Original Article

Impact of Financial Innovations on Job Stress Among Employees of Select Private and Public Sector Banks, Andhra Pradesh, India

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Abstract - Financial Innovations brought revolutionary changes in many aspects of the banking sector in the form of digital transactions and new delivery channels such as Internet Banking, Phone Banking, Automated Teller Machines, Electronic Fund Transfer, Electronic Clearing Services, and Electronic Data Interchange, etc. Augmented competition, rising customer demands, rendering prompt customer services, time-bounded targets, heavy workloads, and conflicting roles are focal factors causing job stress among bank employees.The study attempted to examine the impact offinancial innovations on job stress along with variationsamong bank employees ofselect private and public sectors in India. The study employed simple linear regression, one-way ANOVA, and independent sample t-tests. The study found that operational innovations, Service Innovations, Fintech innovations,Product Innovations are showing a positive and significant relation causing Job stress among private and public sector bank employees. Further, the study concludes that, in the existing scenario, Financial Innovations cause more or less similar job stress on employees across public and private sector banks.

Keywords - Financial Innovations, Job stress, Bank employees

I. INTRODUCTION

The Indian economy is moving forward with innovations brought by the technological era, and the Indian banking industry has well initiated financial innovations to achieve robust growth. Banks are innovating faster by expanding their services towards open banking, re-configuring delivery channels, delivering proactive advice, integrating payments, and using blockchain technology. Moreover, consumers are provided more freedom and access to their banks with account and payment processes being made available through secure Application Programming Interfaces (APIs). Open banking with APIs boost innovations which lead to enhanced digital banking for collecting deposits, using digital platforms for lending, investing, and specialty services; banks are focusing on quality customer experiences and increased value for customers.

Indian banks transformed towards digital banking systems by changing banking services, products, technologies, and operational methods. Nowadays,new financial innovations, digital technologies, advanced data analytics, and new delivery platforms have become critical in the baking sector. The current banking sector dynamics are more focused strategically on different forms of financial innovations to meet customer expectations besides combating market share against increasing competition. The prevailing cut-throat competition across industry and the pressure to satisfy the stakeholders has resulted from increased job stress on employees than ever before.

II. STATEMENT OF THE PROBLEM

Financial innovations in bankingare a dynamic and continuous process that entails the creation of new financial instruments, as well as new financial technologies that suit up the growing needs of financial markets, financial institutions, and customers.Financial innovations have changed dramatically over the past few decades due totechnological advancements, changes in global banking practices,growing importance for new modes of financial services andproducts. Thedynamics of the banking sector have spurred financial innovations that have transformedmajorly in financial services, products, operations,and financial technologies.In contrary to the traditional banking system, modern banking is moving ahead with moderately or completely machine and technology-based banking. Financial innovations aim to facilities customer satisfaction besides increasing operational efficiency and to reduced operational expenses of banking services.The financial innovations encountered in the banking sector have both positive and negative impacts. On the positive side, it facilitated for raise in the volume of business and increased customer service. On the negative side, it is adversely affected by severe competition among banks and ultimately grounded for increased work burden, stringent targets, extreme changes in work activities on the part of the employees. All thesechanges come acrossthrough financial innovationled to new ways of structuring the operationsdrastically

changed the working environment and added job stress on employees of both private and public sector banks.

III. REVIEW OF LITERATURE

A review of new empirical researchers conducted on banking innovations provides some insights which created the path to carry current research.**Sujana (2011)** examined the factors that influence customers in using innovative banking services. The study found that internet banking provides easy access to bank transactions with lower service charges and high-speed interaction.Asli (2011) highlighted that internet banking focuses on different channels to gain a competitive advantage. Further, online banking offersa number of advantages for both banks and customers. Fatima (2011),in a research study, revealed the fact that internet banking services ought to be more responsive regarding security requirements. The study concludes that the biometric identification method is better to address security issues.Parvin (2013) research work revealed that the majority of the banks are offering mobile banking to satisfy their customers as a part of their diverse, innovative services. The study concluded that the majority of the customers are satisfied with very few services offered by the banks.Robert (2013) investigated the factors influencing mobile banking adoption such as Relative advantage, complexity, compatibility, service satisfaction, and risk, etc. The study observed that there existsa correlation between the parameters that measured the adoption of mobile banking. Further, the study noticed with regard to observability and complexity a weak negative correlation and weak positive correlation, respectively. KoteswaraRaoGadda and Shubhamoy(2014) observed that majority of the banks in India implanted core banking system solutions for multi-channel service delivery, integrated data banks highly solicited to encompass business intelligence through information technology.

Narteh (2012) found that most of the banks have implemented innovative banking services such as telephone banking, SMS alerts, and internet banking for their clients. The study noticed that despite the adoption of innovative banking services, there is still a lag behind expectation.Ravindran and Reji Kumar (2012),in their research study, examine the factors that influence the decision in early adopters of m-banking services in Kerala, India. The perceptions regarding risks and trust involved in mobile banking found an adverse impact on service satisfaction. Moreover, quality and perceived usefulness were found to be strong predictors than attitude in acceptance intention in Technology Acceptance Model. Usman and Shah (2013),in their research study, attempted to identify the critical success factors to encounter E-banking frauds from the perspective of both customers and banks. The study observed that besides compromises in the authentication system, education to customers and staff is highly desirable. Himani Sharma (2011) studied the difficulties encountered by bankers with E-banking products. Often there are two major problems that come across while transact E-banking is technical bottlenecks

and heightened stress. The study concludes that despite private sector and foreign bank employees are keeping pace with the technology, but the problem arises in public sector bank employees.AnkitandRadhakrishna (2013),in their research study, noticed that regardless of perceived usefulness and ease of use, some other factors can affect innovative banking adoption, which leads to the reluctance of customers to use innovative banking services, more particularly the risk and privacy issues.

The above review indicates that financial innovations are still in infancy in the Indian banking sector but have brought several opportunities besides persistent challenges. The majority of the studies focus on the positive angle by studying the advantages of financial innovations of banks and customers. Despite very few studies throw light on the negative angle by focusing on the challenges of financial innovations from the customer point of view. The present study attempted to examine the impact of financial innovations on Job stress among bank employees. The study further examines the variations of job stress between Private and Public sector bank employees.

IV. OBJECTIVES OF THE STUDY

1. To examine theimpact of financial innovations on job stress among employees of select banks.
2. To identify the variations in Job stress due to financial innovations among employees of select public and private sector banks in India.

A. Hypothesis

1. Financial Innovations have no significantimpact on job stress among employees of select banks
2. There is no significantvariation in Job stress due to financial innovations among employees of public and private sector banks.

V. RESEARCH DESIGN

The present study is explanatory in nature, which explains the cause and effect relationship between dependent and independent variables. The study is undertaken to examine the impact of financial innovations on the job stress of employees of select banks.

A. Sources of Data and Data Collection

A structured questionnaire with scales was designed to collect the primary data and was distributed to the employees of select public and private sector banks located in the Guntur and Krishna districts of Andhra Pradesh State, India. A qualitative research approach was adopted to collect the data for the study.

B. Sample design

A sample of the top four public sector banks and top four private sector banks ranked by Dun & Bradstreet India in terms of revenue, branches, and total assets as of 31 March 2016 were selected. The sample public sector banks include State Bank of India, Bank of Baroda, Punjab National Bank, Bank of India, Canara Bank, and private banks include ICICI Bank Limited, Axis Bank Limited,

HDFC Bank Limited, Kotak Mahindra Bank Limited, and Yes Bank Limited.

In order to give due representation to public and private sector commercial banks, an equal number of 200 employees each from both private and public sector banks comprising a total of 400 employees were selected. However, 15 responses were found to be incomplete. Hence a net sample of 385 was considered for analysis. A disproportionate stratified random sampling technique was employed, as disparities exist in the number of branches and employees in the select eight banks under the study.

C. Tools used in the study: The study employed statistical tools, which include simple linear regression, one-way ANOVA, and independent sample t-tests.

VI. LIMITATIONS OF THE STUDY

The study is limited to the responses of select public and private sector banks employees working in the Guntur and Krishna districts of Andhra Pradesh state, India.

- Since the study is psychological in nature, and often the employees do not express their stress level freely and hesitate to reveal the Job stress experienced by them at banks. This is a serious limitation of the study.
- The behavioral symptoms of stress exhibited at work were not included in the study.
- Sometimes out of stress, the respondents may not provide a realistic assessment of the work environment.

A. Impact of Financial Innovations on Job Stress of bank employees
In order to gauge the precise impact of Financial Innovations on the Job Stress of bank employees, a simple linear regression analysis was employed. Financial

Innovations form the independent variable, and employee job stress constitutes the dependent variable. The regression equation can be framed as follows:

$$Y = a + bX_1$$

Where Y = Dependent variable = Job Stress; and
X_1 = Independent Variable = Financial Innovations
b = the coefficient (describes the size of the effect of the independent variable on the dependent variable); and
a = the value predicted to have when the independent variable is equal to zero; it is the constant.

Hypothesis 1:

B. Financial Innovations have no significant impact on job stress among employees of select banks
The study considered four sub-variables, namely Product Innovations, Service Innovations, Financial Technology (Fintech) Innovations, and Operational Innovations as proxies for Financial Innovations. The regression equation was applied in order to predict the contribution of each sub variable separately on job stress of employees, which is the dependent variable. Further, efforts were made to find out the composite influence of financial innovations on employees' job stress.

An attempt was made to ascertain those sub-variables of Financial Innovations, which have a high impact on the dependent variable, employee job stress. Regression analysis was, conducted and the results so obtained were exhibited in Table-1. R-square value is the measure of the overall predictive accuracy of a regression model. Further, R-square interprets the amount of variance in the dependent variable (Job stress) caused due to independent variable can be explained by the model.

Table 1. Impact of Financial Innovations Job Stress: Regression Analysis Coefficients (a) and R-Square

Sub Variable	Model	Unstandardized Coefficients	Sig.	R-Square
Product Innovations	(Constant)	2.716	0.000	0.318
	Product Innovations	0.307	0.000	
Service Innovations	(Constant)	2.927	0.000	0.436
	Service innovations	0.405	0.000	
Fintech Innovations	(Constant)	2.608	0.000	0.339
	Fin Tech Innovations	0.349	0.003	
Operational Innovations	(Constant)	2.839	0.000	0.506
	Operational Innovations	0.519	0.000	
Financial Innovations (Composite)	(Constant)	2.638	0.000	0.512
	Financial Innovations	0.504	0.000	

The results of the study revealed that among all the four sub-variables of Financial Innovations, Operational Innovations had shown a high impact on Job stress with the coefficient value of 0.519. The supplementary value of R-square for the model is found to be 0.506. It explains 50.60% of the variance in Job stress. Thus, the Regression equation is:

Job stress = 2.839+ 0.519 Operational Innovations
(Significant at <0.05 level)

The study establishes that Operational Innovations took place at a rapid pace coupled with severe competition increased the work pressures on employees. As the operational innovations increases, business expectancy increases from the organizational end in terms of efficiency and effectiveness of operations which results from an increase in job stress. The results of the study indicate that this sub variable is the most crucial one having a significant impact on employees, causing stress.

Service Innovationsare another sub variable having a high influence on job stress on an employee with the coefficient value of 0.405. The supplementary value of R-square for model Service Innovations was found to be 0.436 showing a variance of 43.6% in employee Job stress. Thus, the Regression equation is:

Job stress = 2.927+ 0.405 Service Innovations
(Significant at <0.05 level)

The study establishes that Service Innovations lead to increased new customer interactions, increased customer communication channels, continuous identification of customer needs, increased customized services added work pressures on employees. As the Service Innovations increases, service delivery expectancy increases from customers in terms of service promptness and customer-centricity, value-added service enhancement resulting in job stress. The results revealed that the sub variable of Service Innovations manifest as one of the most crucial ones with a significant impact on employees erupt to Job stress.

Fintech Innovations is another sub variable having a substantial influence on Job stress on an employee with the coefficient value of 0.349. The supplementary value of R-square for model FinTech Innovations is found to be 0.339 showing a variance of 33.9% in employee Job stress. Thus, the Regression equation is:

Job stress = 2.608+ 0.349 Fintech Innovations
(Significant at <0.05 level)

The study establishes that Fintech Innovations often focus on the integration of finance and novel technologies to enhance the efficiency of financial services with cost efficiency and risk mitigation efforts needed to handle the complexity of work on the part of employees that causes

Job stress. Further, Fintech innovations involving big data analysis, blockchain applications, smart investment management, digital marketing enhancement,and newpayment methodswhile creating opportunities paves the way for new challenges causing job stress on employees. The sub variable of Fintech Innovations was found to be a significant impact on employees leading to Job stress.

Product Innovations are another sub variable having an influence on Job stress on the employee with the coefficient value of 0.307. The supplementary value of R-square for model Product Innovations is found to be 0.318 showing a variance of 31.8% in employee Job stress. Thus, the Regression equation is:

Job stress = 2.716+ 0.307 Product Innovations
(Significant at <0.05 level)

The study establishes that Product Innovations such as Innovative deposit schemes, Innovative loan schemes, Credit cards, Debit cards, Smart cards, Bancassurance, Wealth management services, Mobile banking apps, etc., increased the work burden and targets of employees leading to Job stress. Product Innovations scale up the business activities leading to severe competition in the banking industry, which in turn results in Job stress on employees. Product Innovations sub variable found to be a significant impact on employees explode to Job stress.

While taking into consideration of composite Financial Innovations variable, it comes to light that the coefficient value is 0.504. The supplementary value of R-square for model Financial Innovations is found to be 0.512, depicting 51.20% of the variance in Job stress. The regression equation is explained as under:

Job stress = 2.638+ 0.504 Financial Innovations
(Significant at <0.05 level)

The negative shade of Financial Innovations reflects on employees with added work pressures due to rising demands on them caused for Job stress. As it is noticeable from the data analysis results, financial innovations attributed to all the four sub-variables responsible for casting a significant negative impact on employees caused to Job stress in the banking sector.

C. Testing of Hypothesis
Thus, the hypothesis that Financial Innovations have no significant influence on job stress among bank employees is rejected. The influence of Financial Innovations on Job stress is significant at 0.05 level. Further, Sub variable-wise regression analysis between Financial Innovations and Job stress is also showing a positive and significant relationship in all the four sub-variables of Financial Innovations.

Hypothesis 2

There is no significantvariation in Job stress due to financial innovations among employees of public and private sector banks.

The study further attempted to examine variations in job stress that arise due to financial innovations among employees of public and private sector banks. This has been ascertained by using statistical tools like mean, standard deviation, one-way ANOVA, and t-test. Mean has been calculated to observe the difference in job stress among the employees of public and private sector banks. The standard deviation has been calculated for judging the

representativeness of mean scores. One-way ANOVA was calculated to know whether the employees from the two sectors of banks differ significantly on the basis of job stress. Moreover, in order to determine the specific difference, paired analysis of the group was conducted. This was done using independent sample t-tests. T-test was employed to know the significant difference in Job stress (*means*) among the employees of public and private sector banks in relation to financial innovations. The results are presented in Table 2.

Table 2. Financial Innovation and Job Stress Among Employees- Inter-Sector Bank Comparison

Category	Number of Employees	Mean	Std. Deviation	ANOVA		t	Sig. (2-tailed)
				F	Sig.		
Public Sector	191	3.0431	.38982				
Private Sector	194	3.0335	.38653	.059	.937	.242	.809
Total	385	3.0383	.38769				

D. Testing of Hypothesis

The above Table-2 demonstrates that the statistics reported in the Analysis of Variance column, F = 0.059, is significant at > 0.05 level. It reflects that there is an insignificant difference in the mean across the two sectors of the Bank on account of Financial Innovation and Job stress. Apart from this, the t-test results provided in the table show insignificant mean difference with regards to Financial Innovation and Job stress, significant at > 0.05 among Public and Private Sector Banks. The analysis revealed that employees from public and private sector banks experience a similar level of stress due to financial innovations. Thus, the hypothesis that there is no significantvariation in Job stress due to financial innovations among employees of public and private sector banks is accepted.

On the basis of the above analysis, it can be attributable that Job stress occurring due to financial innovation is equally alike in both the sectors of the banks. The results of the present study are inconsistent with an earlier study conducted by Himani Sharma (2011) which find public sector bank employees experience more stress in dealing with financial innovations than their counterparts foreign and private sector banks. As years rolled by, the transformation took place rapidly by changing the game of business, and irrespective of the

sector, all banks are combating for survival with no exception. This study concludes that adaptation of Financial Innovations under the prevailing tough competition exposed to more or less similar job stress across select public and private sector banks.

Summary

Financial innovations brought revolutionary changes in many aspects of modern banking. Modern banking is found with digital transactions, new delivery channels such as Internet Banking, Phone Banking, Automated Teller Machines, Electronic Fund Transfer, Electronic Clearing Services and Electronic Data Interchange, etc. Financial innovations brought by the banking sector can be classified into four groups such as operational innovations, Service Innovations, Fintech innovations Product Innovations. The present study attempted to find out the impact of financial innovations on job stress amongemployees of select private and public sector banks in India.The study found that operational innovations, Service Innovations, Fintech innovations Product Innovations are showing a positive and significant relation casing Job stress among employees of select private and public sector banks. Operational innovations increase business expectancy in terms of efficiency and effectiveness of operations, and service innovations increase service delivery expectancy in terms of service promptness and customer-centricity,

value-added service enhancement; fintech Innovations increases the complexity of work on the part of employees, Product innovations increase the work burden and targets of employees, and all these are leading to increased Job stress on bank employees.Finally, the present studyconcludes that there is no significant variation in Job stress due to financial innovations among employees of select public and private sector banks.

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