

ROLE OF LIQUIDITY IN FINANCIAL CRISIS IN INDIAN BUSINESS PERSPECTIVE AT CHENNAI CITY

Dr. M.NASRIN SULTHANA¹, Mrs. MAMATHA GNANAKUMAR²

¹PROFESSOR, Head of the Department (B.COM – “CS”), Mohamed Sathak College of Arts and Science, Sholinganallur, Chennai -6000119

²Assistant HOF (Assessment), Faculty of Business and Management Studies, Gulf College Oman. Sultanate of Oman

ABSTRACT:

This paper is presenting the current scenario of business liquidity and financial crisis in Indian Business Perspective at Chennai City during the COVID-19. The authors have insight on few aspects related to business, financial crisis of the world economy on before, during and after. Such as economic recessions can be rebuild with the existence of Liquidity crisis, Shadow banks, Capital and Liquidity, Information and bank liquidity, Measuring liquidity of crisis in market, Market strain at the time of COVID -19 crisis poses threat to financial stability and the role of social quarantine.. The main objective of this study is to identify the problem faced by the Industries due to the financial crisis faced by them during the period of COVID-19. The research design used in this study will be empirical analysis and descriptive analysis in nature. Questionnaire will be drafted to collect the primary data which will help the research to collect the required information from the public. Purposive sampling technique with a sample of 120 respondents will be used in this study. The findings and suggestions will be applicable for the COVID – 19 scenarios only.

Key words: Liquidity crisis, Shadow banks, Capital and Liquidity & Information and bank liquidity.

INTRODUCTION:

A liquidity crisis is based on financial situation, Acharya. V and Lasse and Heje Pedersen (2018) which can be characterized by cash or easily convertible to cash assets on hand beyond many business or financial firms simultaneously. In liquidity crisis Bhatt, Rajiv Kumar (2011), liquidity problems for an individual firm lead to a drastic increase in demand Ghosh, J. and Chandrasekhar, C. P. (2009) and decrease in supply of liquidity crisis Haldane, Andrew (2009), and the results of these liquidity lead to widespread defaults and even bankruptcy. Liquidity crises can be precipitate by large, negative economic shocks which made changes in the economy.

RESEARCH OBJECTIVES:

- To identify the nature of industries and the financial crisis faced by them in Chennai City
- To analyse the current liquid crisis faced by them and the financial assistance obtained to overcome the crisis.
- To suggest the suitable measure to overcome the liquidity and financial crisis faced by the Industries in Chennai City.

LITERATURE REVIEWS:

Huong Le Andros Gregoriou, (2020), in his study titled “How do you capture liquidity? A review of literature on low frequency on stock liquidity” - It reveals that a low frequency liquidity, Onaran Yalman (2008) measurement as well as its implication on asset pricing. Bhusan B., (et.al) (2019), in his study titled “Impact of liquidity management on profitability: An Empirical Analysis in Private sector banks of India” - In this paper he analysed that

commercial banks can focus on increasing their profitability Mittal R. K. (1995) without affecting the liquidity Reserve Bank of India (2008). Pedersen H, (et.al) (2018), in his study titled “Economics with market liquidity risk” Reserve Bank of India (2009)- It revealed that how liquidity risk affects the economic dynamics (Engel, C., & Morris, C. S). (1991) and what to do about it - in a fruitful avenue. Adam B., (et.al)(2012), in his study titled “Shadow Banking Vijay Pereira¹⁵ (2021) - This paper was discussed on shadow banking Sufian, F., A. Majid, and M. Zulkhibri. 2007 for credit intermediation Sengupta²⁰ Jayashree (2008), to be funded outside the banking system. Bhalla³ (2008) has stated that the inflation has high impact on global commodity products with 12.3% increase in the year 2008 Viswanathan, K.G, Prasad and Reddy Panduranga C (2009) it will impact on financial crisis for exporters from India as well. Brunnermeir, M. K. (2009), pointed out about liquidity and credit crunch, Pereira., (et.al) (2021) in their study revealed that MNEs in the information technology Kohn, Donald (2008), and BPO sector are facing the investigating investment in agility to overcome the global financial crisis Deb, S. S. (2003). The benefits emanating from external debt flows have been found to be more questionable until greater domestic financial market development Gupta, R., & Basu, P. K. (2007) has taken place

Table 1 - Chi-Square Tests

No of employees working in your Firm / Industry		Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)	
					95% Confidence Interval	
					Lower Bound	Upper Bound
Below 50	Pearson Chi-Square	29.973 ^c	12	.003	.000 ^b	.025
	Likelihood Ratio	31.534	12	.002	.000 ^b	.025
	Fisher's Exact Test	24.603			.000 ^b	.025
	N of Valid Cases	35				
51 - 100	Pearson Chi-Square	29.753 ^d	16	.019	.025 ^b	.053
	Likelihood Ratio	29.297	16	.022	.025 ^b	.053
	Fisher's Exact Test	23.044			.017 ^b	.040
	N of Valid Cases	46				

(Henry¹⁰, 2007); P K Mishra, K B Das and B B Pradhan, (2009), in their study pointed out that India has returned to previous growth rate track which has greater degree of volatility in Indian stock market Chander⁶, S., & Phillip. (2003).

RESEARCH METHODOLOGY:

The research methodology gives a direction that what, how and when the data were collected and analyzed. Empirical Data analysis was used as research design and Purposive sampling technique Prusty¹⁴, S. (2007) was adopted in non-probabilistic sampling technique was used with the sample size of 120 respondents from various industries in Chennai City. The study was done during the period of August 2021 – October 2021 for a period of three months. Tools analysis were used for as follows: Chi – square analysis, regression analysis and hypothesis testing (Deductive approach) is done with the help of Kruskal- Wallis test, Pearson, Phi, Kappa, Cramer’s test were also adopted using the SPSS software.

DATA ANALYSIS & INTERPRETATION:

101 - 150	Pearson Chi-Square	11.200 ^e	8	.191	.208 ^b	.136	.281
	Likelihood Ratio	12.391	8	.135	.258 ^b	.180	.337
	Fisher's Exact Test	9.040			.317 ^b	.233	.400
	N of Valid Cases	14					
151 - 200	Pearson Chi-Square	8.678 ^f	6	.193	.133 ^b	.073	.194
	Likelihood Ratio	11.339	6	.078	.067 ^b	.022	.111
	Fisher's Exact Test	9.087			.067 ^b	.022	.111
	N of Valid Cases	11					
More than 200	Pearson Chi-Square	19.900 ^g	16	.225	.275 ^b	.195	.355
	Likelihood Ratio	18.787	16	.280	.183 ^b	.114	.253
	Fisher's Exact Test	19.900			.183 ^b	.114	.253
	N of Valid Cases	14					
Total	Pearson Chi-Square	72.242 ^a	16	.000	.000 ^b	.000	.025
	Likelihood Ratio	67.439	16	.000	.000 ^b	.000	.025
	Fisher's Exact Test	59.088			.000 ^b	.000	.025
	N of Valid Cases	120					

Interpretation:

From the chi – square analysis it is clearly identified that the Pearson Chi square values were all the values shows highly significant as

the values were less than .05 in nature @ 0.05 significance level but it is positively correlated Henry, Peter Blair (2007), Based on the observed value and the expected value with the help of spss, it has provided the Chi – square value as .000 which is highly significant in nature and the data were highly reliable.

Table 2 - Symmetric Measures

No of employees working in your Firm / Industry		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.	Monte Carlo Sig.	
						Sig.	95% Confidence Interval
							Lower Bound Upper Bound
Below 50 Nominal by Phi		.925			.003	.000 ^c	.000 .025
	Nominal Cramer's V	.534			.003	.000 ^c	.000 .025
	Measure of Kappa Agreement	.405	.105	4.406	.000	.000 ^c	.000 .025

N of Valid Cases			35						
51 - 100	Nominal Nominal	byPhi	.804			.019	.025 ^c	.000	.053
		Cramer's V	.402			.019	.025 ^c	.000	.053
	Measure ofKappa Agreement		.253	.092	3.377	.001	.000 ^c	.000	.025
	N of Valid Cases		46						
101 - 150	Nominal Nominal	byPhi	.894			.191	.208 ^c	.136	.281
		Cramer's V	.632			.191	.208 ^c	.136	.281
	Measure ofKappa Agreement		.291	.129	2.567	.010	. ^d		
	N of Valid Cases		14						
151 - 200	Nominal Nominal	byPhi	.888			.193	.133 ^c	.073	.194
		Cramer's V	.628			.193	.133 ^c	.073	.194
	Measure ofKappa Agreement		.312	.181	1.710	.087	.133 ^c	.073	.194
	N of Valid Cases		11						
More than 200	Nominal Nominal	byPhi	1.192			.225	.275 ^c	.195	.355
		Cramer's V	.596			.225	.275 ^c	.195	.355
	Measure ofKappa Agreement		.315	.179	2.144	.032	.017 ^c	.000	.040
	N of Valid Cases		14						
Total	Nominal Nominal	byPhi	.776			.000	.000 ^c	.000	.025
		Cramer's V	.388			.000	.000 ^c	.000	.025
	Measure ofKappa Agreement		.335	.057	7.054	.000	.000 ^c	.000	.025
	N of Valid Cases		120						

Interpretation:

As per the Phi and Cramer's Test the value shows highly significant in nature except for the category of employees working below 50 in the

organization. If that variable is removed from the questionnaire more reliable data with high significance can be computed. Conclusion of Chi square analysis – there is significant relationship between the number of employees

working in the organization and the impact of Pandemic situation as well as difficulty faced in running the industry during Covid – 19.

H_0 – There is no significant relationship between no. of employees working in the firm and financial crisis faced by firm during Pandemic situation.

HYPOTHESIS TESTING:

H_1 - There is significant relationship between no. of employees working in the firm and financial crisis faced by firm during Pandemic situation.

Table 12 – Hypothesis testing summary using Kruskal-Wallis Test.

Hypothesis Test Summary			
	Null Hypothesis	Test	Sig. Decision
1	The distribution of No of employees working in your Firm / Industry is the same across categories of Current Financial Crisis faced by firm.	Independent-Samples Kruskal-Wallis Test	.000 Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Interpretation:

The null hypothesis was rejected with Kruskal – Wallis Test results which obtained the value of .000 at 5% level of significance of data. Hence it is concluded that there is significance

relationship between no of employees working in the industry and the industry face some financial crisis during the Pandemic situation.

REGRESSION ANALYSIS:

Table 3 - Case Processing Summary

	N	Marginal Percentage
Company plan to increase or decrease the number of employees		
Reduce greatly (30 - 50%)	69	57.5%
Reduce slightly (10 - 30%)	25	20.8%
Remains the same	17	14.2%
Increase the employee number	2	1.7%
Sent everyone and close the Industry	7	5.8%
Impact of Pandemic and difficulty faced by firm affecting the Production and Operation functions		
Great impact, barely maintained	28	23.3%
Less Impact, Some difficulties	38	31.7%
Very serious impact, Leading to high difficulty	14	11.7%
No significant impact, No difficulty faced	24	20.0%
Moderate Impact, Moderate difficulty faced	16	13.3%
Nature of Firm/ Industry		
Textiles	35	29.2%

	Dairy and dairy products manufacturing	33	27.5%
	Fast moving consumer goods sale Firm	32	26.7%
	Restaurant and hotel industry	10	8.3%
	Food and beverages industry	10	8.3%
Government Assistance to	No assistance	45	37.5%
Overcome difficulties	Electricity subsidy	40	33.3%
	Water bill reduction subsidy	15	12.5%
	Easy Loans facility through Government	10	8.3%
	Seed capital assistance	10	8.3%
Valid		120	100.0%
Missing		0	
Total		120	

Inference:

The above table show the case processing summary for four categories – Companies plan to increase or decrease the no. of employees, Impact of pandemic and difficulty faced by the industry and maintaining the production and operation function, nature of firm/Industry and Government assistance to overcome the difficulties. The values were evenly distributed among all the categories based on the primary data obtained.

Table 4 - Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	233.213			
Final	157.150	76.063	11	.000

Link function: Logit.

Table 5 - Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	353.178	221	.000
Deviance	130.872	221	1.000

Link function: Logit.

Table 6 - Pseudo R-Square

Cox and Snell	.469
Nagelkerke	.521
McFadden	.274

Link function: Logit.

Inference:

From the above table no .4 to 6, the regression analysis was applied as statistical tools to deploy that the values were highly significant as the P value = .000 and the goodness of fit is also .000, Which indicates best fit of regression line. The Pseudo r- square value as per cox and Snell was .469 and McFadden value is .274 which indicates positively correlated at 5% level of significance. The table below confirms the value of all the variables with appropriate parameter estimates as shown in the table 17.

FINDINGS:

- ❖ 80% of the respondents said that they face some impact about pandemic situation and some difficulty faced in running the production and operation function.
- ❖ This reveals that majority of the industries faced difficulty in doing the business during covid-19 pandemic situation.
- ❖ Data were obtained from various industries such as 29.2%(Textiles), 27.5%(Dairy products),26.7%(Fast moving consumer goods), 8.3% of each for Restaurant and Hotel industry and Food & beverages respectively.

- ❖ 37.5% of the respondents said that they were not able to get any financial assistance during the pandemic situation.
- ❖ Pearson chi-square value obtained was 0.025 which is less than 0.05 depicts highly significant in comparing the variables.
- ❖ Regression analysis depicts that best fit of regression line with P value = .000, and the R square value was tested with the help of cox & Snell and McFadden values which indicates positively correlated.

SUGGESTIONS:

- ❖ A small drop of rain can make ocean, single penny saved can make a big fund. So it is suggested that the financial institutions need to support the small scale industries.
- ❖ Liquid crisis faced by the industries need to be removed by proper encouragement and support of the government.
- ❖ Tax free rebate, exemption in interest payment for bank loans can help the industries to improve their financial conditions.

CONCLUSION:

Financial crisis and liquidity crisis is greatest problem during pandemic. Almost all the industries and general public were suffering due to financial problems. The public exception is that who should find a solution to remove covid-19 virus from India and Central & State government should assist more the industrial sector to uplift the economic position of the country. This study highlights the financial crisis more and the nature and problem of industries. To conclude it is never late before the dawn, if government financial assistance we can overcome all the difficulties.

REFERENCES:

- [1] Acharya. V and Lasse and Heje Pedersen (2018). "Economics with Market Liquidity Risk", vol.8 :No. 1-2 , pp 111-125.
- [2] Adam B, (et.al) (2012). "Shadow banking", NO.580 Oct 2012 JEL class E44, G00, G01, G28.
- [3] Bhalla, S. 2008. Surjit S. Bhalla: Inflation Control Chokes Growth. Business Standard. 17 October.
- [4] Bhushan B, (et.al) (2019) . "Impact of liquidity management on profitability: An Empirical Analysis in Private Sector Banks of India", vol.40 (Number 30), Page 14.
- [5] Brunnermeir, M. K. 2009. Deciphering the Liquidity and Credit Crunch 2007–2008. *Journal of Economic Perspectives* 23(1): 77–100.
- [6] Chander, S., & Phillip. (2003). Behaviour of Stock Market Prices at BSE and NSE: An application of Runs Test. *Journal of Accounting and Finance* , Vol.17, No.2, pp.41-57.
- [7] Deb, S. S. (2003). In Search of Weak form Efficiency in Indian Capital Market. *The ICFAI Journal of Applied Finance*, Vol.9, No.9, pp.31-50.
- [8] Engel, C., & Morris, C. S. (1991). Challenges to Stock Market efficiency: Evidence from Mean Reversion Studies. *Economic Review*, Federal Reserve Bank of Kansas City, pp.21-35.
- [9] Gupta, R., & Basu, P. K. (2007). Weak Form Efficiency in Indian Stock Markets. *IBER Journal* , Vol.6, No.3, 57-64
- [10] Henry, Peter Blair (2007), "Capital Account Liberalization: Theory, Evidence, and Speculation", *Journal of Economic Literature*, Vol. XLV, December.
- [11] Huong Le, Andros Gregoriou (2020). "How do you capture liquidity? A review of the literature on Low-frequency in stock liquidity", July.
- [12] Mittal, R. K. (1995). Weak Form Market Efficiency: Empirical Tests on the Indian Stock Market. *Pranjan* , Vol. XXIII, No.3, pp.297-313.
- [13] P K Mishra, K B Das and B B Pradhan, (2009), "Empirical Evidence on Indian Stock Market Efficiency in Context of the Global Financial Crisis", "Global Journal of finance and Management, Volume 1, Number 2, PP 149 – 157, ISSN 0975 – 6477.
- [14] Prusty, S. (2007). Market Efficiency and Financial Markets Integration in India. *Indian Journal of economics and Business*

- [15] Vijay Pereira, Pawan Budhwar, Yama Temouri, Ashish Malik and Tarba, (2021), "Investigating Investments in agility strategies in overcoming the global financial crisis – The case of Indian IT/BPO offshoring firms", *Journal of International Management*, volume 27, Issue 1, March 2021. 100738.
- [16] OnaranYalman (2008), Subprime Losses Top \$ 379 Billion on Balance Sheet Marks: Table from (Retrieved October 2012).
- [17] Prasad and Reddy Panduranga C (2009), Global Financial Crisis and its Impact on India, *Journal of Social Sciences*, 21(1): 1-5.
- [18] Reserve Bank of India (2008) „Handbook of Statistics on the Indian Economy“, Mumbai • Reserve Bank of India (2008) „Macroeconomic and Monetary Developments in 2008- 09“
- [19] Reserve Bank of India (2009) „Macroeconomic and Monetary Developments – First Quarter • Reserve Bank of India „Handbook of Monetary Statistics of India“, Mumbai Review 2009-10“, Mumbai, July 27, 2009.
- [20] Sengupta Jayashree (2008), The Financial Crisis and its impact on India. From< <http://www.observerindia.com>> (Retrieved October 2012).
- [21] Sufian, F., A. Majid, and M. Zulkhibri. 2007. Bank Ownership, Characteristics and Performance: A Comparative Analysis of Domestic and Foreign Islamic Banks in Malaysia. MPRA Paper No. 12131.
- [22] Viswanathan, K.G. (2010), "The Global Financial Crisis and its Impact on India", *The Journal of International Business and Law*: 41-62.
- [23] Bhatt, Rajiv Kumar (2011), "Recent Global Meltdown and its Impact on Indian Economy", *International Conference on Economics, Trade and Development IPEDR vol.7* (2011)
- [24] Ghosh, J. and Chandrasekhar, C. P. 2009. The cost of 'coupling': the global crisis and the Indian economy, *Cambridge Journal of Economics*, vol. 33, no. 4, 725–39
- [25] Haldane, Andrew (2009), "Why Banks Failed The Stress Test?", Bank of England.
- [26] Henry, Peter Blair (2007), "Capital Account Liberalization: Theory, Evidence, and Speculation", *Journal of Economic Literature*, Vol. XLV, December.
- [27] Kohn, Donald (2008), "Monetary Policy and Asset Prices Revisited", Remarks at the Cato Institute's 26th Annual Monetary Policy Conference, November 19, Available at <http://www.federalreserve.gov/newsevents/speech/kohn20081119a.htm>