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# Profitability analysis of selected Nationalised banks in India

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**ABSTRACT**

Banking in India originated in the last decades of the 18th century. After the nationalization of banks, the major concern was the productivity and profitability of public sector banks. It was believed that the new direction given to the banks since their nationalization in 1969, and the slacking productivity, has led to declining trends in the profits and profitability. This study is conducted to know the profitability of selected Nationalised Indian banks. In order to access and evaluate the profitability of selected nationalized banks of India, financial ratios of the different banks have been studied and correlation analysis and multiple regression techniques are used. The study shows the explanatory power of some variables such as NII, C/D ratio, Business per employee, Profit per employee are significantly high and Interest spread, OE, P&C are found with low explanatory power. To strengthen the position further, the public sector banks must strive to greatly enhance efficiency through a control over increasing non-interest income, and maximizing business per employee and per branch, etc.



## Introduction

The terms 'Profit' and 'Profitability' are used interchangeably sometimes. But in real sense, there is a difference between the two. Profit is an absolute term, whereas, the profitability is a relative concept. However, they are closely related and mutually interdependent, having distinct roles in business. Profit refers to the total income earned by the enterprise during the specified period of time, while profitability refers to the operating efficiency of the enterprise. It is the ability of the enterprise to make profit on sales. It is the ability of enterprise to get sufficient return on the capital and employees used in the business operation.

As Weston and Brigham rightly notes "to the financial management profit is the test of efficiency and a measure of control, to the owners a measure of the worth of their investment, to the creditors the margin of safety, to the government a measure of taxable capacity and a basis of legislative action and to the country profit is an index of economic progress, national income generated and the rise in the standard of living", while profitability is an outcome of profit. In other words, no profit drives towards profitability. Firms having same amount of profit may vary in terms of profitability. That is why R. S. Kulshrestha has rightly stated, "Profit in two separate business concerns may be identical, yet, many a times it usually happens that their profitability varies when measured in terms of size of investment".

BANKING Sector Reforms have changed the face of Indian banking industry. These reforms have led to an increase in resource productivity, increasing level of deposits, credits and profitability and decrease in non-performing assets. However, the profitability, which is an important criteria to measure the performance of banks in addition to productivity, financial and operational efficiency, has come under pressure because of changing environment of banking. An efficient management of banking operations aimed at ensuring growth in profits and efficiency requires up-to-date knowledge of all those factors on which the banks profit depends. Profitability is a rate expressing profit as a percentage of total assets or sales or any other variable to represent the relationship. In fact, there may be various dimensions of profitability analysis.

## Literature Review

As banking system plays a pivotal role in the economic development of a nation, it has caught the eyes of many researchers, administrators, departments, committees. Before examining the impact of liberalization on productivity and profitability of PSBs, it is necessary to review the literature on the subject. A number of studies have been conducted in India which examined the financial performance of the commercial banks. To mention, a few of these are:

The following articles have been reviewed for this study:

- Shah (1977), in his various papers discussed bank profitability and productivity. He expressed concern about increased expenses and overheads. Slow growth in productivity and efficiency, wasteful work of banks that higher profitability can result from increased spread and that innovations have a limited role. He favoured written job descriptions for improvement to staff productivity. He also emphasized reduction of costs, creation of a team spirit improvement in the management for improving bank profitability and productivity.
- V.V. Angadi and V. Johan Devraj (1983) in their study, "Productivity and profitability of banks in India" aimed at assessing the productivity and profitability of Indian scheduled commercial banks during the period of 1969-80. According to them, the profitability of banks is governed by several factors, some of them endogenous and some of them exogenous to the system and yet structural. As far as profitability was concerned various changes had their impact on banks earnings, expenses, and overall profitability during the period under review. A thorough analysis of volume and pattern of expenses has been made. The pattern of aggregate earnings and expenses analyzed above has an impact on the levels of profits made during the period. Regarding productivity, They concluded that changes in the earnings, expenses, working funds, priority sectors, growth of bank offices, employees, credit deposit ratio, investment

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deposit ratio, interest rate structure, patterns of deposit etc….

- Durgadas Roy (1986) in he article entitled bank profitability: social role is no barrier, studied that the productivity and profitability of scheduled commercial banks in India and revealed that during 1970-80, profitability and productivity ratios of foreign banks were the highest.
- Kiran Chopra (1987) in her book entitled *Managing Profits, Profitability and Productivity in Public Sector Banking*, studied the emerging trends in profits and profitability of some selected public sector banks. She is of the opinion that there is a need to introduce management essentials for the better managements of profits and productivity of public sector banks and recommended proper management of both costs as well as earnings
- Jagwant Singh (1990) in his thesis entitled, "Productivity in Indian Banking Industry," has discussed the trends and changes in the productivity; in the Indian banking Industry he used indicators to analyze productivity trends. Banking being service industry, greater attention has been paid to employee productivity. He has made cross-sectional and inter-temporal analysis.
- Amandeep (1991) is of the opinion that the PSBs have become an instrument to meet effectively the needs of the development of the economy to affect the total socio-economic transformation, so the profitability of the bank operations has been affected adversely.According to her, the profitability of a bank is determined and affected mainly by two factors: spread and burden. The other factors determining bank's profitability are credit policy, priority sector lending, massiv geographical expansion, increasing establishment expenses, low non-fund income, deposit composition etc. she has chosen 11 factors affecting Bank's profitability to identify the most significant variable affecting bank profitability. She has used correlations and regression analysis. She concluded that priority sector lending was not a drag on bank's profitability.
- C.R. Kothari (1991) in his book entitled, *Social Banking and Productivity*, analyzed the productivity, profitability and social objectives in public sector banks and stressed the need for better profitability in banks to ensure the bank's role in the development of an economy.
- Satyamurty (1994), clarified the concepts of profits, profitability and productivity applicable to the banking industry. It is organized by the bank managements that the pressure on the profitability is more due to the factors beyond their control. He suggested the technique of ratio analysis to evaluate the profit and profitability performance of banks. He opined that endeavors should be made to improve the spread performance through better funds management.
- Sanjay Kaushik (1995) in his thesis entitled, "Social objectives and profitability of Indian banks," has discussed the effect of social objective/obligations on the profits and profitability of the Indian commercial banking industry. He is of the opinion, that the nationalization of the banks had a more dampening effect on profitability. The profitability of nationalized banks is adversely affected by a hot of factors, including social objectives. So, to know there relative significance, he has used a multivariate approach *viz.*, ratio analysis, per annum growth rates, correlation analysis, regression analysis and factor analysis. He concluded that the social obligation was not a major drag on profitability of banks. He suggested various measures to improve the profitability.
- Murty (1996), analyzed various factors, which can be helpful to improve the profitability of public sector banks. The study examine the impact of monetary policy and market interest rates on the bank profitability and also suggest various measures to improve the profitability of the public sector banks in India.
- Sarker and Das (1997), compares the performance of public, private and foreign banks for the year 1994-95 by using measures of profitability, productivity and financial management. They found PSBs performing poorly with the other two categories. However, they give caution that no firm inference can be derived from a comparison done for a single year.
- Prasantha Athma (1997) in his doctoral dissertation, "Performance of Public Sector Commercial Banks – a Case Study of State Bank of Hyderabad," has evaluated the performance SBH by selecting certain parameters like deposit mobilization, analyses of advances, credit deposit ratios, interest spreads, employee productivity, customer services, profit as a percentage of working funds etc. One major conclusion drawn by him is that the profits of SBH showed an increasing trend, indicating a more than a proportionate increase in spread, then in burden. He has stated that there is a gradual increase in the percentage of profit on the working funds over the study period showing the efforts made by the bank (1980—94). In increasing the profits by recovering the operating costs fully.
- Kewaljeet Singh (1999) in his article, "Profitability performance of nationalized banks: Some Issues," makes an attempt to analyze the profitability performance of the State Bank of Patiala keeping in mind the changing economic reward. According to him, percentage in growth in gross income after the reform process started in 1991-92 decreased from a growth of 201.92 per cent during 1985 to 1989-90 to a growth of 74.80 per cent during 1990-91 to 1994-95 (the period of liberalization). As a result of liberalization, there is continuous decline in the profits of commercial banks.
- Passah, P.M. (2002), analyzed the Indian financial system comprising the commercial banks, the financial institutions and the capital markets. He concluded that Indian banking has undergone a very rapid transformation in the past three decades. There is a sea change in the Indian banking sector in the post-financial sector reforms.
- Shveeta and Satish Verma (2002), analyzed the inter-temporal profitability behavior of SBI group, other nationalized and foreign banks in India. They empirically estimated factors influencing the profitability of banks. They concluded that priority sector advances (in case of PSBs) and spread and burden (for all categories of banks) were the major and significant factors that influence the profitability of banks.

**Research Methodology**

In this study, an attempt has been made to identify the key determinants of profitability of Public Sector Banks in India.

**Objectives:**

- To measure the profitability of nationalized banks.
- To identify the factors affecting profitability of nationalized banks.
- To compare the performance of the selected nationalized banks as regards their profitability and related factors.

**Data Collection**

Five leading nationalized bank of India have been selected for this study. Period of study comprises of 10 years i.e. from 2001-02 to 2010-11.

1. State bank of india
2. Bank of baroda
3. Union bank of india
4. Indian bank
5. Indian overseas bank

The secondary data obtained from the Annual reports of the banks for the period under study form the main data source.

**Variables Under Study**

The following Seven variables have been selected which are affecting the profitability of the banks:

1. Net Profit as % of Total Funds (Net Profit After Tax) –Y
2 Interest Spread(%) - $X_1$
3 Non Interest income/Total Funds(%) - $X_2$
4. Credit/Deposit Ratio(%) - $X_3$
5 Operating Expense/Total Funds(%) - $X_4$
6. Provision & Contingency/Total Funds(%) - $X_5$
7 Business Per Employee(%) - $X_6$
8. Profit Per Employee(%) - $X_7$

**Techniques of Data Analysis**

In order to access and evaluate the profitability of selected nationalized banks of India, financial ratios of the different banks have been studied and a computerized correlation analysis and multiple regressions are undertaken. and overall analysis has been made. But the above mentioned banks are analyzed using correlation and multiple regression analysis.

**Interpretation:**

- First column of Correlation Table shows that except Interest spread ($X_1$),Non Interest income/total funds($X_2$),and Operating expense/total funds($X_4$) , all the other variables are highly correlated (ranging from 0.74 to 0.89) either positively or negatively with the dependent variable, Net Profit (Y).
- This means that we may have chosen a fairly good set of independent variables ( $X_3$, $X_5$, $X_6$ and $X_7$) to correlate with Net Profit (Y). Interest Spread ($X_1$), Non Interest income ($X_2$) and operating expense($X_4$) are rightly negatively correlated with Net Profit.
- First column of Correlation Table shows that except Interest spread ($X_1$) and Operating expense/total fund($X_4$) , all the other variables are highly correlated (ranging from 0.17 to 0.97) either positively or negatively with the dependent variable, Net Profit (Y).

This means that we may have chosen a fairly good set of independent variables ( $X_2$, $X_3$, $X_5$, $X_6$ and $X_7$) to correlate with Net Profit (Y). Interest Spread ($X_1$) and operating expense($X_4$) are rightly negatively correlated with Net Profit.

**Interpretation:**

- First column of Correlation Table shows that except Interest spread ($X_1$) and Operating expense/total funds ($X_4$) , all the other variables are highly correlated (ranging from 0.27 to 0.96) either positively or negatively with the dependent variable, Net Profit (Y).
- This means that we may have chosen a fairly good set of independent variables ( $X_2$, $X_3$, $X_5$, $X_6$ and $X_7$) to correlate with Net Profit (Y). Interest Spread ($X_1$) and operating expense($X_4$) are rightly negatively correlated with Net Profit.

**Interpretation**:

- First column of Correlation Table shows that except Operating expense/total funds($X_4$) , all the other variables are highly correlated (ranging from 0.54 to 0.99) either positively or negatively with the dependent variable, Net Profit (Y).
- This means that we may have chosen a fairly good set of independent variables ( $X_2$, $X_3$, $X_5$,$X_6$ and $X_7$) to correlate with Net Profit (Y). Operating expense($X_4$) are rightly negatively correlated with Net Profit .Here $X_1$, $X_2$, $X_3$, $X_5$, $X_6$, $X_7$ are highly correlated with net profit (Y).

**Interpretation**:

- First column of Correlation Table shows that except Interest spread($X_1$) and Operating expense/total funds($X_4$) , all the other variables are highly correlated (ranging from 0.79 to 0.92) either positively or negatively with the dependent variable, Net Profit (Y).
- This means that we may have chosen a fairly good set of independent variables ( $X_2$, $X_3$, $X_5$, $X_6$ and $X_7$) to correlate with Net Profit (Y). Interest spread($X_1$) and Operating expense($X_4$) are rightly negatively correlated with Net Profit .Here $X_2$, $X_3$, $X_5$, $X_6$, $X_7$ are highly correlated with net profit (Y)

**Regression Analysis**

A Regression Analysis is done to explain the variation in one variable (dependent variable), based on variation in one or more other variables (independent variables).

The regression model of the following form has been used by entering all the seven independent variables in the model:

**Interpretation**:

**❖State Bank Of India**

**The estimated regression model for State Bank of India is:**

Net Profit = 0.437 - 0.057 $X_1$-0.988 $X_2$ +0.012 $X_3$+0.010 $X_4$-0.005$X_5$-0.176 $X_6$+24.059 $X_7$………………..(2)

- From the above equation it can be inferred that if 'interest spread' is increased by 1%, „Net Profit" will be decreased by 0.057%, assuming all the other variables to be constant. There is an Inverse relationship between interest spread and net profit.
- If there is increased 1% in Non interest income, Net profit will decreased by .988%. Inverse relationship exists between these two variables.
- Net profit increased by 0.012% and 0.010% if credit /deposit ratio and operating expense increased by 1% respectively .There is direct relationship between variables and net profit.
- Similarly Net profit decreased by 0.005% and 0.176% if Provisions & contingency and business per employee decreased by 1%. There is an inverse relationship between variables and Net profit.
- Here if there is a increase of 1% in profit per employee net profit also increase by 24.059 %. It is positively correlated with net profit.
- The value of $R^2$ equals 0.944 indicating 94.4% of variations in Net profit are explained by interest spread, non interest income, credit deposit ratio, operating exp., provision & contingency, BPE, PPE.
- The value of $R^2$ is significant as indicated by p value(0.182)

**❖Bank Of Baroda**

The estimated regression model for Bank of Baroda is:

NetProfit=1.019+0.025$X_1$-0.051$X_3$+0.034$X_4$-0.256$X_5$-0.080$X_6$+12.757$X_7$

**Interpretation:**

- From the above equation it can be inferred that if 'interest spread' is increased by 1%, „Net Profit" will be increased by 0.025%, assuming all the other variables to be constant. There is an positive relationship between interest spread and net profit.
- Net profit decreased by 0.051% if credit /deposit ratio increased by 1%. There is inverse relationship between credit deposit ratio and net profit.
- Net profit increased by 0.034% if Operating expense increased by 1%.

There is a direct relationship between X4 and Net profit.

- Here if there is a increase of 1% in provisions & contingency ,net profit also decrease by 0.080%. It is inversely correlated with net profit.
- Net profit increases by 12.757% if profit per employee increases by 1%.it is positively correlated with Net profit.
- The value of $R^2$ equals 0.937 indicating 93.7% of variations in Net profit are explained by interest spread, non interest income, credit deposit ratio, operating exp., provision & contingency, BPE, PPE.

- The value of $R^2$ is insignificant as indicated by p value(0.065)

❖**Union Bank Of India**

The estimated regression model for Union Bank of India is:

Net Profit=0.524 - 0.075 $X_1$-1.584 $X_2$ +0.004 $X_3$+0.245 $X_4$+0.179 $X_5$-0.207 $X_6$+40.057 $X_7$

**Interpretation**:

- From the above equation it can be inferred that if 'interest spread' is increased by 1%, Net Profit will be decreased by 0.075%, assuming all the other variables to be constant. There is a inverse relationship between interest spread and net profit.
- Net profit decreased by 1.584% if non interest income increased by 1%. There is a inverse relationship between variables.
- Net profit increased by 0.004% if credit /deposit ratio increased by 1%.There is positive relationship between credit deposit ratio and net profit.
- Similarly Net profit increased by 0.245% if Operating expense increased by 1%. There is a direct relationship between Operating expense and Net profit.
- Here if there is a increase of 1% in provisions & contingency ,net profit also increase by 0.179%. It is directly correlated with net profit.
- Net profit decrease by 0.207% if business per employee increase by 1%.it is negatively correlated with net profit.
- Net profit increases by 40.057% if profit per employee increases by 1%.it is positively correlated with Net profit.
- The value of $R^2$ equals 0.966 indicating 96.6% of variations in Net profit are explained by interest spread, non interest income, credit deposit ratio, operating exp., provision & contingency, BPE, PPE.
- The value of $R^2$ is significant as indicated by p value(0.114).

❖**Indian Bank**

The estimated regression model for Indian Bank is:

Net Profit=- 4.3932- 1.095$X_1$+0.629 $X_2$+0.145 $X_3$ +0.614 $X_4$ +0.905 $X_5$ +1.066 $X_6$-123.537 $X_7$

**Interpretation:**

- From the above equation it can be inferred that if 'interest spread' is increased by 1%, Net Profit will be decreased by 1.095%, assuming all the other variables to be constant. There is an inverse relationship between interest spread and net profit.
- Net profit increased by 0.629% if non interest income increased by 1%. There is a direct relationship between variables.
- Net profit increased by 0.145% if credit /deposit ratio increased by 1%.There is positive relationship between credit deposit ratio and net profit.
- Similarly Net profit increased by 0.614% if operating expense increased by 1%. There is a direct relationship between Operating expense and Net profit.
- Here if there is a increase of 1% in provisions & contingency, net profit also increase by 0.905%. It is directly correlated with net profit.
- Net profit increase by 1.066% if business per employee increase by 1%.it is positively correlated with net profit.
- Net profit decreases by 123.537% if profit per employee increases by 1%.it is negatively correlated with Net profit.
- The value of $R^2$ equals 0.821 indicating 82.1% of variations in Net profit are explained by interest spread, non interest income, credit deposit ratio, operating exp., provision & contingency, BPE, PPE.
- The value of $R^2$ is significant as indicated by p value(0.498)

❖**Indian Overseas Bank**

**The estimated regression model for Indian Overseas Bank is:**

NetProfit=0.562 - 0.191 $X_1$ +1.847 $X_2$ +0.006 $X_3$ +0.357 $X_4$-0.103 $X_5$-0.187 $X_6$+25.931 $X_7$

**Interpretation:**

- From the above equation it can be inferred that if 'interest spread' is increased by 1%,Net Profit will be decreased by 0.191%, assuming all the other variables to be constant. There is a inverse relationship between interest spread and net profit.
- Net profit increased by 1.847% if non interest income increased by 1%. There is a positive relationship between variables.
- Net profit increased by 0.006% if credit /deposit ratio increased by 1%.There is positive relationship between credit deposit ratio and net profit.
- Similarly Net profit increased by 0.357% if Operating expense increased by 1%. There is a direct relationship between Operating expense and Net profit.
- Here if there is a increase of 1% in provisions & contingency ,net profit also decrease by 0.103%. It is negatively correlated with net profit.
- Net profit decrease by 0.187% if business per employee increase by 1%.it is negatively correlated with net profit.
- Net profit increases by 25.931% if profit per employee increases by 1%.it is positively correlated with Net profit.
- The value of $R^2$ equals 0.945 indicating 94.5% of variations in Net profit are explained by interest spread, non interest income, credit deposit ratio, operating exp., provision & contingency, BPE, PPE.
- The value of $R^2$ is significant as indicated by p value(0.179) .

**Findings:**

**The major findings of the study are as follows:**

- Made an attempt to identify the key determinants of profitability of public sector banks in India.
- The analysis is based on correlation and multivariate regression model used on data from 2001-02 to 2010-11.
- The study has brought out that the explanatory power of some variables is significantly high. And some variable is significantly low.
- However, some variables namely Interest spread, OE, P&C are found with low explanatory power.
- Hence, the variables non-interest income, C/D Ratio, Business per employee, Profit per employee have a significant relationship with net profit.
- To strengthen the position further, the public sector banks must strive to greatly enhance efficiency through a control over increasing non-interest income, and maximizing business per employee and per branch, etc.
- Technology up gradation, provision of better service quality, inculcating customer driven work culture, mental revolution among the staff of public sector banks, use of modern risk management practices are also the most sought after steps that are needed to ensure the sustainable level of profit and its growth.

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**State Bank Of India**

| RATIO: | Net profit | Interest spread | Non-interest income | Credit /depsit ratio | Operating income | Provisions &contingen-cy | Business per employee | Profit per employee |
|---|---|---|---|---|---|---|---|---|
| Net profit | 1 | | | | | | | |
| Interest spread | -.680* | 1 | | | | | | |
| Non-interest income | -.157 | -.430 | 1 | | | | | |
| Credit /depsit ratio | .827** | -.702* | .070 | 1 | | | | |
| Operating income | -.741* | .393 | .276 | -.895** | 1 | | | |
| Provisions &contingen-cy | .473 | -.486 | .288 | .720* | -.545 | 1 | | |
| Business per employee | .897** | -.602 | -.231 | .870** | -.794** | .671* | 1 | .898** |
| Profit per employee | 1.000** | -.680* | -.156 | .828** | -.742* | .475 | .898** | 1 |

**Interpretation**

| Ratio: | Net profit | Interest spread | Non-interest income | Credit deposit ratio | Operating expense | Provisio &contingency | Business per employee | Profit per employee |
|---|---|---|---|---|---|---|---|---|
| Net profit | 1 | | | | | | | |
| Interest spread | -0.11 | 1 | | | | | | |
| Non-interest income | 0.083 | -.682* | 1 | | | | | |
| Credit deposit ratio | .821** | -0.452 | 0.566 | 1 | | | | |
| Operating exp. | -0.172 | -0.114 | -0.056 | -0.279 | 1 | | | |
| Provision&contingen | 0.603 | -0.122 | 0.372 | .719* | -0.276 | 1 | | |
| Business-per-emp. | .978** | -0.193 | 0.248 | .909** | -0.233 | .706* | 1 | . |
| Profit-per-emp. | 1.000** | -0.11 | 0.082 | .820** | -0.172 | 0.603 | .978** | 1 |

**Union Bank of India**

| Ratio: | Net profit | Interest spread | Non-int income | Credit deposit ratio | Operating exp. | Provision& conti. | Business per emp. | Profit per emp. |
|---|---|---|---|---|---|---|---|---|
| net profit | 1 | | | | | | | |
| interest spread | -0.291 | 1 | | | | | | |
| non-int income | .949** | -0.12 | 1 | | | | | |
| credit deposit ratio | .724* | -0.534 | .639* | 1 | | | | |
| operating exp. | -0.274 | 0.204 | -0.357 | -0.532 | 1 | | | |
| provision& conti. | 0.546 | -0.223 | 0.522 | .689* | -.777** | 1 | | |
| business per emp. | .967** | -0.294 | .877** | .754* | -0.291 | .656* | 1 | |
| profit per emp. | 1.000** | -0.291 | .949** | .724* | -0.275 | 0.546 | .967** | 1 |

**Indian Bank**

| RATIO: | Net profit | Interest spread | Non interest income | Credit deposit ratio | Operating expense | Provision& contingency | Business per employee | Profit per emp. |
|---|---|---|---|---|---|---|---|---|
| Net profit | 1 | | | | | | | |
| Interest spread | .923** | 1 | | | | | | |
| Non interest income | .154 | .347 | 1 | | | | | |
| Credit deposit ratio | .960** | .940** | .355 | 1 | | | | |
| Operating expense | -.548 | -.484 | -.266 | -.635* | 1 | | | |
| Provision& contingency | .853** | .851** | .103 | .829** | -.595 | 1 | | |
| Business per employee | .993** | .928** | .133 | .958** | -.564 | .840** | 1 | . |
| Profit per emp. | 1.000** | .923** | .154 | .960** | -.547 | .852** | .993** | 1 |

**Indian Overseas Bank**

| RATIO: | Net profit | Interest spread | Non-int. income | Credit deposit income | Operating exp. | Provision&contin. | Business per emp. | Profit per emp. |
|---|---|---|---|---|---|---|---|---|
| Net profit | 1 | -.674* | .924** | .864** | -.791** | .894** | .716* | 1.000** |
| Interest spread | -.674* | 1 | -.572 | -.692* | .584 | -.636* | -.604 | -.674* |
| Non-int. income | .924** | -.572 | 1 | .830** | -.901** | .877** | .682* | .924** |
| Credit deposit income | .864** | -.692* | .830** | 1 | -.760* | .681* | .891** | .865** |
| | .001 | .027 | .003 | | .011 | .030 | .001 | .001 |
| Operating exp. | -.791** | .584 | -.901** | -.760* | 1 | -.830** | -.564 | -.791** |
| Provision&contin. | .894** | -.636* | .877** | .681* | -.830** | 1 | .527 | .893** |
| Business per emp. | .716* | -.604 | .682* | .891** | -.564 | .527 | 1 | .716* |
| Profit-per emp. | 1.000** | -.674* | .924** | .865** | -.791** | .893** | .716* | 1 |

| Dependent Variable | Independent Variable |
|---|---|
| Net Profit as a % of Total Funds (Net Profit After Tax) -Y | 1. Interest Spread(%) - $X_1$ |
| | 2. Non Interest income/Total Funds(%) - $X_2$ |
| | 3. Credit/Deposit Ratio(%) - $X_3$ |
| | 4. Operating Expence/Total Funds(%) - $X_4$ |
| | 5. Provision & Contingency/Total Funds(%) - $X_5$ |
| | 6. Business Per Employee(%) - $X_6$ |
| | 7. Profit Per Employee(%) - $X_7$ |

**Output of Multiple Regression Analysis**
**Dependent Variable: Net Profit**

| | SBI | BOB | UBI | IB | IOB |
|---|---|---|---|---|---|
| (Constant) | .473 | 1.019 | .524 | -4.932 | .562 |
| X1 | -.057 | .025 | -.075 | -1.095 | -.191 |
| X2 | -.988 | 0.00 | -1.584 | .629 | 1.847 |
| X3 | .012 | -.051 | .004 | .145 | .006 |
| X4 | .010 | .034 | .245 | .614 | .357 |
| X5 | -.005 | -.256 | .179 | .905 | -.103 |
| X6 | -.176 | -.080 | -.207 | 1.066 | -.187 |
| X7 | 24.059 | 12.757 | 40.057 | -123.537 | 25.931 |
| R-square | 0.994 | 0.937 | 0.966 | 0.821 | .945 |
| F-value | 4.825 | 7.388 | 8.155 | 1.314 | 4.937 |
| p-value | 0.182a | 0.065a | 0.114a | 0.498a | .179[a] |

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