# AN EVALUATIVE STUDY ON FINANCIAL RISKS AND ITS IMPLICATIONS ON FINANCIAL MANAGEMENT STRATEGIES FOR INDIAN CORPORATES

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Abstract: Covid 19 catastrophe has eventually stopped the functioning of Indian corporates and it has affected it to the core. The study is an empirical and quantitative study to evaluate the nature and prevalence of financial risks which are prevalent in Indian organizations. The study would also evaluate its implications on financial management strategies for Indian corporates.

In this study Mixed research method is used which would be a combination of Exploratory, conclusive and action oriented research. The research method chosen for this study would be survey method with Questionnaire. For this study a sample of 100 senior managers, financial managers, accountants and auditors would be contacted who are working in India. Data analysis has been done using SPSS. It was found from this study that company rules and regulations led to more financial risks in Indian corporates. The government policies and procedures had very less influence on company's financial risks in India. It is concluded that companies must change their policies and procedures to reduce the prevalence of financial risks in their companies.

Keywords: Risk, financial risk, financial management strategies, financial performance & Indian corporates

#### INTRODUCTIONWW

The Indian corporates functionary had come to a total standstill as the whole world has been grappled with Covid19. As the corporates struggle to redefine and establish their existence and performances, these organizations do face lot of risks in this volatile situation. The study is an evaluation on the various types of financial risks that Indian organizations encounter and its implications on financial management of these companies. As no study has been attempted in this direction, the dimensions and challenges are explored for the first time in India.

#### LITERATURE REVIEW

This literature review would be comprehensive, focused and pertinent as it would provide a brief introduction of types of risks, financial risk management in India and also explore in to the various industries in which financial management strategies are effectively managed by reducing risks. The role of risk management technology would also be evaluated.

# Financial risks – concepts and implications

(<u>Kungwani</u>, 2014) has stated that financial risk would mean the probability that the returns expected would be different and lower than what was expected. This indicates that there is a chance in all probability that some part of the investment or major part or totally could be lost in the process. Risk and return is a very basic fundamental concept in finance. When an investor looks for bigger and higher speedy returns the risk that the person assumes could be more.

It is a method which is used to measure the nature and extent of financial risks and the ways to mitigate it effectively. This can be mitigated effectively using by developing risk management practices, strategies, application tools and resource deployment method which can reduce it.

Risks could be due to financial and legal causes like natural calamities and death of person due to accident or any sudden cause. Financial risk management would be various methods and tools used for reducing risks. Financial risk management by nature tries to reduce the margin of risk which is taken by investors or corporates using tools and technologies.

The study states that financial risks could be reduced by analysing and reducing the capital structure of the company. Whenever the debt equity ratio is higher, companies must handle the situation with measures, strategies and steps to reduce it. The study states that interest payment factor also has to be considered in the entire process.

# **Operational risks:**

Operational risks are by nature the risks which are encountered transforms in to direct or indirect losses. These losses could be due to various factors like mismanagement of internal operations and procedures, people, process and its directives. We could find that there are various researches which have been conducted in this field.

(McNeil, Frey, & Embrechts, 2015) written a book on various financial risks and its implications for companies and markets. The book explains the role of operational risk in financial risk management. The study provides model for operational risk, multi factor equity pricing model, capital asset pricing model and operational leverage model. Process based models and accrual based models are discussed in this work.

(Jarrow & Protter, 2005) Done an evaluative study which focuses on different types of risks which are faced by banks. Operating technology is a major challenge which has to be encountered and risk loss which was encountered due to agency. As operational risk measurement is internal part of the company, the company financial policy also has implications on these factors. The calculation of net present value in measuring operational risk is crucial and critical in this. If it is not considered it would lead to major deviations in the entire issue. The internal data of the company has to be integrated with standard risk estimation process would help the companies to measure and assess risks which are prevalent.

(Ergashev, 2012) Done a study on financial risks and its management practices which are done. In this study scenario analysis, as a tool has been included which adds value and new dimensional perspective in to the work. The addition of scenario analysis is justified as it would provide support in worst case situations with new interpretations and analysis. The loss comparison is done with the traditional historical loss and worst case analysis is also done.

#### **Liquidity risks:**

The word liquidity risk would mean probability of company loss which could be due to uncertainties arising due to liquidity. This can happen due to fall in liabilities increase in assets. This risk would cause problems in effective management of the entire organization. So this risk is also categorized as comprehensive risk.

(<u>Bangia</u>, <u>Diebold</u>, <u>Schuermann</u>, <u>& Stroughair</u>, <u>1999</u>) Done an evaluative study & provided BDSS model for mitigating liquidity risk. In this method, price spreads are used as indicators to measure and evaluate it. In this model the liquidity factors and its association with market factors are assumed to be simple in nature. The correlation coefficient also measures linear correlation as it does not provide inputs on correlation between the two factors.

(<u>Duffie & Ziegler, 2003</u>) Conducted a study to evaluate liquidity risk model based on three major factors which are cash, relative liquidity and non-liquidity.

This study concludes that it is better to sell noncurrent assets first and then to use cash in hand as an option. This method is also not a very effective method for implementation by Indian corporates.

#### International studies

(Mortezaee & Sanji) Done a study to evaluate and assess the financial risk management practices in two Iranian banks. Financial risk management is an important domain which has its impact on stockholders' wealth. The dimension is of very huge importance in banking sector. Risk management methods and its implementation has huge impact on consent and disapproval of shareholders. This research is an attempt to evaluate three different kinds of risks – interest rate risks, capital risk and natural hedging risk. The study had found that financial risk management method has some effect on financial performance of organizations. In this study it was found that public sectorial Iranian banks are more effective in implementation & management of risk management tools than private banks. It is concluded that financial risk management tools had meaningful relationships with shareholder wealth in public sector banks of Iran.

(<u>startz</u>, <u>2011</u>) Found that financial market structures of each country have to be assessed & evaluated. Financial risks could cause losses for a firm due to fluctuations in income cash flow and capital changes.

(<u>Lee & Stock</u>, <u>2000</u>) Studied that risk has to be effectively managed it should not be eliminated which is not the right way of approach.

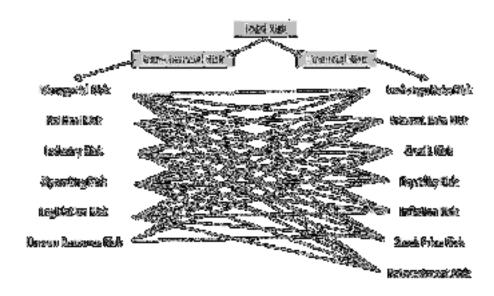
(Neveu, 1981) Done an evaluative study and found that risk could vary in its nature and intensity for different companies across different industries. Thus the financial risks for a company have to be evaluated using various tools and methods. The companies must also have a plan to manage the negative aspects and effects as well. As risk would have its implication on future revenue and profits it's very important that these dimensions has to be considered and evaluated.

(Ogden, Jen, & O'Connor, 2003)Done a study and found that profit is an important factor which affects the decisions of stakeholders with cost of capital as a factor playing a major role. This study concludes that financial risk management and assessment is an important factor which has to be assessed and evaluated.

(<u>Fathi, Zarei, & Esfahani, 2012</u>) Done a study and has provided the various categories of risks and its implications for corporate organizations. International risk, country level risks,

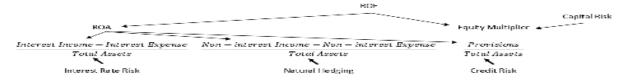
financial risk, corporate level risk, business risk and investment project risk for banks is given in detail below as a form of chart:

## Types of financial and non-financial risks:



Source: (Baele, Vander Vennet, & Van Landschoot, 2004)

(<u>Baele et al., 2004</u>) Provided a comprehensive evaluative model on measurement of risk in banks. The conceptual model for measuring risk in banks is provided below;



The various types of risk which is encountered in banks is provided above.

Risk evaluation and financial management strategies for Public sector banks

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Source: (Sethi, Sahoo, & Sucharita, 2013)

It is found from this study that R2 is equal to 72% for public banks and 51% for private banks. There is no auto-correlation among error tools in both groups. The value of F statistic means prove rejection of H0, it means model coefficients are equal to zero.

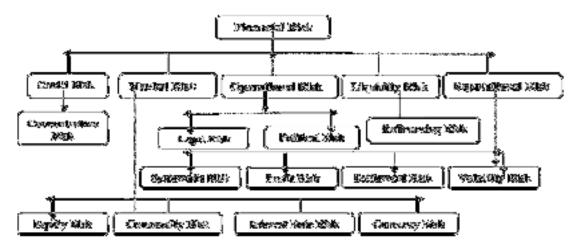
As a result, capital risk, natural hedging and interest rate risk have more significant effects on ROE in public banks. Since  $\beta$  is positive, natural hedging and interest rate risk

have a positive correlation with ROE. Also, the correlation between capital risk and ROE is negative.

(<u>Sethi et al., 2013</u>) Conducted a survey on international financial risk management systems and practices. The study intends to analyse the various types or risks which are prevalent to measure financial risk management.

The three types of risks which are faced by banks are operational risks, market risk and credit risks. With respect to commercial banking, credit risk is the biggest risk which is faced. Investment banking has market risk and asset management has operational risks.

The various types of risks which are encountered by companies are provided below:



Source:(Sethi et al., 2013)

We could see that these kinds of risks intervene and influence in organizational financial performances & an effective management system is needed for effective monitoring and control.

# Global banking risks and challenges - Responses

(<u>Bartram</u>, <u>Brown</u>, <u>& Hund</u>, <u>2007</u>) Conducted a global study of banks to evaluate the financial risks and challenges. They tried to quantify the extent of risk of systemic failure in global banking systems.

A sample of 334 banks was chosen in 28 countries which had faced global financial crisis. The results obtained from the study were statistically significant but which was economically small.

(<u>Stulz, 2008</u>)had evaluated the various risk factors which were associated & which led to failure of risk management systems and processes.

The factors were appropriate risk metrics was not used, known risks were not taken for assessment, in effective measurement of financial risks, failure to communicate financial risk to top management and over all failure in monitoring and management of risks.

#### **Indian studies**

(<u>Topalova</u>, <u>2004</u>) had conducted an empirical and evaluative study on Indian non-financial corporate sector since 1989 for evaluation of financial vulnerabilities. Firm level database of Indian corporates were used for this study. The study concludes that despite the

weakening of the corporate sector in recent years, most indicators are still at comfortable levels and there were signs of improvement in almost all indicators in 2002, the last year in our sample, and in 2003, with the soft interest rate regime and on-going economic recovery.

(<u>subramanya</u>, 1998)Opined that risk management processes in banks must be able to do proper risk modification, assess and quantify the nature of risks which are prevalent. The companies must be able to develop suitable strategies for effective management of risk using technical and managerial skills. Scientific risk management practice would enable credit and profit processes in banks which would enhance efficiency. Risk information and effective control system can help banks to sustain in future.

# Relevance of Financial risk on financial performance:

(<u>Hazzi & Kilani, 2013</u>) Evaluated and said that financial performance is the most important and critical factor in assessment and evaluation of organizational performances for future. This aspect and dimension has been continuously and consistently monitored by commercial banks and it has gained prominence in the last decade.

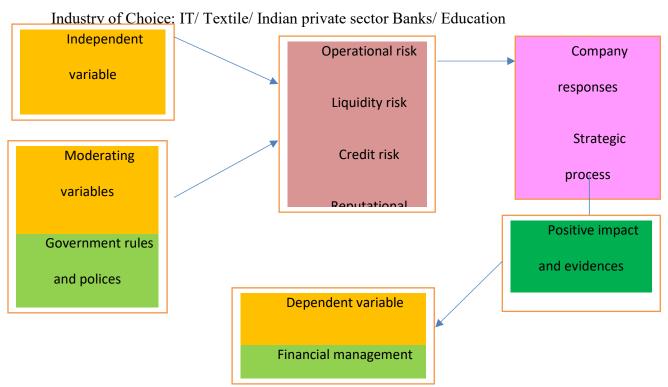
(Najjar, 2013) Conducted a study to evaluate the role and efficiency of banks by measuring the nature and extent of financial risks which are prevalent in it. This study evaluated the performance of banks with ratios and found that operational efficiency, size & methods of asset management influenced it to a larger and greater extent.

(Ongore & Kusa, 2013) Evaluated the role of financial risks on financial performance of banks and concluded that capital adequacy and liquidity factors also has to be considered. These factors also play a crucial role in financial risk management of companies.

# **Research Gaps:**

- 1. From the literature review, it is found that research studies have been done on types of financial risks as a descriptive and conceptual oriented study only. Financial risk based empirical studies are less evident in nature
- 2. It is also found that empirical and conceptual studies have not been done much on financial risks and its effects on financial management systems
- 3. It is evident that we could find lesser all India or region based studies on financial risks and its impact on financial management system of Indian corporates
- 4. As a comprehensive assessment of various types of risks operational, liquidity, credit, liquidity, reputational, market and systemic risk has not been done on financial management proactive practices in Indian corporates, this research is attempted.
- 5. As we could find the global or Indian studies on financial risks and financial management strategies for banking systems only. So there is an intensive need to study, evaluate and measure the nature and extent of financial risk and its prevalence and its impact on financial management practices for Indian corporates.
- 6. As these dimensions are not dealt in depth nor in detail, this study is an attempt to fulfil the research gaps. So this study is attempted in this direction.

# **Conceptual framework:**



# **Research Methodology:**

This section of the proposal would discuss in detail the various aspects and dimensions of research methodology which is provided below:

- 1. Philosophical paradigms
- 2. Philosophical orientations

## Philosophical Paradigm for this Research

We could evaluate and understand that three different philosophical paradigms/approaches are possible with educations which are:

- Scientific
- Interpretative
- Critical

This study would be undertaken with scientific orientation and pursuit as the main form of research which would also be interpretative and critical in terms of analysis and providing critical evaluations and examinations in this study. The first characteristic which would be reflecting in the entire study would be objectivity in all forms and methods would be represented. The nature, characteristics and its implications are provided below. This research

would be integrative in its philosophical approach by effectively combining all the three forms of representations like scientific, interpretative and critical research paradigms would be used in this research.

# Philosophical orientation in this research

In this research, Ontological research philosophy is followed with a combined philosophical perspective approach is chosen with a combination of scientific, interpretative and critical methods. The study would be done with the highest ethical standards with an objective view on things without giving any space for perceptual bias and attitudinal issues with research. An open minded approach would be taken at every stage of research and suggestions from research scholars academicians and professionals would be entertained which would increase the quality of this research which is the ultimate aim of the work.

- 1. Kind of research: Empirical and quantitative
- 2. Type of research: Mixed research method Exploratory, conclusive and action oriented research
- 3. Research method: survey with Questionnaire
- 4. Sample: senior manager, financial managers, accountants and auditors
- 5. Number of sample: 100
- 6. Sample method: Stratified random sample stratified based on age income designation, total number of years of experience and no of years in the department

The sample would be stratified as it would have a representation of senior managers, financial managers, accountants and auditors who have five years of experience minimum

- 7. Data collection method: primary data with Questionnaire with open ended, multiple choice and Likert 5-point scale method
- 8. Data Analysis methods:

The collected data from finance professionals working in MNC companies or in specific IT/ textile/Indian private sector banks would be analysed using SPSS - tools.

I level analysis

Frequency analysis of various demographic factors and its impact would be assessed at the first level.

II level of analysis

Cross tabulations of various factors and its impact would be assessed at the second level and necessary interpretations would be provided.

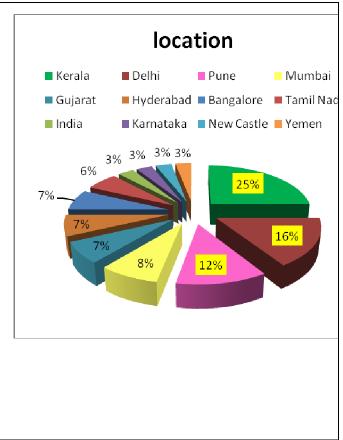
III level of analysis

Kruskal Wallis Test and Wilcoxon test would be done for ranking analysis.

# DATA ANALYSIS AND INTREPRETATION

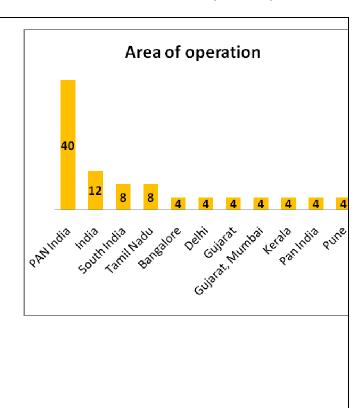
**Table 1: Demographic Details of the Respondent** 

Table 1: Demographic Details of the Re					
location	FREQU ENCY	%			
Kerala	25	25.0			
Delhi	16	16.0			
Pune	12	12.0			
Mumbai	8	8.0			
Gujarat	7	7.0			
Hyderabad	7	7.0			
Bangalore	7	7.0			
Tamil Nadu	6	6.0			
India	3	3.0			
Karnataka	3	3.0			
New Castle	3	3.0			
Yemen	3	3.0			
Total	100	100.0			



Designation	Freque ncy	%	DESIGNATION
Finance Manager  Financial Associate  Finance Head  Relationship  Manager	31 17 9	31. 0 17. 0 9.0 8.0	Finance Manager nancial Associate Finance Head Gionship Manager Accountant Accountant Audit Control Audit Control Bank manager
Bank Manager  Accountant  Senior Manager	7 6 6	7.0 6.0 6.0	Finance Manager Financial Associate Finance Head Relationship Manager Bank Manager Accountant Senior Manager Senior Accountant Audit Control Audit Control Bank manager
Senior Accountant  Audit Control  Auditor	3 3	4.0 3.0 3.0	
Bank manager  Manager	3	3.0	
Total	100	10	
establishment details	Frequ ency	%	Companies establisment details  ■ after 1947 ■ before 1947  20%
after 1947	80	.0 80 20	80%
before 1947  Total	100	.0 10 0.0	

Area of Operation	Freque ncy	%
PAN India	40	40. 0
India	12	12. 0
South India	8	8.0
Tamil Nadu	8	8.0
Bangalore	4	4.0
Delhi	4	4.0
Gujarat	4	4.0
Gujarat, Mumbai	4	4.0
Kerala	4	4.0
Pan India	4	4.0
Pune	4	4.0
Total	100	0.0



• 25% of the respondent's location was from Kerala next to Kerala 16% from Delhi and 12% from Pune.

8% from Mumbai and 7% from Gujarat, Hyderabad, Bangalore, and 8% are from Tamil Nadu. Very few 3% from new castle and 3% from Yemen. As per our study analysis the financial risk and providing the strategies for Indian companies so this result will help for our study.

- Cumulatively 57% of the respondent's designation was related to finance department. Next to finance department executive's majority of the respondents were relationship manager, accountant, Bank manager and senior manager.
- 80% of the respondents companies were established after 1947 and having great experienced from several financial crises.40% of the companies area of operation is in PAN India.

Table 2: Kruskal Wallis Test on company rules and regulatory policies with types of risk

	company rules and regulatory policies lead to these financial risks		Mean Rank
liquidity risk in	Neutral	2	39.25

your organiz	ation						
		Agree				0	42.30
		Totally ag	ree			0 8	47.21
		Total				9 2	
		Neutral				2	33.25
41.		Agree				1 0	51.05
credit r your organiz		Totally ag	ree			0 8	46.26
		Total				9 2	
Neutral						2	69.75
		Agree	1 0	56.65			
reputatio in your organ		Totally agree					44.65
		Total	Total				
		Neutral				2	41.75
		Agree				0 1	41.75
systemic your organiz		Totally agree					47.21
		Total	Total				
Test Statistics <sup>a,b</sup>		idity risk in ganization	credit risks in your organization	_	sys your or		risk in zation
Chi- Square	.476		.842 3.500 .464				
df	2		2 2 2				
Asymp. Sig.	.788		.656 .174 .79				
a. Kruska	al Wallis	s Test					
b. Group	ing Vari	able: company	rules and regulate	ory policies lead to thes	e financ	cial ri	sks

Company rules and regulatory policies lead to higher level of credit, liquidity and systematic financial risks.

Table 3: Kruskal Wallis Test on Government policies and regulatory policies with

types of risk

types of risk					
			Government policies lead to these financial risks in your organization	N	Mean Rank
			Neutral	10	34.70
liquidity risk	in	your	Agree	20	20.03
organization	J	Totally agree	23	29.72	
		Total	53		
			Neutral	10	29.90
credit risks	in	your	Agree	20	28.13
organization in y	J	Totally agree	23	24.76	
		Total	53		
			Neutral	10	31.85
reputational ri	sk in	your	Agree	20	22.93
organization		your	Totally agree	23	28.43
			Total	53	
			Neutral	10	29.20
systemic risk	in	your	Agree	20	22.53
organization		<i>J = 22</i> 2	Totally agree	23	29.93
			Total	53	

Test Statistics <sup>a,b</sup>	liquidity risk in your organization		reputational risk in your organization	
Chi-Square	7.661	1.009	2.694	2.863
df	2	2	2	2
Asymp. Sig.	.022	.604	.260	.239
a Vanalsal Wa	11:a Tast			

a. Kruskal Wallis Test

b. Grouping Variable: Government policies lead to these financial risks in your organization

A government policy leads tomoderate level of credit, liquidity and systematic financial risks.

Table 4: Wilcoxon test on factors of financial risk

Ranks		N	Mean Rank	Sum of Ranks
Government policies lead to-	Negative Ranks	69ª	41.24	2845.50
these financial risks in your	Positive Ranks	10 <sup>b</sup>	31.45	314.50
organization - company rules and regulatory policies lead to		21°		
these financial risks	Total	100		

- a. Government policies lead to these financial risks in your organization < company rules and regulatory policies lead to these financial risks
- b. Government policies lead to these financial risks in your organization > company rules and regulatory policies lead to these financial risks
- c. Government policies lead to these financial risks in your organization = company rules and regulatory policies lead to these financial risks

#### Inference:

Company rules and regulatory policies lead to these financial risks higher than the Government policies lead to these financial risks in an organization.

Table 5: Cross tabulation of Designation and Effective financial risk management strategies

Designation		Effective financial risk management strategies have led to better nancial management strategies forour organization					
	Totally disagree	Disagre e	Neutral	Agree	Totally agree		
Accountant	2	0	1	0	3	6	
Audit Control	1	0	0	0	2	3	
Auditor	0	1	0	1	1	3	
Bank Manager	0	1	2	2	5	0 1	
Finance Head	0	1	0	3	5	9	
Finance Manager	2	2	2	5	20	3	
Financial Associate	1	1	3	7	5	1 7	
Manager	2	0	0	1	0	3	

Relationship Manager	0	1	2	1	4	8
Senior Accountant	0	0	0	2	2	4
Senior Manager	0	0	1	0	5	6
Total	8	7	11	22	52	1 00

All the senior accountant and majority of the Audit control executives, Finance managers, finance heads and senior managers. Above 50 % of the Bank managers and Financial associates strongly suggest that the effective financial risk management strategies have led to better financial management strategies for organization.

Table 6:Frequency analysis of opinion for strategies deployment to reduce financial risks

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	eq	Fr	%
Complying to the rules and regulations, Good governance and leadership, Systematic functioning	.0	20	0.0
Employment of risk management team(less concentration on risk management)	.0	16	1 6.0
Keeping adequate resources for emergency (keep a part of our earnings reserved, Hedging using many other investments)	.0	16	1 6.0
Forecasting	0	8.	.0
Increasing the efficiency of work, Reduce the errors in the job	0	8.	.0
There is no much strategies, Trying different risk management models	0	8.	.0
Monthly analysis ,Timely auditing and Strict rules	0	8.	.0

More concentration on core activities, Spending less on non-operational activities	0	8.	.0	;
Keeping Government as a support	0	4.	.0	ļ
Reduce the costs	0	4.	.0	Ļ
Total	0	10	00	

Complying with the rules and regulations, Good governance and leadership, Systematic functioning, Employment of risk management team(less concentration on risk management) and Keeping adequate resources for emergency (keep a part of our earnings reserved, Hedging using many other investments) are the major factors opined by majority of the respondents for strategies deployment to reduce financial risks.

## **Summary and Findings:**

• 25% of the respondent's location was from Kerala next to Kerala 16% from Delhi and 12% from Pune.8%fromMumbai and 7% from Gujarat, Hyderabad, Bangalore, and 8% are from Tamil Nadu. Very few 3% from new castle and 3% from Yemen.

• Cumulatively 57% of the respondent's designation was related to finance department

Finance Manager	31	31.0
Financial Associate	17	17.0
Finance Head	9	9.0

- 80% of the respondents companies were established after 1947 and having great experienced from several financial crises.40% of the companies area of operation is in PAN India.
- Credit risk getting highest ranking. Cumulatively 59% of the respondents agreed on systematic risk in their organization, 55% of the respondents agreed on Liquidity risk in their organization, 48% of the respondents agreed on reputation risk in their organization.
- There is higher influence of company rules and regulation policies and moderate influence of Government policies in the financial risk.
- Company rules and regulatory policies lead to these financial risks is higher than the Government policies lead to these financial risks in an organization.
- Effective financial risk management strategies have led to better financial management strategies for organization getting higher mean rank.
- All the senior accountant and majority of the Audit control executives, Finance managers, finance heads and senior managers. Above 50 % of the Bank managers and

- Financial associates strongly suggest that the effective financial risk management strategies have led to better financial management strategies for organization.
- 20% of the officers suggested that Complying to the rules and regulations, Good governance and leadership, Systematic functioning will be a good strategies to reduce financial risks. Next highly suggested strategies are creating separate team for risk management and Keeping adequate resources for emergency.

#### **Conclusions:**

The Credit risk isgetting highest rankingand all the other three risks liquidity, reputation and systematic are very closest to credit risk. There is a higher influence of company rules and regulation policies than the Government policies in the financial risk. The following are the **financial management strategies** revealed from our study.

#### Highly suggested:

- Complying to the rules and regulations, Good governance and leadership, Systematic functioning
- Employment of risk management team(less concentration on risk management)
- Keeping adequate resources for emergency(keep a part of our earnings reserved, Hedging using many other investments)

#### Moderately suggested:

- Forecasting
- Increasing the efficiency of work, Reduce the errors in the job
- There is no much strategies, Trying different risk management models
- Monthly analysis, Timely auditing and Strict rules
- More concentration on core activities, Spending less on non-operational activities

#### REFERENCES

- 1. Baele, L., Vander Vennet, R., & Van Landschoot, A. (2004). Bank risk strategies and cyclical variation in bank stock returns. *Ghent University Economics & Business Working Paper*.
- Bangia, A., Diebold, F. X., Schuermann, T., & Stroughair, J. D. (1999). Modelling liquidity risk, with implications for traditional market risk measurement and management", Wharton School working paper.
- 3. Bartram, S. M., Brown, G. W., & Hund, J. E. (2007). Estimating systemic risk in the international financial system. *Journal of Financial Economics*, 86(3), 835-869.

- 4. Duffie, D., & Ziegler, A. (2003). Liquidation risk. Financial Analysts Journal, 59(3), 42-51.
- 5. Ergashev, B. A. (2012). A theoretical framework for incorporating scenarios into operational risk modeling. *Journal of Financial Services Research*, 41(3), 145-161.
- 6. Fathi, S., Zarei, F., & Esfahani, S. S. (2012). Studying the role of financial risk management on return on equity. *International journal of Business and Management*, 7(9), 215.
- 7. Hazzi, O. A., & Kilani, M. (2013). The financial performance analysis of Islamic and traditional banks: Evidence from Malaysia. *European Journal of Economics, Finance and Administrative Sciences*, 57, 133-144.
- 8. Jarrow, R., & Protter, P. (2005). Liquidity risk and risk measure computation. *Review of Futures Markets*, 11(1), 27-39.
- 9. Kungwani, P. (2014). Risk management-an analytical study. *IOSR Journal of Business and Management*, 16(3), 83-89.
- 10. Lee, J. H., & Stock, D. R. (2000). Embedded options and interest rate risk for insurance companies, banks and other financial institutions. *The Quarterly Review of Economics and Finance*, 40(2), 169-187.
- 11. McNeil, A. J., Frey, R., & Embrechts, P. (2015). *Quantitative risk management: concepts, techniques and tools-revised edition*: Princeton university press.
- 12. Mortezaee, M., & Sanji, D. FINANCIAL RISK MANAGEMENT-A COMPARATIVE STUDY BETWEEN IRANIAN BANKS.
- 13. Najjar, N. J. (2013). Can financial ratios reliably measure the performance of banks in Bahrain. *International journal of economics and finance*, *5*(3), 152-163.
- 14. Neveu, R. P. (1981). Fundamentals of managerial finance: Thomson South-Western.
- 15. Ogden, J. P., Jen, F. C., & O'Connor, P. F. (2003). *Advanced corporate finance: policies and strategies*: Pearson College Division.
- 16. Ongore, V. O., & Kusa, G. B. (2013). Determinants of financial performance of commercial banks in Kenya. *International journal of economics and financial issues*, *3*(1), 237.
- 17. Sethi, N., Sahoo, K., & Sucharita, S. (2013). A Survey Of International Financial Risk Management System. *Journal of Public Administration, Finance and Law, 4*(4), 186-203.

- 18. startz, R. D. s. F. (Producer). (2011). dornbush-macro. *gargicollege*. Retrieved from https://gargicollege.in/wp-content/uploads/2020/03/dornbush-macro.pdf
- 19. Stulz, R. M. (2008). Risk management failures: What are they and when do they happen?

  \*\*Journal of Applied Corporate Finance, 20(4), 39-48.
- 20. subramanya, s. (1998). Bank risk management is need of the hour *Bank risk management is need of the hour*: southerneconomistmonthly.
- 21. Topalova, P. (2004). *Overview of the indian corporate sector: 1989-2002*: International Monetary Fund.