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## ANALYSIS OF RISK OF FRAUD BY EMPLOYEES IN PRIVATE SECTOR BANKS

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### (ABSTRACT)

In the present study, an attempt is made to study the various aspects of risk of fraud by the employees in e-banking in the selected private sector banks. A sample of 120 respondents (banks' officials) is taken on the basis of judgement sampling. The primary data were collected with the help of pre-tested structured questionnaire on five point Likert scale i.e. Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D) and Strongly Disagree (SD). The collected data were analyzed through various descriptive and inferential statistical techniques like percentage, mean and standard deviation, etc. Further, ANOVA technique has been employed to test the hypotheses and validate the results. It is found that poor security of records, hardware and software system is ranked as the most significant factor responsible for the risk of fraud by the employees in AXIS and HDFC, and little fear of exposure and likelihood of detection of frauds in ICICI. On the other hand, bank may face withdrawal of approvals from regulatory bodies is ranked as the most significant impact of the risk on the functioning of AXIS, increase in costs associated with reimbursing customers' losses in HDFC and ICICI. Further, clear boundaries between acceptable and unacceptable behaviour of employees is ranked at the top in AXIS, developing policies for adequate screening of new employees in HDFC and ICICI as measures for overcoming the risk of fraud by the employees in the selected banks. It is recommended that there should be an open-door policy in the organization to give employees an open line of communication with management. Internal control programmes should be monitored and revised regularly to ensure that they are effective and current with technological advances. Certified Fraud Examiners (CFE) and Certified Public Accountants (CPAs) should be hired to analyze the existing company's policies and procedures, and recommend appropriate anti-fraud policies and procedures. Every employee of the organization should be aware of the fraud risk policy including the types of fraud and the consequences thereof.

**Key Words:** *Exposure, Approval, Reimbursing, Screening, Behaviour*

### Introduction

Indian banking is in the mid of information technology revolution these days. However, new private sector banks and foreign banks have an edge over public sector banks in the implementation of technological solutions. To be successful in the competitive environment, public sector banks are trying to find innovative ways to reduce the cost of transaction and increase the profitability by providing better services to the customers. Technology has been one of the major enabling factors for enhancing the customers' convenience in the products and services offered, which were difficult or even impossible earlier with traditional banking. Indian banks have been able to take one step in

this direction - physical cash has been replaced by anytime/anywhere money, however these are more pronounced in foreign and private banks. The public sector banks are far behind in technology integration, therefore there is a huge scope for automation in these banks (*www.centralbank.ie*). The security of the transactions is a major concern in the use of technology as it induces a number of risks, which are highly interdependent and events that affect one area of risk can also have ramifications for a range of other risk categories (*Singh, 2015*). Among these risks, operational risk is emerging as a new challenge to the Indian banks, which is a distinct class of risk, and exists in each product and services offered. It differs from other banking risks in the sense that it exists in the natural course of corporate activity and is not directly taken in return for an expected reward. At the same time, failure to properly manage operational risk can result in a mis-statement of an institution's risk profile and expose the institution to significant losses (*www.fsrc.gov.ag*). Operational risk is confronted by the bank even before it decides its first credit transaction realizing that the merely a quantitative approach to credit risk and market risk overlooks the key danger areas, and that operational risk management should consequently be developed into a discipline (*Geiger, 2000*), increasing dependence on computers and electronic communication in banking transactions has increased the possibility of system failure, and the renewed interest of regulatory authorities in operational risk as they feel that about 25 percent of regulatory capital is needed for operational risk (*Akbari, 2012*). The fraud by employees or bank fraud or insider fraud, which is an important component of operational risk, is the use of potentially illegal means by the employees to obtain money, assets or other property owned or held by a bank or financial institution, or to obtain money of depositors by fraudulently posing as a bank or other financial institution. The number of bank frauds in India is substantial and increasing with the passage of time and technology. According to survey by Earnest and Young (2012), the banking segment witnesses around 84 percent of reported fraud cases within the financial services sector. Banks frauds occur due to ignorance, situational pressures and permissive attitudes. It is difficult to detect the frauds in time and even more difficult to book the offenders because of intricate and lengthy requirements and processes of the legal/judicial system. Moreover, the fraud cases are not always brought to light due to fear of loss of reputation of the bank(s) (*Kundu and Rao, 2014*).

### Review of Literature

The articles on different aspects of risk of fraud appeared in various journals are restrictive and do not give a comprehensive picture. *Sharma ad Brahma (2000)* indicated that banks frauds could crop up in all spheres of bank dealing and emphasized on bankers' responsibility on frauds, and suggested that the need of hour is the analysis and concerted application of controls by bank management and their operations staff. *Ebnother and Vanini et al. (2003)* found the results of the modeling exercise relevant for the implementation of a risk management framework, but the risk factor 'fraud' dominates all other factors and finally, only 10 percent of all processes have a 98 percent contribution to the resulting VaR. *Beirstaker, Brody and Pacini (2005)* proposed various fraud protection and detection techniques such as fraud policies, employee reference checks, fraud vulnerability reviews, password protection, firewalls, digital analysis and other forms of software technology. *Willson (2006)* examined the causes that led to the breakdown of Barring bank, which include failure in management supervision, lack of segregation of duties, insufficient actions taken in response to warning signals, weak financial and operation control over the activities and funding of the bank. *Bhasin (2007)* examined the reasons for cheques frauds, magnitude of frauds in Indian banks and the

manner in which expertise of internal auditors can be integrated to detect and prevent frauds in banks. *Ganesh and Raghurama (2008)* believed that training improved the capabilities of the employees by enhancing their skills and knowledge commitment towards their work. *Khanna and Arora (2009)* indicated that lack of training, overburdened staff, competition, low compliance level are the main reasons of fraud, and recommended that the banks should take the rising graph of bank frauds seriously and need to ensure that there is no laxity in internal control mechanism. *Kundu and Rao (2014)* highlighted that bank frauds in India are increasing with the passage of time and technology, identified the thrust areas for fraud management and finally, with IT as fulcrum, a model of fraud management for the Indian banks has been provided. The foregoing review of literature and other articles which could not be cited here focused upon the reasons of bank frauds, but no concerted efforts were made to examine the impact of frauds on the functioning of banks and measures initiated to control frauds. Therefore, the present study is undertaken to fill the gap in the existing literature.

### **Scope of the Study**

The present study is conducted to examine the various aspects of risk of fraud by the employees in e-banking in selected private sector Indian banks in the area of Punjab, Chandigarh, Haryana, New Delhi and Rajasthan.

### **Research Objectives**

The following are the specific objectives of the study:

- (i) To identify the factors responsible for risk of fraud by the employees in e-banking in the selected banks.
- (ii) To examine the potential impacts of risk of fraud by the employees in e-banking on the functioning of the selected banks.
- (iii) To analyze the measures to overcome the risk of fraud by the employees in e-banking in the selected banks.

### **Research Hypotheses**

The following hypotheses have been formulated and tested to validate the results of the study:

- H<sub>01</sub>:** There is no significant difference among the bankers' viewpoint towards the factors responsible for the risk of fraud by the employees in e-banking in the selected banks.
- H<sub>02</sub>:** There is no significant difference among the bankers' viewpoint towards the impacts of risk of fraud by the employees in e-banking on the functioning of the selected banks.
- H<sub>03</sub>:** There is no significant difference among the bankers' viewpoint towards the measures for overcoming the risk of fraud by the employees in e-banking in selected banks.

### **Research Methodology**

In the present study, three banks *viz.* HDFC Bank (HDFC), ICICI Bank (ICICI) and AXIS Bank (AXIS) are selected. A sample of 120 banks officials (40 from each bank) is taken on the basis of judgement sampling. Both types of data *i.e.* primary and secondary were used. The primary data were collected with the help of pre-tested structured questionnaire on five point Likert scale *i.e.* Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A) and Strongly Agree (SA) from the bank officials of branches of the selected located in the areas of Delhi, Rajasthan, Haryana, Chandigarh and Punjab. On the other

hand, secondary data were collected from journals, magazines, websites, reports of RBI and IBA, *etc.* Besides questionnaire, interviews and discussion techniques were also used to unveil the required information. The collected data were analyzed through various descriptive and inferential statistical techniques like frequency distribution, percentage, mean, standard deviation, *etc* with the help of SPSS (18.0 version). For coding and editing the data, weights were assigned in order of importance *i.e.* 1 to Strongly Disagree (SD), 2 to Disagree (D), 3 to Neutral (N), 4 to Agree (A) and 5 to Strongly Agree (SA). Further, ANOVA technique has been used to test the hypotheses and validate the results of the study.

## **RESULTS AND DISCUSSION**

### **Factors Responsible for Risk**

As displayed in Table 1, poor security of records, hardware and software system is ranked as the most significant factor responsible for the risk in AXIS (Mean=4.45, SD=0.93) and HDFC (Mean=4.27, SD=1.13), and little fear of exposure and likelihood of detection of frauds in ICICI (Mean=4.07, SD=1.02), followed by lack of awareness about the results of fraud in AXIS (Mean=3.97, SD=1.12), alternation of data by the employees to draw information from the records in HDFC (Mean=4.07, SD=1.02) and unclear policies with regard to acceptable behaviour of employees in ICICI (Mean=4.02, SD=0.89). The mean score of all the statements, which is greater than 3.00, indicates that most of the respondents agree with the factors responsible for risk of fraud by the employees in the selected banks. Statistically, ANOVA results show that the respondents in these banks do not differ significantly in their viewpoint towards the factors responsible for the risk of fraud by the employees at 5 percent level of significance; therefore, the null hypothesis ( $H_{01}$ ) is accepted.

### **Impacts of Risk**

As displayed in Table 2, bank may face withdrawal of approvals from regulatory bodies is ranked as the most significant impact of the risk on AXIS (Mean=4.15, SD=0.97), increase in costs associated with reimbursing customers' losses in HDFC (Mean=4.20, SD=0.96) and ICICI (Mean=4.25, SD=0.63), followed by increase in costs associated with regeneration of customers' records in AXIS (Mean=4.10, SD=1.03), intentional manipulation of accounts in HDFC (Mean=4.05, SD=1.10) and possible losses from redeeming electronic money in ICICI (Mean=4.15, SD=0.83). The mean score of all the statements, which is greater than 3.00, indicates that most of the respondents agree with the impacts of fraud by the employees on the functioning of the selected banks. Statistically, ANOVA results show that the respondents of these banks differ significantly towards the possible losses from redeeming electronic money ( $p=0.049$ ) as an impact of risk of fraud by the employees at 5 percent level of significance; therefore the null hypothesis ( $H_{02}$ ) is rejected.

### **Risk Management Measures**

As displayed in Table 3, clear boundaries between acceptable and unacceptable behaviour of employees is ranked as the most significant measure of risk in AXIS (Mean=4.40, SD=0.84), developing policies for adequate screening of new employees in HDFC (Mean=4.47, SD=0.64) and ICICI (Mean=4.35, SD=0.89), followed by developing policies for adequate screening of new employees in AXIS (Mean=4.35, SD=0.83), clear boundaries between acceptable and unacceptable behaviour of employees in HDFC (Mean=4.22, SD=0.65) and proper control over storage of smart cards (Mean=4.30, SD=0.91) in ICICI. The mean score of all the statements, which is greater than 3.00,

indicates that most of the respondents agree with the measures for overcoming the risk of fraud by employees in the selected banks. Statistically, ANOVA results show that respondents of these banks differ significantly in their viewpoint towards the proper control over storage of smart cards ( $p=0.003$ ) as a measure for overcoming the risk of fraud by the employees at 5 percent level of significance; therefore the null hypothesis ( $H_{03}$ ) is rejected.

### **Conclusion and Policy Implications**

To sum up, poor security of records, hardware and software system is ranked as the most significant factor responsible for the risk in AXIS and HDFC, and little fear of exposure and likelihood of detection of frauds in ICICI. On the other hand, bank may face withdrawal of approvals from regulatory bodies is ranked as the most significant impact on AXIS, increase in costs associated with reimbursing customers' losses in HDFC and ICICI. Further, clear boundaries between acceptable and unacceptable behaviour of employees is ranked at the top in AXIS, developing policies for adequate screening of new employees in HDFC and ICICI as measures for overcoming the risk of fraud by the employees in the selected banks. It is recommended that there should be an open-door policy in the organization to give employees an open line of communication with management. Internal control programmes should be monitored and revised regularly to ensure that they are effective and current with technological advances. Certified Fraud Examiners (CFE) and Certified Public Accountants (CPAs) should be hired to analyze the company's existing policies and procedures, and recommend appropriate anti-fraud policies and procedures. In addition to prevention strategies, there should also be detection methods in place and must be visible to the employees. Every employee of the organization should be aware of the fraud risk policy including types of fraud and the consequences thereof.

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**Table 1: Factors Responsible for Risk of Fraud by Employees in Selected Private Sector Banks**

Factors	N	AXIS			HDFC			ICICI			ANOVA	
		Mean	S.D.	Rank	Mean	S.D.	Rank	Mean	S.D.	Rank	F	Sig.
Poor security of records, hardware and software system	40	4.45	0.93	1	4.27	1.13	1	3.87	1.13	7	3.028	0.052
Lack of awareness about the results of fraud risks	40	3.97	0.76	2	4.05	0.93	3	3.97	0.91	4	0.098	0.907
Little fear of exposure and likelihood of detection of frauds	40	3.77	1.14	6	3.57	1.29	9	4.07	1.02	1	1.882	0.157
Unclear policies with regard to acceptable behaviour of employees	40	3.77	1.27	7	3.47	1.19	10	4.02	0.89	2	2.367	0.098
Poor internal control system	40	3.67	1.36	9	3.82	1.19	5	3.85	1.09	8	0.239	0.788
Ignorance of red flags and fraud warnings	40	3.82	1.33	5	3.62	1.40	8	3.90	1.05	6	0.496	0.610
Indifferent attitude of innocent and honest employees to the possibility of fraud	40	3.72	1.15	8	3.82	1.19	6	3.92	0.91	5	0.333	0.717
Non-updation of customers' accounts timely	40	3.40	1.33	10	3.70	1.24	7	3.67	1.20	10	0.694	0.501
Withdrawal of funds by the employees from customers' accounts	40	3.92	1.20	3	3.87	1.18	4	3.70	1.15	9	0.399	0.672
Alteration of data by the employees to draw information from the records	40	3.82	1.21	4	4.07	1.02	2	4.02	1.14	3	0.548	0.580

**Source:** Survey, **Note:** \*=significant at 5 percent level, Degrees of Freedom (df) = 2,117



**Table 2: Impacts of Risk of Fraud by Employees in Selected Private Sector Banks**

Impacts	N	AXIS			HDFC			ICICI			ANOVA	
		Mean	S.D.	Rank	Mean	S.D.	Rank	Mean	S.D.	Rank	F	Sig.
Increase in costs associated with reimbursing customer's losses	40	4.10	1.03	2	4.20	0.96	1	4.25	0.63	1	0.292	0.747
Increase in costs associated with regeneration of customers' records	40	3.65	1.16	8	3.67	1.07	9	4.00	0.78	4	1.464	0.236
Possible losses from redeeming e-money	40	3.57	1.17	9	3.72	1.17	6	4.15	0.83	2	3.087	0.049*
Wrong perception of the public towards the bank	40	3.95	1.03	3	3.70	1.06	7	3.95	1.13	8	0.716	0.491
Increase in legal problems	40	3.77	0.99	6	4.02	0.89	3	3.97	1.14	5	0.677	0.510
Withdrawal of approvals of the bank by the regulatory bodies	40	4.15	0.97	1	3.92	0.91	4	3.95	0.98	7	0.660	0.519
Increase in the complaints of the customers	40	3.92	1.26	5	3.70	1.13	8	3.95	0.95	6	0.595	0.553
Adverse impact on the motivation of honest employees	40	3.72	1.41	7	3.85	1.02	5	3.90	1.03	9	0.237	0.790
Intentional manipulation of accounts	40	3.95	1.21	4	4.05	1.10	2	4.05	1.10	3	0.101	0.904

**Source:** Survey, **Note:** \*=Significant at 5 percent level, Degrees of Freedom (df) = 2,117

**Table: 3: Measures for Overcoming the Risk of Fraud by Employees in Selected Private Sector Banks**

Measures	AXIS				HDFC			ICICI			ANOVA	
	N	Mean	S.D.	Rank	Mean	S.D.	Rank	Mean	S.D.	Rank	F	Sig.
Developing policies for adequate screening of new employees	40	4.35	0.83	2	4.47	0.64	1	4.35	0.89	1	0.329	0.721
Designing internal controls including segregation of duties	40	3.95	0.74	6	4.10	0.81	4	4.27	0.59	3	2.014	0.138
External audit of employees performance	40	3.90	1.12	8	3.82	0.93	9	4.17	0.81	6	1.456	0.237
Proper control over storage of smart cards	40	3.45	1.43	10	3.85	0.86	8	4.30	0.91	2	5.985	0.003*
Rotation in the distribution of work	40	3.82	1.15	9	3.77	0.94	10	4.00	1.06	9	0.500	0.608
Designing policies for developing an anti-fraud culture	40	3.97	1.12	5	3.87	0.93	7	4.00	1.26	10	0.141	0.869
Clear boundaries between acceptable and unacceptable behaviour of the employees	40	4.40	0.84	1	4.22	0.65	2	4.15	0.80	7	1.105	0.334
Assessing the relative likelihood and potential significance of inherent fraud risk	40	4.17	0.67	3	4.07	0.82	3	4.12	0.72	8	0.180	0.835
Designing of anti-fraud controls including appropriate steps to deal with relevant risk	40	3.97	1.09	4	3.92	0.97	6	4.27	0.87	4	1.475	0.233
Executing anti-fraud control measures by the competent and honest employees	40	3.95	1.21	7	4.02	1.12	5	4.22	0.91	5	0.676	0.510

**Source:** Survey, **Note:** \*=Significant at 5 percent level, Degrees of Freedom (df) = 2,117