

Banks' Profitability and Extent of Their Employee Outlay Nexus - An Indian Perspective

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Abstract

This paper made an attempt to scrutinize the causal liaison between yield performance of Indian banks, being measured through profit per employee, business per employee, return on assets (excluding co-operative banks, regional rural banks, and foreign banks having their representative offices in India), and the percentage of expenditure incurred towards salary and compensation paid to its employees. I used panel data approach for the purpose of examining this relation across different categories of banks, that is, public sector banks and private sector banks for a period of 13 years starting from the year 2005 to 2017. An empirical model was developed to illustrate that banks' profitability does not necessarily translate into an optimal rewardable employees' benefit and compensation policy, more so for private sector banks considered here in this study - a paradoxical proposition of sorts.

Keywords : causality, employee outlay, panel data, profitability, return on assets (ROA)

JEL Classification Codes : C33, G21, G29

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The Indian banking industry, the vertebrae of the country's economy, has always performed a pivotal role in preclusion of the economic catastrophe from attaining dreadful volumes in the country. Over the years, it has achieved lots of appreciation and admiration for its potency, predominantly in the wake of economic calamities that took place worldwide in the recent past (Mohan & Ray, 2004).

The Indian banking industry is an amalgamation of public, private, and foreign ownerships. The major dominating force is that of commercial banks and co-operative banks. However, the regional rural banks also have a reasonable business segment in this structure. A well - organized and resourceful banking structure can endorse a superior amount of investment, which can aid in the achievement of a faster expansion rate of the economy. Worldwide practice and experience confirms that countries with well developed and market oriented free banking system grow more rapidly and consistently.

A diverse range of studies on banks and their performance have been conducted by researchers, which present wide - ranging perspective and outlook with regards to the banks' performance in different countries. The studies reveal different dimensions which directly or indirectly affect the performance of Indian banks (see Das & Kumbhakar, 2012 ; Ray & Das, 2010). However, very little has been spoken about the relationship or causal effect of banks' performance in India and the huge amount of investments made towards research and development activities along with the expenditure incurred in terms of recruitment, training, and improvement as well as the

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cost of retaining employees working under the banking structure. Are these expenditures all significant and relevant in the first place, or are they simply going into vain? To what extent is the performance of the banks along with the annual turnover made by them dependent upon the cost incurred towards their employees? These are a few of the questions I am seeking answers to which ultimately lead us to scrutinize the causal liaison between yield performance and the percentage of expenditure incurred towards salary paid to employees of only Indian public and private sector banks (excluding the likes of co-operative banks, regional rural banks, and foreign banks having their representative offices in India due to data availability constraints). Interestingly, the paradoxical result of profitability of commercial banks being inversely related to employees' compensation and benefits sets up the tone of the paper.

Review of Select Literature

The pioneering works under the conventional measures are by Angadi (1983), Karkal (1983), Subramanyam and Swamy (1994), Das and Ghosh (2009), Hansda and Venkatachalam (1995), and Das (1999). According to the above studies, the banking functions are more or less uniform, differences in production across the public and private sector banks are not only due to technological improvements, but are also generated from competence. However, widespread disparities in the evaluation of performance exist, and rural branches generate more profit than the urban ones.

Coming to studies focusing on the measurement of the different aspects of efficiency of banks, Bhattacharyya, Lovell, and Sahay (1997) went onto assess the productive efficiency of Indian commercial banks post 1980s to early 1990s, which showcased the impact of policy measures undertaken during the liberalization of 1980s on the performance of various Indian banks. Sathye (2001) used data envelopment analysis (DEA) to scrutinize the relative efficiency of Indian banks with that of foreign banks operating in the latter half of the 1990s in India. His findings stated that the public sector banks in India had a higher mean efficiency score compared to the private sector banks, but mixed results were instituted in the process of comparing public sector banks and foreign commercial banks operating in India. Mohan and Ray (2004) estimated the revenue maximizing efficiency of Indian banks in the 1990s. In their study, deposits and operating costs were taken as inputs while loans, investments, and other income were taken as outputs. As per the results of their research, public sector banks were considerably better than private sector banks on grounds of revenue maximization. However, it was also found that the difference in efficiency between the public sector banks and foreign banks was insignificant. Shanmugam and Das (2004) used four input measures - deposits and other borrowings, fixed assets, equity, and number of employees. The three output measures that were taken for this analysis were performing loan assets, investments, and other non - interest fee based incomes. The findings showed that Indian banks did not reveal much of a difference with regard to input or output oriented technical and cost efficiency. However, prominent differences were seen in terms of revenue and profit efficiencies. It was also discovered that ownership and size of the bank and listing on the stock exchanges had an affirmative effect on the average profit and revenue scores.

A study conducted using DEA by Sanjeev (2006) on the efficiency of private, public, and foreign banks in India for the period from 1997 - 2001 revealed the liaison between NPA and efficiency of the banks and discovered that efficiency had improved post-reforms coupled with the fact that NPAs and efficiency are inversely related. Following the same line of construct, Kumar and Batra (2012) also deliberated on the efficiency of private sector banks, public sector banks, and foreign banks in India using DEA analysis. 'Interest expenses & operating expenses' as inputs and 'interest income & other income' as outputs were used for this data analysis. No considerable difference was found in the mean efficiency scores of public, private, and foreign banks in India (also see Banerjee, 2018).

From the measurement of different aspects of efficiency of commercial banks, I move on to review studies

concentrated towards making overall comparisons across both private and public sector banks in India. To start with, a comparative study amongst banks in the public, private, and foreign sectors in India was conducted by Sarkar, Sarkar, and Sen (2008) to diagnose the effect of ownership type on banks' performance measures. Moreover, another study by Mohan (2002, 2003) drew a distinction among the operational efficiencies of different banks over a period of time. Among recent studies, particularly of relevance are the ones by Narayanaswamy and Muthulakshmi (2014); Sharma and Kumar (2013); Makkar and Singh (2013); and Prasad, Ravinder, and Reddy (2012). These studies carried out a comparative analysis of the financial performance of Indian commercial banks in terms of parameters like capital adequacy, assets quality, management efficiency, earning quality, and liquidity. While the first study measured the financial efficiency of the private sector commercial banks, the rest carried out a comparative analysis between private and public sector commercial banks. In the Indian context, there are a number of papers on the technical/cost/profit efficiency aspects of banks in India (see Kumar & Batra, 2012; Jayaraman & Srinivasan, 2009; Jayaraman & Srinivasan, 2014; Mohan & Ray, 2004; Sathye, 2001; Shanmugam & Das, 2004) as already discussed. However, in the Indian context, till date, no study has looked at the causal relationship between banks' profitability and the extent of their employee outlay. Thus, the contribution of the paper lies in answering whether high - performance banks care about their employee outlay or not.

Motivation for the Study

From the review of existing literature, profitability, efficiency, liquidity, asset quality, and capital adequacy ratio have been identified as the main indicators of performance of banks. These factors have been extensively studied in the literature thus far. But nothing much has been found regarding the relationship or causal effect on the performance of banks in India with the expenditure incurred in terms of recruitment, training and improvement, as well as the cost of retaining employees working under the banking configuration and also the huge amount of investments made towards research and development activities.

On the basis of the gaps identified in the course of the literature review, I have picked up only the profitability aspect and consider the following objective :

↳ To analyze the causal relationship of the different financial profitability indicators being measured through profit per employee, business per employee, and return on assets with the extent of expenditure incurred towards the compensation, benefit, and development of employees of the Indian commercial banks (only public and private sector ones).

Empirical Model and Methodology

(1) The Empirical Model : One of the biggest challenges of an econometric analysis of the performance of Indian banks is data availability and reliability. The empirical analysis has been carried out using annual data for the period from 2005 to 2017. Panel data approach has been used for the purpose of examining this relation across different categories of banks, that is, public sector banks (considered here are, State Bank of India & Associates, Allahabad Bank, Andhra Bank, Bank of Baroda, Bank of Maharashtra, Canara Bank, Central Bank of India, Corporation Bank, Dena Bank, Indian Bank, Indian Overseas Bank, Oriental Bank of Commerce, Punjab & Sindh Bank, Punjab National Bank, Syndicate Bank, UCO Bank, Union Bank of India, United Bank of India, Vijaya Bank, and Industrial Development Bank of India (IDBI) Bank) and private sector banks (considered here are, Axis Bank, HDFC Bank, DCB Bank, ICICI Bank, IndusInd Bank, Yes Bank, Kotak Mahindra Bank, Karur Vysya Bank, Karnataka Bank, Dhanlaxmi Bank, and Federal Bank) for a period of 13 years starting from the year 2005 to 2017. This analysis has incorporated only nationalized public and private sector banks.

The data series have been compiled from the Reserve Bank of India's Database on the Indian Economy, that is, Statistical Tables Relating to Banks in India under *Handbook of Statistics on the Indian Economy* (various years). The estimable linear model developed in this paper (see for details Jain, Metri, & Rao, 2019) for the latest list of factors influencing profitability of commercial banks in India) goes as follows :

$$wexp_{it} = \alpha + \beta_1 (ppe_{it}) + \beta_2 (bpe_{it}) + \beta_3 (ROA_{it}) + \beta_4 (NPA_{it}) + e_{it}$$

where, $wexp$ denotes wages and salaries as a percentage of total expenses incurred by the banks ; ppe denotes the 'profit per employee' ; and bpe represents 'business per employee' in logarithm INR lakhs, that is,

$$\text{Business per Employee} = \frac{\text{Total Business (= Deposits + Advances)}}{\text{Number of Full time Employees}}$$

Moving onto the definition part, business per employee is characterized as revenue generated per employee while profit per employee (in INR lakhs) is defined by :

$$\text{Profit per Employee} = \frac{\text{Revenue} - \text{Total Operating Expenses (before taxes and interest)}}{\text{Number of Full time Employees}}$$

Also, return on assets have been defined as :

$$\text{Return on Assets (ROA)} = \frac{\text{Net Income}}{\text{Average Total Assets}}$$

Average total assets are derived by dividing the sum of total assets at the commencement of a particular period and at the end of that period by 2. It is to be noted that I have considered one period lagged values of non - performing assets to deal with the problem of multicollinearity. Also, NPA values (in INR billion) are taken to be at their logarithmic levels in order to avoid the scale effect. The discussion on the multicollinearity issue is very trivial, so we directly move to the estimation procedure.

The theoretical justification of having non - performing assets (NPAs) as a computable measure of profitability comes from the fact that as the levels of NPAs go up, the profitability of the banks go down as it indicates the credit risk of the banks. Studies like the ones conducted by Bhatia, Mahajan, and Chander (2012) and Bawaa, Goyal, Mitra, and Basu (2016) have supported this negative relationship. Similarly, for bpe , ppe , ROA , we have the theoretical justifications as bpe bears a positive relation with profitability as it highlights the productivity and efficiency of human resources in relation to the core business of banking ; ppe has a positive relation with profitability and depicts employee efficiency ; ROA represents how banks are using their real investment resources to generate profits, and also acts as a proxy for the banks' yearly investments.

This model is based on decomposing the error term e_{it} to its component items of its individual and time effects. In the model, i indicates the countries and t indicates the time. When the error term gets decomposed, $e_{it} = \mu_i + \vartheta_{it}$ is obtained. The final equation obtained is known as the 'error component model'. Here, μ_i indicates the individual specific effects. It is supposed μ_i and $\vartheta_{it} \sim iid(0, \sigma^2)$. In other words, they possess all the desired properties of the white noise process.

(2) Econometric Methodology : Before starting off with the panel data analysis, the heteroskedasticity in the model needs to be examined. The results reported in Table 1 clearly show the absence of heteroskedasticity as the null hypothesis of constant variance is accepted. Also, the Jarque - Bera (1980) test for normality of the dataset

Table 1. Heteroskedasticity Results

Likelihood - Ratio Test		
H ₀ : Constant variance	LR Chi-Square value (χ^2)	Probability > Chi-Square (χ^2)
	0.19	0.6598

Note. Results as obtained in Stata 12.

gets satisfied at the 5% significance level. To decide about the model to be estimated, that is, whether we should go for fixed effects or random effects, we will make use of Hausman (1978) specification test.

The major advantage of a panel data study lies in the fact that the asymptotic behaviour of the time-series dimension, T and the cross-sectional dimension, N gets captured very well. The data considered is for a period of 13 years, that is, from 2005 to 2017, so unit root is absent. The series are stationary at their level values. As a result, there is no chance of a cointegrated relationship in the long run. It should be noted that since the main objective of this paper is to look into the causality between $wexp$, bpe , ppe , NPA , and ROA and accordingly, bpe , ppe , NPA , and ROA have been considered as exogenous in this model as depicted in the causality results in Table 4.

In this study, I have made use of Levin, Lin, and Chu (LLC) unit root tests. This test is based on their model as follows :

$$\Delta Y_{it} = \alpha_i Y_{it-1} + \sum_{j=1}^{P_i} \beta_{ij} \Delta Y_{it-j} + X'_{it} \delta + \varepsilon_{it}$$

Here, α_i is the error correction term and when $\alpha_i < 0$ happens, we understand that the series is trend stationary ; alternatively, when $\alpha_i = 0$, unit root exists and as a result, it is non-stationary. When the probability value corresponding to the test statistic is smaller than 0.05, H_0 is rejected and the series is stationary. LLC panel unit root test results are shown in the Table 2. As Levin, Lin, and Chu (2002) have confirmed, the performance of this test - statistic depends on whether N lies between 10 and 250 and T lies between 5 and 250 (for details, see Levin et al., 2002).

The tests of unit root indicate the stationarity of all macroeconomic variables at their level value. This rules out the possibility of any sort of 'spurious regression'. It needs to be mentioned that given the time period considered, I have made use of the Schwarz criterion in the process of computation. The next question which immediately crops up is that then which method seems applicable? To answer this, I shall make use of the Hausman specification test (Hausman, 1978). The null hypothesis under the Hausman specification test states that random effects model suits best ; whereas, the alternative hypothesis states that the model is a fixed effects one. At this point, whether to go for fixed effects or random effects model specification was decided by the Hausman specification test (see Table 3).

Table 2. Results of Unit Root Test (in a Panel Set-Up)

LLC Unit Root Test		
Variables	Test Statistic Value	Probability Value
$wexp$	-3.64	0.00*
ppe	-3.38	0.00*
bpe	-5.33	0.00*
ROA	-6.23	0.00*
NPA	-5.99	0.00*

Note. * denotes significance at 5% level ; results as obtained in Stata 12.

Now, I move on to the subject of causality in panel data. It is used to test whether the lagged values of one variable enter into the equation of another variable. To explain the concept in general, let us consider the following set of variables from x_{1i} to x_{ni} for the i^{th} cross section, that is,

$$\begin{pmatrix} x_{1i} \\ x_{2i} \\ \vdots \\ x_{ni} \end{pmatrix} = \begin{pmatrix} \beta_{11} & \dots & \beta_{1n} \\ \vdots & \ddots & \vdots \\ \beta_{n1} & \dots & \beta_{nn} \end{pmatrix} \begin{pmatrix} x_{0i} \\ x_{1i} \\ \vdots \\ x_{(n-1)i} \end{pmatrix} + \begin{pmatrix} \varepsilon_{1i} \\ \varepsilon_{2i} \\ \vdots \\ \varepsilon_{ni} \end{pmatrix}$$

We can comment that x_{ji} does not Granger cause x_{it} ($i \neq j$) if and only if $A_{ij}(L) = 0$ for all i and j . The null hypothesis (H_0) under Granger causality (Granger, 1969) is :

↪ H_0 = No Granger causality and H_1 (alternative hypothesis) = there exists Granger causality.

Since this analysis is being carried out across both public and private sector banks in India, I run the Granger causality regressions for each individual cross-section. Then, I take the average of the Wald statistics derived from each cross section to get the overall \bar{W} statistic (Table 4) to comment whether i Granger causes j across all the cross sections.

Analysis and Results

The results of the Hausman specification test have been reported in the Table 3.

The assumption of a fixed effects model implies that one should go for the 'de-meanned' values to counter the individual specific effects. The results of the panel regression model are given in the Table 5 and Table 6. Given the fact that there are certain bank specific effects like organizational structure, HR policy, nature of operation, style of functioning, etc. that remain fixed and are generally unobserved in this model, the assumption of fixed effects is hence justified.

Table 3. Hausman Specification Test

Hausman Specification Test		
H_0 :	Chi-Square value (χ^2)	Probability > Chi-Square (χ^2)
The model is a random effects model.	23.07	0.000*

Note. * implies significance at the 95% level ; Results as obtained in Stata 12.

The results of the Granger causality test show that there subsists a uni-directional causality from ppe to wexp, bpe to wexp, NPA to wexp, and ROA to wexp. This justifies the exogeneity assumption for ppe, bpe, NPA, and ROA in the model. This is some kind of a paradox that profitability of the banks does not have an effect on the wages and salaries of the employees. Thus, bpe, ppe, NPA, and ROA can be considered as strongly exogenous variables on account of the absence of causality (see Engle, Hendry, & Richard, 1983). The results show that if a bank's profitability increases, the benefits do not percolate to the employees in general. What is even more interesting, the coefficients of bpe and ppe have turned out to be negative and significant (Table 5). The independent variables except ROA are unquestionably significant in explaining the outlay on employees by the concerned banks. This again points to the fact that for both the public and the private sector banks in India, profitability does not necessarily ensure that employees get the benefit out of it. The bpe and ppe variables negatively affect wexp.

Coming to NPAs, the model predictions point to the fact that a rise in the level of NPAs will increase the credit

Table 4. Panel Causality Test Results

Null Hypothesis	W-bar Statistic	Probability
<i>wexp</i> does not Granger cause <i>bpe</i> .	0.93	0.80
<i>bpe</i> does not Granger cause <i>wexp</i> .	1.76	0.01*
Null Hypothesis	W-bar Statistic	Probability
<i>wexp</i> does not Granger cause <i>ppe</i> .	1.01	0.60
<i>ppe</i> does not Granger cause <i>wexp</i> .	1.97	0.00*
Null Hypothesis	W-bar Statistic	Probability
<i>wexp</i> does not Granger cause <i>NPA</i> .	0.98	0.76
<i>NPA</i> does not Granger cause <i>wexp</i> .	1.99	0.00*
Null Hypothesis	W-bar Statistic	Probability
<i>wexp</i> does not Granger cause <i>ROA</i> .	1.02	0.60
<i>ROA</i> does not Granger cause <i>wexp</i> .	2.88	0.00*
Null Hypothesis	W-bar Statistic	Probability
<i>ROA</i> does not Granger cause <i>NPA</i> .	0.67	0.90
<i>NPA</i> does not Granger cause <i>ROA</i> .	0.77	0.90
Null Hypothesis	W-bar Statistic	Probability
<i>ROA</i> does not Granger cause <i>ppe</i> .	0.76	0.90
<i>ppe</i> does not Granger cause <i>ROA</i> .	0.64	0.90
Null Hypothesis	W-bar Statistic	Probability
<i>ppe</i> does not Granger cause <i>NPA</i> .	0.22	0.99
<i>NPA</i> does not Granger cause <i>ppe</i> .	1.01	0.60
Null Hypothesis	W-bar Statistic	Probability
<i>ppe</i> does not Granger cause <i>bpe</i> .	0.23	0.99
<i>bpe</i> GDP does not Granger cause <i>ppe</i> .	0.49	0.89
Null Hypothesis	W-bar Statistic	Probability
<i>bpe</i> does not Granger cause <i>NPA</i> .	1.11	0.50
<i>NPA</i> does not Granger cause <i>bpe</i> .	0.59	0.88
Null Hypothesis	W-bar Statistic	Probability
<i>bpe</i> does not Granger cause <i>ROA</i> .	0.44	0.89
<i>ROA</i> does not Granger cause <i>bpe</i> .	0.88	0.95

Note. * implies significance at the 95% level ; Results as obtained in E-views 7.

risk or the risk of default and this negatively affects employee benefits. This particular result is quite justified given the NPA scenario that Indian banks are in, standing at a staggering 10.3% as in December 2018.

As an extension, I do the panel regression for public sector banks and private sector banks separately. Interestingly, the results in Table 6 are very much consistent with what we get in the overall case (see Table 5). In general, be it entrepreneurial startup ventures or banks or large, established enterprises, etc., there is a strong relationship between employee engagement and profitability. Surprisingly, we get to see from these results that increased profits of banks do not imply more benefits for employees, more so in case of private sector banks (see Table 6). In case of public sector banks, a unit rise in *bpe* and *ppe* means 0.04 and 0.02 unit fall in employee outlay, respectively while it is 0.06 and 0.03 for private sector banks. One reason for this is the ploughing back of

Table 5. Panel Results (Fixed Effects Within Regression)

Dependent Variable : <i>wexp</i>		
Variables	Coefficients	Probability Value
<i>bpe</i>	-0.03	0.00*
<i>ppe</i>	-0.01	0.00*
<i>ROA</i>	-1.20	0.19
<i>NPA</i>	-0.72	0.00*
Constant	14.17	0.00*

Note. * implies significance at the 95% level ; Results as obtained in Stata 12.

Table 6. Panel Results (Fixed Effects Within Regression) - Public vs. Private

Model 1 : For Public Sector Banks		
Dependent Variable : <i>wexp</i>		
Variables	Coefficients	Probability Value
<i>bpe</i>	-0.04	0.00*
<i>ppe</i>	-0.02	0.00*
<i>ROA</i>	-0.43	0.51
<i>NPA</i>	-0.76	0.00*
Constant	11.33	0.00*

Model 2 : For Private Sector Banks		
Dependent Variable : <i>wexp</i>		
Variables	Coefficients	Probability Value
<i>bpe</i>	-0.06	0.00*
<i>ppe</i>	-0.03	0.00*
<i>ROA</i>	-0.91	0.07
<i>NPA</i>	-0.94	0.00*
Constant	16.22	0.00*

Note. * implies significance at the 95% level ; Results as obtained in Stata 12.

profits as additional capital under the capital adequacy norms. For the profitability of banks to be sustained in the long run, this paradox has to be taken care of.

Discussion and Implications

As of now, in India at least, public sector banks have no scheme for sharing the profits with their employees as there is generally no component named performance incentives in the salary slips of the employees of public sector banks (Srivastava, 2017). Though, private sector banks have a performance linked pay component, it is not really a regular affair and entirely rests with the management. Of late, public sector banks saddled with high level of non - performing assets and successive quarterly losses, are looking to restrict the salaries and remunerations of its employees while unions are demanding a hike under the 11th bipartite settlement. This has led to a series of strikes since December 2018 (Ray, 2018). However, private bank employees are not a party to it; but the situation is nonetheless the same. The NPA result of my model (see Tables 5 and 6) is exactly pointing out to this - that a rise

in the level of NPAs has a negative impact on the level of wages, salaries, and other compensation benefits that banks pay to their employees. As already stated, one of the reasons why the coefficients of bpe and ppe have turned out to be negative is that a significant part of retained earnings has been infused as additional capital to maintain the adequacy level required over the next 5 - 10 years. To ensure that profitability of the banks gets translated into employee benefits, the focus should be on reducing operational costs, non-performing assets, and looking for avenues to generate non-interest based income in the long run. These results, in particular, are important for management officials of the banks, bank unions, bank employees, and the government because in the long run, the challenge will be employee retention.

To sum up, when it comes to the case of wages and salaries and other monetary or non-monetary employee benefits for bank employees, these act as key drivers in enhancing the productivity of the employees. Therefore, they really need to be motivated towards serving their customers in a far better way which, in turn, would ultimately lead to generating more profitable avenues for the organization. In this context, the requirement is that profitability of banks should have a corresponding incentive scheme for their employees. Ironically, as per my results, the reverse happens in the Indian context irrespective of whether it is a public or a private bank - a realistic reflection of the current situation in the banking industry.

Conclusion

Sound banking infrastructure plays a vital role in respect of supporting the overall growth of an economy. The returns that a bank obtains from its employees in a way reflects the financial soundness of the same. Based on the methodology and tests conducted and the results derived thereof, it can be very well concluded that there is no significant relationship between the rise in investments made by banks with that of hike in wages and salaries paid to their employees. From the overall results (see Table 5), it can be seen that a unit rise in bpe leads to a fall in wexp by 3%. Similarly, for ppe, it is a fall to the extent of 1%. In India, till date, no such result exists in the literature for public or private sector banks. However, not in the Indian context, but there are mixed results where studies have pointed out either the existence of a positive correlation (Dwomoh & Korankye, 2012 ; Shaheen & Naseem, 2015) or insignificant relation (Bernhardt, Donthu, & Kennett, 2000) between employee satisfaction (or outlay) and firm's profitability. Contradictory to the already existing ones (in different contexts), through my analysis, the paradoxical results pertaining to the public and private sector banks in India have added an extra dimension in this field of research.

Moreover, given the compensation policies across both private and public sector banks, profit made by the banks has simply got no role to play in augmenting the amount of its outlay towards the development of employees or raising their wages and salaries. Thus, there always lies a question of misutilization of wealth generated by banks, and hence, they ought to be more vigilant regarding the proper channelization of scarce human as well as material resources. Thus, it is quite obvious that banks are not only required to be more focused about their incremental rate of turnover, but also need to investigate into those factors which lead them to the pinnacle of profit and invest more meticulously. One of the areas will be to focus on valuing bank employees as human capital. In this regard, as a suggestion, an open door policy should be in place where each and every employee gets a chance to put in their grievances before the management and settle it upfront.

Limitations of the Study and Scope for Further Research

There are a few limitations of this study. First, this study concentrates only on the Indian commercial banks (both public and private). Second, only the profitability aspect of the banks has been considered while there are other

aspects to be looked at like capital adequacy, asset quality, liquidity, and management capability. Finally, given the dataset pertains to the period from 2005-2012, examining the cointegrational time series properties is not feasible.

For further research, first, this study can be extended in case of a cross - country framework together with the examination of the time series properties of wexp, bpe, ppe, NPA, ROA across both public and private sector banks. Second, in terms of the CAMEL model, analyzing the extent of employee outlay across both the public and private sector banks would be an interesting exercise. Even these results would be worth exploring when the same study can be replicated for making a comparison between public and private sector companies operating across different sectors like, insurance, trade, IT and ITeS, manufacturing, etc., provided the data is available. Also, to have a micro perspective, carrying out a primary survey among bank employees for measuring their satisfaction levels with respect to their compensations benefits and then in turn, relating such a measure of employee satisfaction with the same variables, that is, bpe, ppe, NPA, ROA as used in this paper. This exercise, in particular, remains as one of my key future agendas to be looked into. The results derived in this paper can be used as useful benchmarks for future research in this direction.

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