.G.R	-1.55	-10.36	0.21
t-value	2.03*	5.57**	0.11

* Significant at 10% level, ** Significant at 5 % level

cent) of diversification index in DCCB, Ropar non-significant. On the other hand, in DCCB, Amritsar, there was continuous decline in diversification index from 1.00 in the base year to 0.52 in 2007, which registered a significant decline at the rate of 8.04 per cent compounded annually. In DCCB, Ferozepur, the diversification witnessed ups and downs throughout the period under study. It increased from 1.00 in the year 2000 to 3.52 in 2004, which ultimately declined to 0.70 in 2007.

However, the overall the decline came to be non-significant.

In DCCB, Nawanshahr, the business diversification index, by and large, reported declining trend, i.e. from 1.00 to 0.94 during the period under study. The business diversification in DCCB, Ludhiana declined significantly from 1.00 in 2000 to 0.46 in 2007 at a compound rate of 10.36 per cent per annum. However, in DCCB, Bathinda it declined insignificantly after witnessing fluctuations.

Overall, it can be said that the business diversification in competitive banks could not make pace with the concept. It may be due to the fact that about 70 per cent of the loss of interest due to non-performing advances was from the loan advanced to other than agricultural sector. That is why the cooperative banks could not advance consistently on the path of business diversification. However, there is diversification, is a fact.

IMPACT OF BUSINESS DIVERSIFICATION ON PRODUCTIVITY AND PROFITABILITY

The productivity in cooperative banks was measured as business per branch and business per employee, while the profitability was measured as profit per branch and income per employee. The impact of business diversification on productivity and profitability of the selected low-profit banks was seen in the form of regression equation and the same have been presented in Table 2.

Low Profit District Central Co-operative Banks

In DCCB, Bathinda, profit per branch was positively affected by business diversification. However, business diversification could explain only 42 per cent of the variation in profit per branch. The regression coefficient (16.41) came to be significant only at 10 per cent level. Other measures of productivity and profitability could not be affected by business diversification even at 10 per cent level of significance.

In DCCB, Amritsar the productivity in both the terms was inversely influenced by the business diversification. The value of R^2 for business per branch was 0.781 while the same for business per employee was 0.788. This showed that about 80 per cent of the variation in productivity measures was explained by business diversification in the bank. The regression coefficient of business diversification came to be -1065.07 and -174.58 for business per branch and business per employee respectively. This revealed that productivity would further decline with the increase in business diversification in the bank. As far as profitability of the bank is concerned, it is clear from the Table 2 (b) that income per employee was negatively affected by the business diversification as indicated by the

Table 2 (a)

Impact of Diversification on Productivity and Profitability in Bathinda DCCB

Variable	Constant	b of DI	t-value	R^2
Business per branch	1088.26	-226.83	0.247	0.010
Profit per branch	-11.21	16.41	2.080	0.419
Profit per employee	314.15	-135.05	0.580	0.053
Income per employee	13.35	-1.41	0.139	0.003

Table 2 (b)

Impact of Diversification on Productivity and Profitability in Amritsar DCCB

Variable	Constant	b of DI	t-value	R^2
Business per branch	1614.59	-1065.07	4.630***	0.781
Profit per branch	-4.49	8.17	1.565	0.290
Profit per employee	245.25	-174.58	4.726***	0.788
Income per employee	10.24	-4.40	2.497**	0.510

*** Significant at 1%, ** Significant at 5%

Table 2 (c)

Impact of Diversification on Productivity and Profitability in Ferozepur DCCB

Variable	Constant	b of DI	t-value	R^2
Business per branch	794.66	-16.47	0.244	0.010
Profit per branch	-1.00	1.99	2.071	0.417
Profit per employee	153.14	-5.15	0.431	0.030
Income per employee	9.77	0.38	0.705	0.077

significantly negative regression coefficient (-4.40). The overall analysis revealed that business diversification in DCCB, Amritsar has badly affected the profitability of the Bank. In DCCB, Ferozepur, the impact of business diversification on profit per branch was significantly positive, but at 10 per cent level. Its R^2 value worked at only 0.417 leaving 58 per cent of the profit per branch unexplained by the business diversification. The other measures of productivity and profitability were not affected significantly by the business diversification in DCCB, Ferozepur.

High-Profit DCCBs

In DCCB, Nawanshahr, productivity and profitability were not significantly affected by the business diversification Table 3 while in DCCB, Ludhiana, business diversification hit hard the productivity and profitability of the bank. The value of R^2 worked at 0.887 for business per branch, 0.919 for business per employee and 0.775 for income per employee. This indicated that 78 to 92 per cent of the variation in productivity and profitability was explained by business diversification. The regression coefficient of business diversification in case of business per branch, business per employee and income per employee came to be significantly negative. This revealed that business diversification adversely affected the productivity and profitability of DCCB, Ludhiana. All this can be explained keeping in view the high NPAs in non-agricultural sector in the bank. In DCCB, Ropar business diversification did not exert significant effect on productivity and profitability as indicated by the non-significant values of R^2 and regression coefficients in table 3(c).

Table 3 (a)

Impact of Diversification on Productivity and Profitability in Nawanshahr DCCB

Variable	Constant	b of DI	t-value	R^2
Business per branch	2232.99	-1001.71	0.719	0.079
Profit per branch	-16.85	38.14	1.523	0.279
Profit per employee	370.83	-180.82	0.611	0.059
Income per employee	14.07	-0.26	0.018	0.00005

Table 3 (b)

Impact of Diversification on Productivity and Profitability in Ludhiana DCCB

Variable	Constant	b of DI	t-value	R^2
Business per branch	1952.26	-1199.45	6.874***	0.887
Profit per branch	6.96	10.98	1.124	0.174
Profit per employee	383.13	-259.93	8.235***	0.919
Income per employee	15.94	-6.25	4.547***	0.775

*** Significant at 1%

Table 3 (c)

Impact of Diversification on Productivity and Profitability in Ropar DCCB

Variable	Constant	b of DI	t-value	R^2
Business per branch	1307.98	-234.48	0.325	0.017
Profit per branch	19.48	-1.57	0.092	0.001
Profit per employee	289.76	-65.50	0.369	0.022
Income per employee	14.086	-0.15	0.013	0.00003

Summary of Findings and Conclusion

Overall, it can be concluded that business diversification in cooperative banks is not profitable. Profitability is a pillar which provides opportunities for future growth and prospect for any organization. Any new venture is undertaken with objective to strengthen and improve the profitability position. In case of co-operatives the shift of funds from agricultural to non-agricultural sector resulted by and large, into huge NPAs, which affected the banks performance badly. This is the reason why cooperative banks are again shifting towards agricultural sector. Out of total loss of interest due to NPAs, about 70 per cent is accounted for by non-agricultural sector. Thus, the adverse effect of business diversification on productivity and profitability of cooperative banks caused the diversification almost to a halt or decline. Diversification step was undertaken to increase the scope of co-operatives and fulfill all types of credit need of the rural community, so co-operatives took a step to improve the position of farmers and to decrease the scope of moneylenders, which ultimately results in exploiting the farmers. But unfortunately the result of all these efforts by this organization was not that fruitful. At this point of time co-operatives cannot fulfill its objectives by only providing agricultural finances, they need to provide non-farm credit also, the only point of consideration is what kind of policies should be pursued for these type of advances so that rather than hampering the growth it results in improving the performance of co-operatives and which ultimately results in augmenting the resources for providing funds to agriculture sector. Co-operatives need to give serious thought to advances to non-agriculture sector. This crucial sector is not working in right direction which our research shows.

SUGGESTIONS

Proper steps should be undertaken to bring this sector on the right track. Only then, co-operatives can think of its long term sustainability. The following steps will go a long way to facilitate the improvement in the productivity and profitability of the Co-operative Banks in Punjab:

1. As high as 70 per cent of the loss of interest is due to non-performing advances against the loans advanced to other than agricultural sector. This is the underlying reason for the lack of consistent advancement on the path of business diversification by cooperative banks. Therefore, there is a need of acceleration of recovery machinery and proper credit evaluation of the customers, before sanctioning loan to them.
2. There is urgent need of introduction of advance technology for banking

activities in cooperatives because cooperatives are still using age old technology which is acting as a hurdle in its progress.

3. Bank staff needs to have more professional attitude and there should be proper training programmes in form of workshops, seminars and camps from time to time for bank employees, so that they are well aware of the new challenges as well as rules and regulations.
4. In this era of marketing, cooperative banks are far behind in marketing of their products. They are still known for their agriculture sector loans only. So effort should be made to increase the marketing activities for promotion of non-farm sector loans.
5. It is a need of the hour that more infrastructure should be there in cooperative banks to tackle the non-farm loans along with proper credit evaluation, modern technology and support from Punjab State Cooperative Banks.

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