

## **SUMMARY AND CONCLUSION**

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## CHAPTER V

### SUMMARY AND CONCLUSION

In this chapter a brief summary of work done, showing the focus, objectives, sources of data and methodology is presented. It is followed by the statement of salient findings based on the inferences drawn from the discussion of results of analysis. The findings are used to verify the hypotheses of the study and to draw specific conclusions and their policy implications.

#### **Focus**

Commercial banks are simple business or commercial concerns which provide various types of financial services to customers. A commercial bank is a profit seeking business firm with the business to hold deposits and make advances and investments with the object of securing profits for its shareholders. They have the power to create credit and thereby to contribute to the money supply in any economy.

As on March 31, 2004 there were 90 commercial banks (excluding RRB) in India. These commercial banks comprising of the State Bank of India (SBI) and its seven associates (eight in number), 19 nationalized banks as nationalised or public sector banks (NSB), 30 other scheduled banks (OSB) and 33 foreign banks (FB) as private sector banks.

The performance of Indian commercial banks can be measured on three fronts, *viz.*, profit and profitability (net profit, net profit to total Assets), efficiency (net interest income total assets, operating expenses to total assets, non-interest income to total assets) and stability (NPAs).

Their performance affects on the supply side, the economic growth as measured by real GNP / GDP and the liquidity preference and investment climate on the demand side. Both demand and supply are conditioned by the expectations of rate of economic growth on one hand and concern for price stability on the other, the later emerging as the target variable in monetary policy.

As the economy grew and became more sophisticated, the banking sector had to develop *pari pasu* to support and stimulate such growth and also structural transformation; especially in the context of increasing global integration. In response to this need, the New Economic Reform Policy (NERP) was formulated, in mid 1990. It also included several financial sector reforms allowing for substantial transformation and liberalization of the whole financial system, with the twin objectives of “maintaining price stability” and “ensuring availability of adequate credit to priority sectors” of the economy.

The bank rate is varied to influence money supply in general, institutional credit in particular and also investment and saving rates in the economy through its influence on market rate of interest for the deposits and advances of the scheduled commercial banks and other financial institutions.

The bank rate, administratively determined by the Reserve Bank of India, is a powerful instrument of monetary policy of the Government of India. Therefore, the earning power of the banks, especially scheduled commercial banks and their financial performance are affected by the Bank Rate. At the same time, the commercial banks in the country are committed to financially assist priority sectors of the economy to sustain growth rate of the economy, at levels exceeding six percent per annum and aiming at 8-10 percent in the next decade. These expectations and the bank rate are therefore the major determinants of the performance of the commercial banks in the country. That is the reason to take up this study.

### **Objectives**

Overall objective of the study is to evaluate the influence of the Bank Rate on the performance of commercial banks in India during the post-nationalization (of banks) period, with special attention to the period of economic reform. Specific objectives of the study are; (i) to study the performance of commercial banks during the post – (bank) nationalization period 1975 to 2004, (ii) to make a comparative study of the performance of commercial banks during pre- and post- (economic) reform periods (i.e) (1975-1990 & 1991-2004), (iii) to make a comparative study of performance of four categories of commercial banks viz., State Bank of India and its associates (SBI), Nationalised

Scheduled Banks (NSB), Other Scheduled Banks (OSB) and Foreign Banks (FB), (iv) to study the variation in bank rate and rationale for it, and (v) to study the relationship between the bank rate ( $R$ ) and the macro variables viz., economic growth ( $g$ ), foreign exchange reserve ( $FOREX$ ), rate of inflation ( $\rho=rho$ ), money supply ( $M_3$ ) and liquidity ( $L=M_1/M_3$ ) and (vi) to study the influence of Bank Rate on performance of the Banking Sector in India.

### **Methodology**

Thus, the study is based on the aggregate data for the four categories of commercial banks viz., (1) State Bank of India and its associates (SBI), (2) Nationalised Scheduled banks (NSB), (3) Other scheduled banks (OSB), and (4) Foreign banks (FB).

As the study involved mostly macroeconomic variables for the nation as a whole, it is based on secondary data on bank rate, related variables and variables measuring performance of the banks. For studying the performance of the commercial banks the data on the following variables were collected separately for the four categories of bank viz., SBI, NSB, OSB, FB and for their total.

The secondary data were collected mainly from the publications of RBI that include Statistical Tables Relating to Banks in India, Report of Trends and Progress of Banking in India, RBI bulletins, Report on Currency and Finance, Hand Book of Statistics on Indian Economy, Annual Reports of RBI, and circulars on credit policy. Several other publications such as the Annual Economic Surveys, CMIE Reports, and Statistical Abstracts of India were also consulted. The data were time series of annual values for the variables studied for the period from 1975-2004.

### **Analysis**

The data collected for the study were analysed with reference to each of the specific objectives. Tools of analysis included Growth Rate (CGR), trend analysis, comparative static analysis for selected years and testing mean difference for two periods, viz., period I (15 years from 1975 marking post banks nationalization and pre-economic reform period and 14 years of post reform period) ending 2004 which was the latest year for which data were available. The stationarity of the time series, problem of auto regressive errors, were first studied. Multiple regression analysis using ordinary least squares method

and stepwise regression method was the tool used for testing interrelationship among macro variables and the determinants of performance of the banks. All statistical tests were done for five percent level of significance only.

### **Salient Findings**

Salient findings of the results of analysis are presented below briefly.

### **Temporal Variation**

Temporal variations in macro variables were studied first with CGR and trend analysis.

### **Growth Rate**

The annual average compounded growth rate (CGR) was showing a progressive growth path in period I and further acceleration in period II it might be reasonably attributed to the economic reforms. The increase in economic growth (GDP) was necessarily accompanied by an increase in demand for investible fund *per se* and an increase in money supply in general. It was made possible only by the growth in supply of bank money – it was a strong base for the performance of the commercial banks in India and also a sign of a good investment climate in the economy. The liquidity preference was increasing largely due to economic reforms, encouraging current consumer spending. The rate of inflation was falling – it showed a small success in price stability due to reforms. A small rise in bank rate was seen to be reversed and became a strong decline in it. This might have contributed to price stability and helped the performance of the banks improve.

### **Trend**

To draw inference on the likely impact of economic reforms and for a more detailed dynamic picture of changes, the trend in time series of the variables was studied with a dummy variable (D) to show inter period differences. There was no trend in Bank rate, while for  $g$ ,  $M_1$ ,  $M_3$  and WPI, the trend was positive – and uptrend, while it was negative for liquidity (L). It implied that GDP had an uptrend, but economic reforms had just sustained but not improved it. A simultaneous negative trend in liquidity and Bank rate had implications for the performance of the commercial banks.

As shown by (DF and PP) tests, the time series of all the macro variables were stationary. Therefore the direction of causation was studied by multiple regression analysis.

### **Interaction**

In the multiple regression equation estimated to study the influence of macro variables on performance of banks (profitability) only GDP and price level were found to be significant.

The growth of GDP promoted the performance of the commercial banks, which provided the major part of investment funds for the growth. Thus, a strong backward linkage of economic growth with performance of the commercial banks was evident. Significantly rising general price level (i.e., inflation) would curtail the performance of the commercial banks.

Therefore a positive economic growth and control of inflation would greatly help the commercial banks in India improve their performance as measured by their profitability. It was then very logical to find a significant improvement in the performance of the commercial banks in the post reform period, which had a policy of growth with stability (in price level) or non-inflationary growth process. Among the excluded variables only  $M_1$  had some influence on performance of the banks, while  $M_3$  and  $r$  were very weak.

Another equation studied the influence of macro variables on bank rate. The Bank rate was influenced by GDP (negatively) and by  $M_1$  and WPI positively. The performance of the commercial banks had to act indirectly through  $M_1$  and had no direct influence on bank rate. This could be explained by  $M_1$  being intermediate target variables. The general price level (inflation) was an important macro variable with a strong bearing on the bank rate also.

### **Performance of Banks**

With the nationalization of major commercialization the thrust was on rural banking to support priority sector, mostly agriculture and rural artisans and it required wider spread of the banks. Therefore, the post nationalization, pre reform period saw

a significant growth in the number of bank branches. In the post reform period, the focus was more on institutional reforms than on expansion and it had reflected in smaller, yet positive CGR. This expansion was expected to improve banking activities in terms of mobilizing deposits, making advances and investment.

The mobilization of deposits was very impressive. Similar progress was seen in making advances and investments. Total assets of the banks had grown. There was every reason for the net profit of the banks to grow and its growth was as high as 24.68% in period I and a CGR of 35.43% in period II. Profitability also showed a significant growth. When profit and profitability had grown a similar growth was expected in the net worth of the banks. However, it had shown a smaller rate after reform all because the non - performing assets (NPA) were growing and acted as a constraint.

All the eight performance variables had a significant uptrend and impressive growth during the post-nationalisation period. The uptrend in the variables during post-nationalisation, pre-reform period (period I) continued during the post reform period without change in the trend rate. Thus, the economic reform had sustained the up trend. The economic reform policies had helped the commercial banks improve their profitability faster than the assets of the banks.

### **Performance of Bank Groups : Growth**

In the number of branches over all picture was that NSB had a lead role and SBI come next. In spite of a policy of privatization in economic reforms, the OSB continued to grow slowly, even in post-reform period. More than nationalization of major commercial banks, it was economic reforms that helped the growth of the deposits. The OSBs had benefited from the reform policies, relatively more than the other groups.

The economic reforms had helped all the four groups to increase their advances, but OSB and FB had performed relatively better. Definitely the economic reform had boosted investment by the banks, through a liberal policy of

diversification of portfolio of the banks. The total assets of the banks included advances, investments and other assets. Thus nationalization of major scheduled banks set off growth trajectory and economic reforms sustained it. OSB registered significant improvement. FB showed little gain while SBI and NSB registered a small decline, despite special support from policies of the government of India.

The net profit of the banks improved over the period under study. Over all, profitability of the banks had improved many folds after the reform. The foreign banks had done better while OSB suffered OSB suffered a decline. In the aggregate, it was seen that profitability of banks had improved and it was faster after the reform. There was a significant growth of net worth in both the period. The private sector banks (OSB and FB) increased their net worth, more than the public sector banks (SBI and NSB) in post reform period.

The positive contribution of all other three groups was offset by the stagnant performance of NSB, which failed to benefit from the reforms. The NSB was larger (in terms of number of branches) among the four groups. The economic reform had helped all the banks to substantially increase the loans and advances – their earning power. A second development in the commercial banks was diversification of portfolio. The performance of the commercial banks in improving their earning power, had significantly improved and it was helped by the reforms.

### **Efficiency**

With only exception of OSB, no bank group was able to significantly improve their efficiency in spite of the favourable environment created by the economic reforms. One reason was the growing size of non-performing assets and the business risk faced by the banks in an increasingly opened up, diversified and intensively competitive financial market.

The groups of SBI, NSB maintain CAR at 12, against the minimum of 8.0 - the norm prescribed by RBI. OSB was most successful in CAR, because of

their preference to keep the risk low. Second in rank came the SBI group which had all the backing of the government of India. The FB group stood at the top.

If any advance or credit facilities granted by bank to a borrower becomes – non-performing, then the banks will have to treat all the advances / credit facilities granted to that borrower as non – performing. The growth of NPA had affected the efficiency of all the groups. Only in 2004, there was turn for the better.

### **Profitability**

An analysis of profitability of banks showed that SBI group banks had to turn their attention from spread to concentration on business practices to increase interest earning. The variable SCR was the sum of SLR and CRR and represented the rate of pre-emption. Its effect on the private sector OSB group of banks was negative. NERP had positively helped OSB improve their performance in terms of their net profit. Interest earnings, credit / liability ratio and the market share would increase the profit of FB.

The cost of human resource of the banks was raising and it had a negative effect on net profit of the banks, this result was seen in spite of the scheme of voluntary retirement (VRS) of the staff and extensive computerization of the operations of the banks. The increase in the number of branches had a strong and significant negative effect on the net profit.

Assisting priority sector had in fact a positive impact on the net profit of the commercial banks.

In summary it could be said that interest and other earnings, mobilization of deposits, social banking, and economic reforms including financial sector reforms had significantly contributed to the net profit of the commercial banks. The rising cost of personnel (wage cost), indiscriminate increase in number of branches, credit/asset ratio, and pre-emption rate ( SCR) had caused a decline in the net profit.

As a percentage to GDP it was in the range of 0.55 to 1.52 between 1975-76 and 1986-87. In the next two years it shrank and accounted for only 0.95 percent of GDP in 1989-90. That year (1989-90) was the year of crisis in foreign exchange. As a percentage of GDP also increase from 1.65 % to 34.35 % during the same (post reform) period.

### **Bank Rate**

The standard rate at which RBI prepared to buy or discount bills of exchange or other commercial papers is defined as Bank Rate. It is an instrument of monetary policy to influence the creation of bank credit, which is an important component of money supply in the economy. If the economy is open then the changes in the bank rate will have an effect on the external flows and thus to improve balance of payments. In both absolute value and as a percentage of GDP, FOREX had grown significantly in post reform period. It is a factor to be considered.

There was no change in the rate in the pre reform period. But there were frequent changes in the bank rate after the introduction of new economic reform policy. It has changed 17 times. The bank rate remained high in the range of nine percent to 12 percent in the pre-reform period, while it progressively declined to touch the lowest rate of six percent in 2003.

### **Verification of Hypothesis**

The first specific objective of this study was to evaluate the dynamic growth path of the commercial banks in India after the nationalization of major scheduled commercial banks. The results showed that evaluated by CGR and trend, by the temporal exchange in the eight performance variables, there had been steady progress in all the groups and their aggregate. Profit, profitability, spread (number of branches), assets and net worth had shown significant improvement. Therefore, the first hypothesis of the study i.e., “the commercial banks in India have shown significant growth in terms of size of their business” stands empirically verified to be true.

The second hypothesis was that “in the post reform period, Indian Banking System has improved its performance further”. Attention was on growth, reach out and efficiency. The result of the comparative study of pre - reform period (period I) and post-reform period (period II) with the help of CGR, a dummy variable in the trend equation and the mean difference of key variables showed that reform (NERP) had sustained the progress in period I to period II in spread and accelerated the productivity and growth in deposits, advances, investments, assets, net worth, net profit and profitability. In the post reform period NPA appeared a drag on the growth path, but there was a change for the better in 2004. The findings on CAR, cost to income ratio and profitability of banks showed definite improvement in operating efficiency of the banks. This verifies the second hypothesis of the study to be true.

A comparative study of the four groups of commercial banks revealed, in all the eight performance variables all the groups had shown good progress. However, OSB had performed better than other groups in all but one performance variables the exemption being profitability. It was followed by FB, SBI and NSB in that order. The NSB with largest share in all total number of branches, pulled down over all performance of all banks. The problem with NSB was the size of NPA and the rising cost – both interest cost and wage cost, with relatively slower rise in the output prices of interest and non-interest incomes. Thus the third hypothesis: “there is significant difference in the performance of four groups of banks” is empirically verified to be true.

The fourth hypothesis was: “in spite of diversification of portfolio of the banks, the Bank rate continues to be effective in regulating the bank money”. The findings show that the effectiveness of the Bank rate is conditioned by the objectives of MCP and real growth of the economy (i.e., GDP and rate of inflation) and the free market environment for the banks. With the economic reforms, banks enjoy great functional autonomy and act in a least regulated competitive, forex influenced globalised market. In such a market the Bank rate has been reactivated. It has definite influence on liquidity and net worth of banks, and a little weak influence of the profit. This is the fourth hypothesis of the study and it was empirically verified to be true.

“The Bank rate has its effect on macro variables and thus continues to be a policy instrument to achieve economic growth with price stability”. This is the fifth hypothesis. The zero order correlation matrix for macro variables clearly showed that the Bank rate had significant correlation with pre-emption (CRR and SLR), Forex and  $M_3$ . Its correlation with GDP was also significant. However, it has weak correlation with the rate of inflation and liquidity. This was largely because  $M_3$  was the intermediate target in MCP and through  $M_3$ , growth with price stability was influenced. This the fifth hypothesis also verified to be true.

### **Conclusion**

Above summary of salient findings and the empirical verification of all the hypotheses, have helped drawing specific conclusion.

The period of this study, especially the post reform period (period II) marked the transitional period. During this period the banks had to perform in increasingly open deregulated money market. In the free market, the bank rate at best be a referral rate and an instruments of MCP for the RBI. Then the impact of the Bank rate on the performance of the banks could be studied only in partial analysis setting, i.e, a *ceteris paribus* condition. Then bank rate is but one of the monetary instruments and not only tool available for the RBI. This was the rationale for bank rate. This study showed that the banks rate had little effect that too indirectly on spread and profit of the commercial banks. The influence of BR on the performance of the commercial banks was through liquidity and net worth rather than on profit.

A new vibrant, dynamic, market oriented and highly competitive monetary system had emerged in the country by 2004, the last year this study. With wide functional autonomy granted to the banks, their success to emerge a competent competitor, sub serving the interest of the interest of the country and their own interest could be seen only in the years to come (2005 and beyond). These findings of this study conclusively show that there is valid reason to be optimistic about progressive growth in performance and efficiency of the commercial banks in India, in the year to come and the effect of Bank rate is conditioned by the monetary policy and real growth of the economy.

Above conclusion have a few implications for policy. They are briefly stated below.

### **Implications**

1. During the period of this study the performance of the commercial banks in India, as measured by their profitability (the ratio of net profit to total assts) has shown a significant uptrend. a comparison of pre- and post reform periods, shows however that there is no change in trend between the two periods. The economic reform had brought in institutional reforms and functional autonomy to the banks and also encouraged diversification of portfolio. If this market based, and un-regulated system had only sustained, but failed to accelerate the growth process of the banks, the reform itself requires a close study and changes.
2. One reason for the stagnant growth is the increasing cost of the services of the banks. Both interest cost and wage cost have increased, the latter very significantly. This is to be expected in a democratic country, with a strong trade union activism and high rate of inflation for a large part of the period studied. The voluntary retirement scheme (VRS) and extensive computerization of the banks, have not helped a reduction in wage cost. Therefore, micro level studies should be encouraged to evolve efficient practices for human resource management in the banks. The policy of social banking is blamed by many bankers. However, the findings of the study shows that financing priority sector had helped both private sector banks and foreign banks improve their profit while public sector banks have shown a setback. The reason should be identified by a more detailed study of primary data at bank level. One remedy is in improving productivity – of workers and total factor productivity of the banks. a small success in this measure is seen in the SBI group but the findings need further analysis to replicate the method in other groups.
3. A comparative study of the four groups of the commercial banks, reveals that the private sector banks (OSB) have performed better in assets, deposits, investments, net worth, assets to deposit ratio and operational efficiency but they suffered in their profitability and in spread. But, this is the smallest of the groups by the number of branches. The

largest group is NSB and it ranks last among the groups in terms of most of the performance variables. The RBI has to arrange a detailed study of the banks group wise and help banks with problems. Two important problems are: (i) spread of the banks with large number of unviable branches and (ii) diversification of portfolio increasing market risk of banks. Definitely social banking is not a real problem.

4. The problem of NPA is serious and it has drawn the attention of policy makers. It was growing in size in all groups upto 2002. The efforts of the banks to reduce it found little success in 2003. The enforcement of SARFAESI Act 2002 has succeeded in reducing NPA in money value and also as a ratio to advances and to assets, in the year 2004. The reduction is significant. The measure has to continue with efforts as to sustain and improve the progress in the years to come. Even granting that it is successful, it is only a remedy to the problem after it has occurred. Real cure is prevention not just healing the disease. The responsibility is with the RBI.
5. Then Bank rate is an instrument of monetary policy to regulate bank money. It is shown to have significant correlation with CRR.SLR, M<sub>3</sub>, Forex, and liquidity, the last two having a negative sign. Its correlation with GDP is weak, but statistically significant and negative, while it is positive with the rate of inflation. Its influence on the performance of the banks- the main focus of the study is strong and negative on liquidity and also net worth of the commercial banks. This is in agreement with the theoretical *a priori* expectations- as an instrument of regulations of banks credit. Its influence on net profit of the banks is very weak; the Bank rate had add no effect on most macro variables in the closed, much regulated economy in period I, while it appears to be effective in recent years; it has decreased in period II (post - reform) and is frequently changing, as it is a market sensitive variable. A reduction in Bank rate may help the banks but it is decided by the RBI, consistent with the monetary and credit policy (MCP) objective of growth with price stability.
6. Lastly, it is to be remembered that Bank rate and also the performance of the commercial banks depend upon the market conditions. Recent developments are: market oriented reforms, liberalization of deposits and lending rates, introduction of

liquidity adjustment facility (LAF) with repo and reverse repo rates providing a corridor for call money rates to vary (125 basis points now), launching of market stabilization scheme (MSS), increasing flow of Forex and RBI's efforts to sterilize its monetary impact. These have promoted a free globalized market for the banks, wherein the Bank rate and other monetary policy instruments will be reactivated. However, a healthy banking, requires further reforms such as inflation targeting along with  $M_3$  as intermediate target variable and fine tuning operational strategies to exploit market integration with care to reduce market risks arising from external shocks of a globalized economy. The RBI has to respond to the changing conditions quickly and effectively.