## Customer Complaints Management and Bank Performance-Evidence from India

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#### Abstract

The present study analyses the position of the customer complaints settlement in the Indian commercial banks and the effect of customer complaints settlement rate on bank performance along with studying the trend of complaints received and settled. On the basis of trend and growth analysis, the future values for the number of complaints to be received and settled for next five years has been forecasted. The study has been conducted on a sample of 28 commercial banks for a period of 12 years. Bank performance has been measured with two accounting ratios ROA and ROCE. Customer complaints settlement rate has been used to measure customer complaints management in banks. Other variables that may have a significant effect on bank performance viz. the bank age, bank size, CRAR, GNPA ratio, etc. have been used as control variables in the study. The analysis concludes that the number of complaints received by the public sector banks in the next five years would increase at an alarming rate as compared to their private counterparts which would show only a minor increase in the complaints received each year. The study also concludes that there does not exist a significant difference between the settlement rates of public sector and private sector commercial banks in India. Moreover, panel data regression analysis conducted on the data reveals that the customer complaints settlement rate has a significant positive effect on the financial performance of Indian commercial banks.

**Keywords:** Customer Complaints Management, Complaints Settlement, Indian Commercial Banks, Firm Performance.

#### Introduction

Customer complaints are an inevitable part of a business concern. No matter how good the product or services is, a business concern can never fully satisfy all of its customers. The complaints managers of the organisations have to face a complex dilemma regarding the complaints management process, as it is well known and accepted that complaints management plays a strategic role in the success of a business, but the company practices are not in conjunction with the same. Complaints management attracts attention primarily because it is often used as a tool to retain customers. (Brown, Cowles, & Tuten, 1996; Smith, Bolton, & Wagner, 1999; Stauss & Seidel, 2004) However, in majority of the organisations, the complaints management

department of the company is merely regarded as the operational units rather than strategic business units that have a say in the strategic planning of the organisation, (Stauss & Schoeler, 2004)

Studies conducted by the different consumer affairs departments worldwide, show that majority of the companies do not perceive customer compliant management as a business opportunity. (Fornell & Westbrook, 1984) The companies regard complaints as a negative information, which indicates poor performance. Therefore, rather than solving the complaints that they receive, the businesses try to decrease the total number of complaints received. (Fornell & Wernerfelt, 1987) Such an approach may solve the problems faced by the consumers at present but will not be effective in the long-run. However, the companies are now trying to understand the primary underlying motive of a customer making complains about the service or goods of the company. A dissatisfied customer, who does not want to purchase from the same company again in future would probably not opt for complaining to the company. Therefore, a customer who chooses to complain about the goods or services of the company probably wants to continue the relationship with the firm. (Hill, 2010)

The dissatisaction of customers does not have a singular effect, but has myriad of effects, one such effect being that the dissatisfied customer not only complaints to the company but also complaints about the product or service to other individuals, some of who may well have been the prospective customers of the company. Therefore, dissatisfaction of customers not only leads to reduction in the current profit and goodwill of the company, but also affects the future profit making capability of the organisation. This calls for a timely and efficient management of the complaints of the customers. With the advent of globalisation and social media, it has become easy for the consumers to provide positive or negative reviews about a product or service. Such reviews are also viewed by the future customers before making a purchase. Therefore, efficient complaints management is becoming progressively vital for the success of the business.

Majority of the studies done on customer complaints management have focused themselves on the link between customer complaints management and various aspects of customer relationship management viz. customer satisfaction, customer loyalty, customer retention, etc. There has been a dearth of studies which analyse the relationship between customer complaint management and financial performance of a company. Moreover, the majority of the studies have been conducted on the developed economies, with a lack of studies conducted on transitional and developing economies.

The current study examines the position of customer complaints and their redressal in the banking companies in India, difference between the number of complaints received and redressal rates of the public sector and private sector banks. The study also analyses the effect of customer complaints management on the financial performance of the Indian public sector and private sector commercial banks along with forecasting the customer complaints that will be received and settled each year by the banks for the coming five financial years.

#### Position of Customer Complaints and Complaints Redressal in Indian Banks

Figure 1 depicts the number of customer complaints that were received during a year, redressed during the year, those that were pending at the end of the year and the average rate of compliant settlement each year. As can be seen from the data, the number of compliants received each year increased approximately 16 times during the 12 year period from 4,11,640 in FY 2006-07 to 64,26,003 in FY 2017-18. The reason behind such a drastic increase in complaints can be the increasing awareness of the customers as well as the improvement in complaint receiving mechanism of the bank, making it easier for the customers to provide feedbacks. (RBI, 2017)

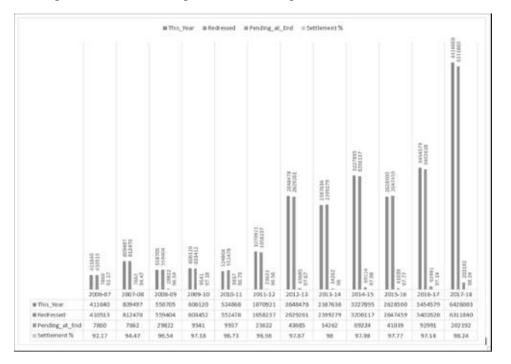


Figure 1: Complaint redressal in 30 public sector and private sector commercial banks in India.

The number of complaints redressed in a year has also increased drastically during the period from 4,10,513 in FY 2006-07 to 63,11,860 in FY 2017-18. This may be attributed to the reason that the number of complaints received has also increased in the same ratio. Regarding the settlement rate of complaints, it increased from 92.17 percent in FY 2006-07 to 98.24 percent in FY 2017-18. However, in the first five years of the study the variables have remained approximately at same level with minor changes. They show a consierable increase in the FY 2012-13, thereby again showing a stationary position for next four years and again showing a considerable increase in FY 2017-18.

#### **Review of Literature**

The relationship between customer complaints management and performance of a firm can be explained with the help of a number of theories, some of which show a direct link between customer complaints management and performance, whereas some link the customer complaint behaviour to other customer related variables like customer satisfaction and loyalty. These factors have in turn been proved to affect the performance of the firm.

One of the well-established theories in psychology viz. the cognitive dissonance theory elicits that in case the expectations of a consumer regarding a product or service is disconfirmed, it tends to create "a state of dissonance" or "psychological discomfort". (Cho & Im, 2002; Festinger,

1957) The Double Deviation theory which was proposed by authors like Bitner, Bernard, & Tetreault (1990), Tax, Brown, & Chandrashekaran (1998) and Maxham, James, & Netemeyer (2003) posits that the customers tend to compare the level of complaint handling of the firm. They compare the bad complaint handling situation with the good complaint handling situation. Doing so, they create a level of expectation regarding complaint handling by the firms. In the future, if a particular customer does experience the complaint handling upto his/her expectation, he/she will be satisfied. On the contrary, if the customer does not experience the complaint handling by the firm up to his expectation, they would be dissatisfied. This leads to sharp decline in satisfaction, loyalty and trust towards the firm, which in turn affects the performance of the firm.

Using the 'principle of reciprocity', in a study by TARP (1986), it has been presented that the customers who tend to complaint more about a firm's product or service, are found to be more loyal to the firm in comparison to the customers that never make a complaint to the organisation. If the complaints of these customers are well resolved and the customers are satisfied, their tendency to convey the successful complaint handling by the firm to their acquaintances increases manifold in comparison to the when the customer receives good quality product or service in first instance. Therefore, better complaint handling proves to have more effect on customer satisfaction and

loyalty, and helps in improving goodwill of the company, thereby having a positive impact on the performance of the company.

As per the Hirschman's theory of exit, voice and loyalty, the behaviour of the consumer complaints is dependent upon three factors viz. "value of voicing the complaint", "the ability and willingness to take up the voice" and "the probability that the complaint will be successful". (Hirschman, 1970) The theory states that "exit" i.e. stopping the use of a product or good of a firm is the last resort of the customer. The managers of an organisation measure the success or failure of the firm with the help of two factors, viz. exit and voice. (Fornell & Wernerfelt, 1987; Cho & Im, 2002)

Previous studies in the area of customer complaints management have linked complaint handling by the firms to various aspects like customer satisfaction, customer loyalty, customer retention, etc. The quality of customer complaints handling has also been linked to employee retention in an organisation. Studies have found that effective customer complaint management has a significant positive relationship with earning customer satisfaction.(Varela-Neira & Va'zquez-Casielles, 2010; Taleghani et. al., 2011; Filip, 2013; Supriaddin et. al., 2015) It has been found that the major and critical issue about customer complaint management is that usually, the customers are not dissatisfied about the issues with the product or service, rather than how the failure in the product or service is being handled by the organisation. The customers believe that mistakes can happen, however, if the organisation fails to efficiently manage the failure and to correct it, it causes dissatisfaction in the customers. (Bitner, Booms, & Tetreault, 1990; Feinberg et. al., 1990)On the other hand, studies have proved that customer satisfaction has a positive significant effect on firm performance as higher the satisfaction, higher the loyalty of the customers. (Williams & Naumann, 2011; Sun & Kim, 2013; Eklof, Podkorvtova, & Malova, 2018) According to Leo, Gani, & Jermias (2009), companies can improve their performance through customer complaints management as effective and efficient management of complaint imparts improved ability to attract new customers and to retain existing ones. Moreover, customer satisfaction has been documented to have an effect on customer retention. (Rust & Zahorik, 1993; Jones & Sasser, 1995; Loveman, 1998) Customer retention has been proved to have a significant positive effect on company performance, as retaining existing customers is cheaper than aquiring and attracting new customers. (Rust & Zahorik, 1993; Peters, 1987; Loveman, 1998)

Another aspect of customer relationship management that has been linked to customer complaints management is customer loyalty. Previous researches have found that a lack in effective management of complaints or failure in meeting the expectations of the customers regarding complaint handling can drain the loyal customers from the organisation. (Heskett, Sasser, & Hart, 1990; Bailey, 1994; Spreng, Harrell, & Mackoy, 1995) Studies have found that loyalty of customers has a significant effect on performance of the firms. A reduction in customer loyalty has been found to have an advserse effect on performance of the firm. (Edvardsson *et. al.*, 2000; Soltanmoradi, Poor, & Nazari, 2013) Therefore, the first hypothesis of the present study states that an increase in the rate of customer complaint management has a significant positive impact on firm performance.

# H1: An increase in the rate of customer complaint management has a significant positive impact on firm performance.

Customer complaint management has become a fundamental part of the modern day banking system. It has gained importance both from the regulatory perspective as well as from the customer satisfaction and service viewpoint. (Customer Expressions, 2019) The retail bankers have now realised that an increase in the rate of customer retention can have a sizeable impact on profit of the bank. (Levesque & McDougall, 1996) Therefore, the present study aims to analyse the customer complaints settlement rates in the commercial banks of India. Moreover, recent studies in the context of Indian public sector and private sector banks have provided evidence of the customer complaint handling mechanism to be sugnificantly better in private sector banks in comparison to the public sector banks. The private sector banks have shown significantly better performance in terms of complaint registration, communication, courtesy, speed of handling complaint, transparency of the process, satisfaction level after complaint resolution, etc. (Sharma, 2015; Nagra & Gopal, 2015) The private banks are known to be more proactive and alert to customer service and requests, they have customer service desks to deal with customer complaints at greater speed. Whereas, public sector bank employees are not bound enough to pay greater heed to customer complaints. (Shetty, 2014) Therefore, the second hypothesis of the study states that there exists a significant difference between the customer complaints settlement rates of public sector commercial banks and private sector commercial banks in India.

H2: There exists a significant difference between the customer complaints settlement rates of public sector commercial banks and private sector commercial banks in India.

#### Data

#### Sample

The present study has been conducted on a sample of 28 public sector and private sector commercial banks in India. The population for the study consisted of 48 public sector and private sector commercial banks in India as on March 31, 2018. The period of the study has been conducted for a range of 12 years from FY 2006-07 to FY 2017-18. Data for the present study has been collected from various sources including the Annual Reports of the banks, their official websites, the official websites of BSE and NSE, etc. A total of 18 banks have been eliminated from the study due to lack of availability of Annual Reports for the study period or due to non-availability of requisite data. The analysis for the study has been conducted on 28 commercial banks with a total of 336 firm year observations.

#### Variables

#### **Dependent Variables**

In order to keep robustness in the study, two accountingbased ratios have been used as measure of firm performance viz. Return on Capital Employed (ROCE) and Return on Assets (ROA). *Independent Variable* 

Previous studies have used varied measures to calculate complaint management by the firms. According to Johnston (2001) complaint management includes variables like service recovery, receipt of complaints, investigation of complaints, settlement of complaints and prevention of complaints. In the present study complaints settlement rate has been used as a proxy for complaint management by the banks. Complaints Settlement Rate (CSR) has been calculated as the total number of complaints resolved during the year as a percentage of the total of complaints pending at the beginning of the year and complaints received during the year. The variable Complaints Settlement Rate (CSR) forms the main independent variable of the study.

#### **Control Variables**

Although a number of factors exist that have a measurable effect on the financial performance of a company, some of the major variables have been included in the present study as a control variable. The selection of the control variables have been done based on the review of previous studies and the frequency of their usage in the earlier studies. The control variables used in the present study include bank size, age of the bank, capital adequacy ratio and gross nonperforming assets of the banks.

#### Method

The first hypothesis of the study which relates to the effect

of the rate of settlement of consumer complaints on bank performance after various other associated factors have been controlled, has been analysed through regression analysis. As the data under study is longitudinal in nature and there are more than one cross-section, the data structure forms a panel and therefore, panel data analysis has been applied. The panel data estimation technique takes account of both the cross-sectional aspect of the data as well as the time aspect of the data. In doing so, the technique deals with the heterogeneity aspect of the data, thus "allowing for individual-specific variables". (Gujarati, 2004)The F-test has been applied to test whether how much the fixedeffects estimator can improve the goodness-of-fit of the model as compared to the OLS estimator. Similarly, the Lagrange Multiplier (LM) test indications whether how much the random-effects estimator improves the goodness-of-fit of the model as compared to the OLS estimator. If both the fixed-effects estimator and randomeffects estimator are better than OLS estimator, the Sargan-Hansen test has been applied to chose between fixedeffects estimator and random-effects estimator. Application of panel data estimation techniques requires stationarity of the data. Therefore, stationarity of the data has been checked with the Levin-Lin-Chu test of stationarity. In order to control for the effects of heteroscedasticity and the factor of autocorrelation in the model, cluster-robust standard errors have been used keeping banks as the cluster variable.

The firm performance could also be affected by other unobserved variables that are year-specific but timeinvariant. Such variables could be changes in technology, changes in policies of the government, change of political scenarios, etc. Therefore, time-dummies have been used in the model to control for such variables. (Dewan, Sanjeev, & Kenneth, 1998; Gil-Pareja *et al*, 2008)

The second hypothesis of the study has been tested with the help of independent samples t-test. Moreover, the trend and growth in the number of complaints received by the banks each year for both the public sector banks and private sector banks have been studied with trend analysis. Along with this, the trend and growth in the number of customer complaints settled each year by the public sector banks and private sector banks has also been studied. Moreover, the number of customer complaints that the banks are estimated to receive and the estimated number of complaints that will be settled each year by the banks in the coming five financial years from financial year 2018-19 to financial year 2022-23 has also been forecasted.

#### **Model Specification**

The effect of consumer complaints management on the performance of the banks has been analysed with the help

of two regression equations. Under the first regression equation, the performance measure ROA has been regressed on Complaints Settlement Rate (CSR) and similarly in the next equation, the variable ROCE has been regressed on Complaints Settlement Rate (CSR), including other control variables.

$$P_{it} = \alpha_i + \Sigma \beta CSR_{it} + \Sigma \beta_k CV_{kit} + \Psi_i + \varepsilon_{it}$$

P represents the performance variables viz ROA and ROCE. The variable CSR represents Complaints Settlement Rate and CV represents all the control variables viz. firm age, firm size, CRAR and NPA. The symbol  $\frac{1}{2}$  represents the unobserved heterogeneity in the model and  $\epsilon$  depicts the error term of the model.

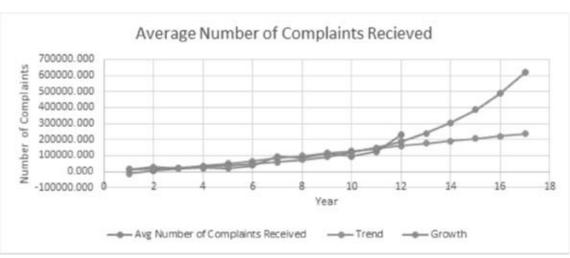
#### **Results and Discussion**

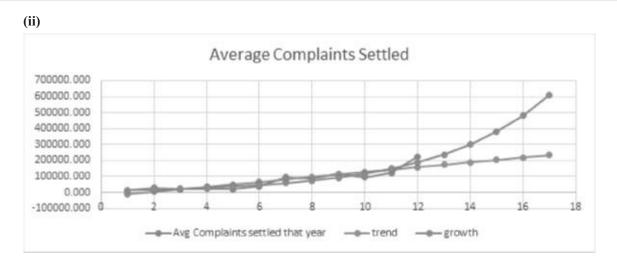
The result of trend analysis has been depicted with the help of line graphs, trend equations and growth equations followed by tabulated values of the forecasted data relating to the complaints received and settled each year. The graphs numbered (i) and (ii) represent the trend and growth curves of the average number of complaints received and settled for the period of 12 years, followed by forecasted values of the same for further five years. The graphs numbered (iii) and (iv) show the same for public sector banks and graphs numbered (v) and (vi) represent the private sector banks. Table 1 depicts the trend equations and growth equations for both the public sector banks and private sector banks and for both the sectors seperately. As can be seen from the values of r-squared for each trend and growth equation, the trend and growth lines fit the data fairly well and therefore, the future forecasted values can be considered fairly reliable.

As the graphs show, the average number of complaints received and settled each year show a rising trend over the years in case of both the public sector banks and private sector banks. However, the exponential trend line in case of public sector banks increases at a relatively rapid rate as compared to the exponential trend line of the private sector banks. Therefore, it can be ascertained that public sector banks will experience a higher growth rate in the number of complaints received and settled in the future years as compared to their private counterparts.

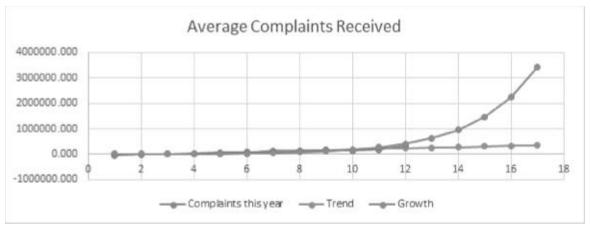
The data in Table 2 depicts the forecasted values for the average number of complaints that the banks will receive and the average number of complaints that will be settled by the banks in the future five years from financial year 2018-19 to financial year 2022-23. Therefore, the average number of complaints received by the public sector banks will increase by more than 5 times (448.05 percent) from the year 2018-2019 to the year 2022-23. However, the average number of complaints received in the case of private sector banks will only increase 11.56 percent. As computed from the forecasted data, the rate of complaints settlement in the case of public sector banks would increase from 99.91 percent in the year 2018-19 to 99.96 percent in the year 2022-23. However, in the case of private sector banks the number of complaints settled each year would show an increase from 99.31 percent in the year 2018-19 to 99.56 percent in the year 2022-23.

(i)

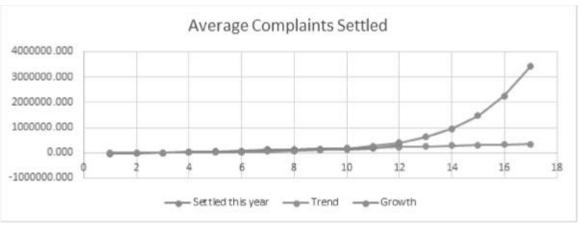


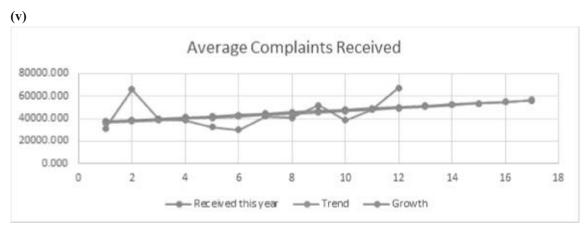


(iii)

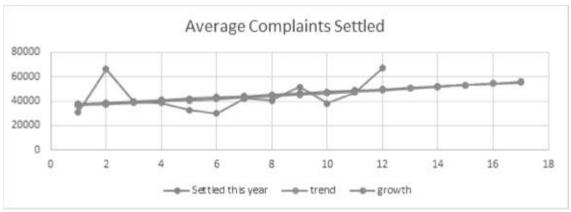












$1 \alpha \beta \alpha \alpha \beta $	Table 1:	The trend	and growth	equations
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Sector		Linear Trend	<b>R-square</b>	Growth Trend	R-square
<b>Public Sector</b>	Average	Y = 15566x -	0.7742	$Y = 10986e^{0.2371x}$	0.8689
and Private	Complaints	27461			
Sector	Received				
	Average	Y = 15350x -	0.7793	$Y = 11106e^{0.2356x}$	0.8729
	Complaints	26451			
	Settled				
Public Sector	Average	Y = 24868x -	0.8007	Y =	0.9195
	Complaints	68510		2465.3e <sup>0.4259x</sup>	
	Received				
	Average	Y = 24555x -	0.8063	Y =	0.9244
	Complaints	66948		2485.2e <sup>0.4253x</sup>	
	Settled				
Private Sector	Average	Y = 1150.5x +	0.4122	$Y = 35525e^{0.0274x}$	0.4389
	Complaints	36404			
	Received				
	Average	Y = 1107.6x +	0.4036	$Y = 35633e^{0.0266x}$	0.4309
	Complaints	36606			
	Settled				

Public and Private Sector		Public	Sector	<b>Private Sector</b>		
Average	Average	Average	Average	Average	Average	
Complaints	Complaints	Complaints	Complaints	Complaints	Complaints	
Received	Settled	Received	Settled	Received	Settled	
13925	14056	3802	3774	36593	36510	
17652	17791	5818	5778	37580	37523	
22375	22518	8902	8845	38593	38564	
28363	28501	13620	13542	39633	39633	
35954	36074	20841	20731	40733	40702	
45575	45659	31888	31739	41863	41799	
57772.	57791	48791	48589	43024	42926	
73232	73146	74654	74387	44218	44084	
92830	92582	114227	113881	45444	45272	
117672	117181	174776	174343	46705	46493	
149162	148316	267421	266907	48001	47746	
189079	187725	409174	408614	49332	49034	
239679	237603	626067	625557	50701	50356	
303819	300735	957930	957680	52107	51713	
385123	380641	1465705	1466134	53553	53108	
488186	481779	2242639	2244539	55038	54540	
618828	609788	3431406	3430217	56565	56316	
	Average Complaints Received 13925 17652 22375 28363 35954 45575 57772. 73232 92830 117672 149162 189079 239679 303819 385123 488186	Average Complaints ReceivedAverage Complaints Settled13925140561765217791223752251828363285013595436074455754565957772.5779173232731469283092582117672117181149162148316189079187725239679237603303819300735385123380641488186481779	Average Complaints ReceivedAverage Complaints SettledAverage Complaints Received13925140563802176521779158182237522518890228363285011362035954360742084145575456593188857772.5779148791732327314674654928309258211422711767211718117477614916214831626742118907918772540917423967923760362606730381930073595793038512338064114657054881864817792242639	Average Complaints ReceivedAverage Complaints SettledAverage Complaints ReceivedAverage Complaints Settled13925140563802377417652177915818577822375225188902884528363285011362013542359543607420841207314557545659318883173957772.5779148791485897323273146746547438792830925821142271138811176721171811747761743431491621483162674212669071890791877254091744086142396792376036260676255573038193007359579309576803851233806411465705146613448818648177922426392244539	Average Complaints ReceivedAverage Complaints SettledAverage Complaints ReceivedAverage Complaints SettledAverage Complaints Received13925140563802377436593176521779158185778375802237522518890288453859328363285011362013542396333595436074208412073140733455754565931888317394186357772.577914879148589430247323273146746547438744218928309258211422711388145444117672117181174776174343467051491621483162674212669074800118907918772540917440861449332239679237603626067625557507013038193007359579309576805210738512338064114657051466134535534881864817792242639224453955038	

 Table 2: The trend values and forecasted values of complaints received and settled

Table 3 shows the descriptive statistics for the variables under study. The mean value of the variable CSR shows that on an average the sample banks have a settlement rate of 96.75 percent. The high mean value of the settlement rate of complaints shows that the Indian banks are cautious to the timely settlement of the complaints of their customers. To the least, 70 percent of the complaints were always settled, going as high as settlement of 100 percent of the complaints. The independent samples t-test shown in Table 4, that measures whether a significant difference exists between the settlement rate of complaints of the public sector banks and private sector banks, reveals that there does not exist a significant difference between the settlement rates of public sector banks and private sector banks for the period under study. The negative value of the t-test indicates that on an average the complaints settlement rates of the private sector banks was higher as compared to the complaints settlement rates of the public sector banks. Although, such a difference was not significant. Therefore, we fail to reject the second hypothesis of the study. The diagnostic statistics viz. the test for stationarity of the variables along with the multicollenearity diagnostic, the variance inflation factor and tolerance values are shown in the Table 5. The Levin-Lin-Chu test shows that all the variables used in the study except GNPA and ROA are stationary at level. The variables GNPA and ROA are stationary at first difference, and therefore have been used in the regression model after first differencing. The VIF values of the variables are not less than 1 and not more than 10 and the tolerance values (1/VIF) of the variables are not less than 0.1. This depicts that there does not exist the problem of multicollinearity between the independent variables used in the model. (Cho & Kim, 2007; Field, 2009; O'Connell, 2010)

#### **Complaints Settlement Rate and Firm Performance**

Table 6 shows the results of the regression analysis of complaints settlement rate of banks and the financial performance of the banks. The values of the co-efficients of CSR againt both the proxies of bank performance viz. ROA and ROCE are significant at 0.05 significance level and 0.01 signifucance level respectively. Moreover, the

positive values of the co-efficients show that with an increase in the complaints settlement rates of the banks, their financial performance in the terms of ROA and ROCE would show an increase. This result corroborates with the findings of the previous studies, which state that an improvement in the setlement of customer complaints would bring higher returns to the organisation. (Johnston, 2001; Leo, Gani, & Jermias, 2009) Such a significant positive effect of complaints settlement can be attributed to the fact that an increase in successful complaints settlement, would bring increased customer loyalty (Heskett, Sasser, & Hart, 1990; Bailey, 1994; Spreng,

Harrell, & Mackoy, 1995) and customer satisfaction. (Varela-Neira & Va'zquez-Casielles, 2010; Taleghani et. al., 2011; Filip, 2013; Supriaddin et. al., 2015) Increased customer loyalty and satisfaction are effective in retaining customers and therefore, help to earn more. (Edvardsson et. al., 2000; Soltanmoradi, Poor, & Nazari, 2013) Therefore, we reject the first null hypothesis of the study. The results indicate that an increase in the complaints settlement rate of the banks by 1 percent, would increase the ROA of the banks by 1.3 percent and the ROCE of the banks by 1.9 percent.

#### **Table3: Descriptive Statistics**

Variables	Mean	Std. Dev.	Min	Max
CSR	96.75	3.99	70.29	100
TA	16.41	1.21	13.17	19.68
AGE	4.11	0.74	1.09	5.02
CAR	13.14	2.16	7.51	20.09
GNPA	4.16	4.37	0.00	27.91
ROA	0.78	0.88	-2.46	7.51
ROCE	7.22	0.69	3.91	9.54

#### **Table 4: Independent Samples Test**

		Levene's Test for Equality of Variances			t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Complaint Settlement Rate (CSR)	Equal Variances Assumed	0.001	0.971	-0.123	334	0.902	-0.055	0.446
	Equal Variances not Assumed			-0.120	260.03	0.904	-0.055	0.456

#### Table 5:Levin-Lin-Chu Test of Stationarity

Variable	I(0)		I	1)	VIF values	Tolerance Values
	t-statistic	p-value	t-statistic	p-value		
1. CSR	-17.4556	0.0000			1.04	0.96
2. TA	-7.9723	0.0000			1.13	0.88
3. Age	-12.5571	0.0000			1.03	0.97
4. CRAR	-4.1969	0.0000			1.00	1
5. GNPA	1.7056	0.9560	-4.3014	0.0000	1.11	0.90
6. ROA	2.2917	0.9890	-2.9706	0.0015		
7. ROCE	-7.3186	0.0000				

	ROA	ROCE
CSR	0.013**	0.019*
	(0.035)	(0.006)
TA	0.425	0.105*
	(0.229)	(0.034)
AGE	1.500*	1.022*
	(0.410)	(0.315)
CRAR	0.114**	-0.034
	(0.129)	(0.025)
GNPA	-0.141*	-0.010**
	(0.039)	(0.004)
Intercept	-3.097	5.362
	(3.027)	(1.640)
Ν	308	308
Adjusted R <sup>2</sup>	0.5494	0.4668
F-statistic (model-fit)	39.04*	29.91*
F-test	14.12*	8.14*
LM Test	39.28*	260.08*
Sargan-Hansen Test	109.54*	15.225*
FE / RE	FE	FE

Table 6: Complaints Settlement Rate and Firm Performance

#### Conclusion

The present study investigates the association between the customer complaint redressal by the banks and firm performance of the public and private sector commercial banks in India. The study concludes that (a) the number of customer compliants received by the banks have increased drastically in the period of 12 years along with the complaints settlement rate of the banks. (b) there does not exist a significant difference between the complaints settlement rate of public sector commercial banks and private sector commercial banks in India. (c) the customer complaints settlement rate has a significant positive impact on the financial performance of the public and private sector commercial banks in India.

A significant increase in the complaints received could mean that the bank customers are becoming aware about their rights, the procedure of complaint filing and about the banking ombudsman scheme of RBI. However, this also points to the factor of inefficient internal mecahnisms of the banks to redress the grievances received. The typical procedure to file a complaint is to first raise it with the concerned bank. In case the customer is not satisfied with the actions taken by the bank, or the solution given, or in case the compliant was left unattended, the customer can then file the compliant with the higher authorities, i.e. the banking ombudsman. However, according to RBI, the number of complaints being filed with the ombudsman has increased significantly. The total number of complaints received by the banking ombudsman was 85,131 in the year 2014-15, 102,894 in the year 2015-16 and 130,987 in the year 2016-17. According to the results of trend analysis done in the study, the number of complaints received by the public sector banks would increase dramatically as compared to private sector banks, which would show only a minor increase in the number of complaints received in the years 2018-19 to 2022-23. The increase in rate of customer complaints settlement can also be attributed to the fact that on the advice of RBI, the banks have formed an Internal Ombudsman (IO), which would review the compliants received and would handle them internally, before transfering it to the banking ombudsman. (RBI, 2017)

The significant positive effect of the rate of customer complaints settlement on the financial performance of the banks can be supported with the fact that successful settlement of complaints has a positive effect on the customer relationship factors like customer loyalty, customer satisfaction and customer retention, which singularly as well as collectively are known to have a positive impact on the earnings of a company. However, it must also be stated that a mere settlement of complaints is not sufficient. The factor of satisfaction of the customer with the solution provided by the bank for his grievance must be considered. Failure of the Indian banks in satisfying the customers with the solution provided could be a possible reason for the significant increase in the number of complainst filed with the banking ombudsman. Therefore, the quality of complaints settlement must also be analysed. The present study fails to address the

following limitations. A linear relationship has been assumed between the independent variables including the settlement rate and the dependent variable viz. bank financial performance, whereas a curvilinear relationship could exist between the variables and may be more effective in explaining the relationship between the two factors. Ratios measuring bank financial performance has been used as a proxy for bank performance. However, other measures of bank performance viz. the market measures and the variables measuring bank productivity could provide a comprehensive view on the matter. Quantitative aspect of customer complaints settlement has been analysed in the study. However, other quantitative aspects of complaint settlement as well as the qualitative aspects of the same could be considered. Lastly, to develop a more consistent result, study could be conducted on an incresed sample size and extended time period.

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