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A Study of Liquidity Analysis on Profitability With Reference to Axis Bank and Kotak Mahindra Bank

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Abstract

Liquidity and Profitability are the two important concepts in gauging the financial performance of a company. Liquidity refers to an ability to meet anticipated and unanticipated demands for cash through ongoing cash flow or the sale of a current asset at fair market value. Profitability refers to an ability of a business to earn profits from its operational activities. Liquidity along with profitability analysis help in analyzing financial sustainability or otherwise of a concern. The present study attempts to analyze the impact of liquidity on profitability of two private sector banks viz. Axis bank and Kotak Mahindra bank. Variables such as cash deposit ratio, credit deposit ratio and investment deposit ratio were used to analyze the liquidity position and . profitability is analyzed using return on assets and return on equity. Statistical techniques such as mean, standard deviation, correlation analysis, regression analysis and variance analysis were to used for analyzing and drawing the inference about the liquidity and profitability of two selected banks.

Key words: Liquidity, Profitability etc.

Introduction

Liquidity and profitability analysis has been an area of research for academicians since decades. The relationship between liquidity and profitability plays an important role in assessing the future profitability and solvency of the concern. Liquidity refers to an ability of firm to pay its short term dues as and when they arise. It is the ability to meet anticipated and unanticipated demands for cash through ongoing cash flow or the sale of a current asset at fair market value. Liquidity ratios gives early sign of financial distress or cash crunch impending business failure. The profitability analysis is an important technique to measure the financial performance of the company. Interested parties such as shareholders, banks, creditors, government keep a close watch on soaring profit because without profits, a firm could not attract outside capital. It becomes imperative to understand the relationship between liquidity and profitability. It is also important to study the cause and effect relationship between liquidity and profitability. An efficient financial manager is required to strike a balance between above two stated variable. When a firm is not able to manage its working capital, it results in unnecessary blocking of funds in assets and thereby reducing the scope of making profitable investment. This has an adverse effect on profitability. Hence the essence of financial management is to equate between liquidity and profitability to give maximum return to its shareholders.

Trade, commerce and industry is based on finance and banking. Banking sector serve as the backbone of modern economy. A bank is a financial institution which accepts deposits and it lends money to those who need it. The performance of the banking sector has significant influence on economic growth of a country. The economic slowdown and global developments have derailed the banking sectors' performance in India.

Literature Review

Bordeleau and Graham (2010) quoted that liquidity as a variable showed operational strength and profitability depicted efficiency and value maximization over a period of time. The authors opined that banks need to hold more liquid assets in order to increase the rate of return on investment.

Horvath etal. (2016) stated that there was between the benefits of financial stability, stronger capital base and liquidity creation. It was found that an increase in one variable would deteriorate other.

Khan and Ali (2016) found that liquidity and profitability shared positive correlation and it was suggested that banks should keep sufficient liquid assets to get a higher rate of profit.

Elsharif (2013) concluded that impact of liquidity management on profitability of banks cannot be predicted with greater degree of accuracy.

Sahyouni and Wang (2018) in their study concluded that liquidity has negative effect on bank profitability. It supported that low level of liquidity increases the likelihood of bankruptcy.

Iqbal Hossain and Jahangir Alam (2019) studied the relationship between liquidity and firm's profitability of cement industry. Profitability was measured by net profit, return on assets and return on equity and the liquidity was analyzed with the current ratio, quick ratio, and the cash conversion cycle. The study concluded slower cash conversion cycle impaired all profitability ratios.

Manju Rajan Babu (2019) evaluated the profitability and liquidity position of banks during Pre and post-merger in India. CAMEL approach was used to study the financial performances of the Indian banking sector. It was found that HDFC bank ltd, Federal bank, and Bank of Baroda gave better financial results.

Paul et al. (2020) investigated the performance of forty commercial banks with the help of loan to deposit ratio, deposit to asset ratio, cash to deposit ratio, liquid to asset ratio, and current ratio for analyzing liquidity and ROE as profitability measure. It was concluded that liquidity has a significant effect on the profitability in the commercial banking sector of Bangladesh.

Objectives of the Study

Present research study aims to study the impact of liquidity on profitability of two private sector banks namely- Axis Bank and Kotak Mahindra bank. The objectives of the study were:

- a. To analyze the financial performance of Axis bank and Kotak Mahindra bank.
- b. To compare the financial performance of Axis bank and Kotak Mahindra bank.
- c. To study the effect of liquidity on profitability of above stated banks.

Hypothesis

- a. There is no significant relationship between liquidity and profitability among the selected banks.
- b. The liquidity ratios do not predict profitability of selected banks.

Research Methodology

The research is based on secondary data which is collected through annual reports and other audited financial statements of the banks. Time period of five years from 2017-2018 to 2021-2022 has been considered for the study. To gauge the liquidity position of the banks, ratios such as cash to deposit ratio (CDR), credit to deposit ratio (CRDR) and investment to deposit ratio (IDR). Profitability of the selected banks were analyzed with the help of return on assets (ROA) and return on equity (ROE). Various statistical tools like mean and standard deviation were used to study the descriptive characteristics of selected data. To test the hypothesis, Pearson Correlation Coefficient, multiple regression model along with Variance analysis were used.

Results and Discussion

Descriptive Statistic of Variables

Table 1 represents the data pertaining to credit deposit ratio, investment deposit ratio, cash deposit ratio, return on equity and return on assets for five years ranging from 2017-18 to 21-22 in respect of Axis Bank. The mean and standard deviation of above selected variables are given in the table 1. Standard deviation of Cash deposit ratio is lowest (1.3) indicating least fluctuating variable and highest unstable variable is ROA with 46.88

Table 1: Descriptive Analysis of Variables of Axis Bank

Axis Bank	17-18	18-19	19-20	20-21	21-22	Mean	Std. Dev
Credit Deposit Ratio	87.08	88.7	89.71	93.25	93.63	90.474	2.565795
Investment Deposit Ratio	32.81	28.41	27.91	32.82	32.57	30.904	2.247822
Cash Deposit Ratio	9.54	10.15	10.1	7.04	7.64	8.894	1.300701
Return on Equity (%)	11.32	6.48	1.57	7.01	0.43	5.362	3.953922
Return on Assets	374.71	331.63	301.05	259.27	247.2	302.772	46.88602

Table 2 shows the data relating to Kotak Mahindra Bank for five years from 2017-18 to 2021-22. Standard deviation of Cash deposit ratio is smallest with 0.32 and ROA is highest with 56.63.

Table 2: Descriptive Analysis of Variables of Kotak Mahindra Bank

Kotak Mahindra Bank	17-18	18-19	19-20	20-21	21-22	Mean	Std. Dev
Credit Deposit Ratio	81.68	87.06	89.7	87.35	86.04	86.366	2.631742
Investment Deposit Ratio	33.18	29.92	32.44	31.32	32.54	31.88	1.148425
Cash Deposit Ratio	4.05	4.17	4.73	4.69	4.86	4.5	0.325576
Return on Net Worth(%)	10.95	11.86	11.47	10.89	12.35	11.504	0.552724
Return on Assets	319.03	253.6	222.13	196.69	150.01	228.292	56.63675

It is evident that Axis Bank is having better results than Kotak Mahindra Bank with respect to credit deposit ratio. (CRDR), cash deposit ratio (CDR). Although, Axis Bank has greater return on Assets (ROA) signifying higher operational efficiency, but Return on Equity (ROE) of Kotak Mahindra Bank (11.54) is more than twice ROE of Axis Bank (5.36).

Hypothesis Testing

A) Correlation Analysis

Correlation analysis was used to study the whether the liquidity variables such as CRDR, CDR and IDR are associated with profitability variables- ROA and ROE

Table 3: Correlation analysis of ROA and ROE with independent variables CRDR, IDR and CDR of Axis Bank

	CRDR		IDR		CDR	
	Pearson Cr	Sig(2tailed)	Pearson Cr	Sig(2tailed)	Pearson Cr	Sig(2tailed)
ROA	-0.981	0.003	-0.200	0.746	0.758	0.138
ROE	-0.597	0.288	0.334	0.582	0.148	0.812

It is evident from the above table that correlation coefficient of -0.981 between credit deposit ratio and ROA shows negative but significant correlation as p value $0.003 < 0.05$. However no significant correlation was found between between ROA and IDR and CDR. Correlation coefficient of -0.597 between ROE and CRDR depicts negative but insignificant relationship as p value $0.288 > 0.005$. Variable such as IDR and CDR shared positive but not significant correlation with ROE being p value greater than 0.005.

Table 4: Correlation analysis of ROA and ROE with independent variables CRDR, IDR and CDR of Kotak Mahindra Bank

	CRDR_K		IDR_K		CDR_K	
	Pearson Cr	Sig(2tailed)	Pearson Cr	Sig(2tailed)	Pearson Cr	Sig(2tailed)
ROA_K	-0.582	0.303	0.095	0.879	-0.582	0.303
ROE_K	0.254	0.680	-0.169	0.786	0.254	0.680

Above table shows that no significant correlation exists between Return on assets and independent variables CRDR, IDR and CDR of Kotak Mahindra bank as p value is greater than 0.05 in respect of each variable. Also p-value is greater than 0.05 in respect of all the independent variable and ROE, hence it can be inferred that no significant relationship exists between them.

B) Regression Analysis

Regression analysis was used to study the effect of liquidity on profitability.

Table 5(A): Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.998 ^a	.997	.988	5.75843

a. Predictors: (Constant), CDR, IDR, CRDR

Table 5(B): ANOVA^b

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	10958.337	3	3652.779	110.158	.070 ^a
Residual	33.160	1	33.160		
Total	10991.496	4			

a. Predictors: (Constant), CDR, IDR, CRDR

b. Dependent Variable: ROA

Table 5(A) shows regression analysis between dependent variable ROA and predictor variable CDR, IDR and CRDR of Axis bank. Value of R-Square reveals that liquidity variables influence 99.7% of profitability. However the f value of 110.158 is statistically insignificant as p value 0.07 > 0.05. Hence null hypothesis is accepted implying that liquidity variables such as CDR, IDR and CDR fail to predict the return on assets of axis bank.

Table 5(C) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.991 ^a	.981	.926	1.20302

a. Predictors: (Constant), CDR, IDR, CRDR

b. b. Dependent Variable: ROE

Table 5(D) ANOVA^b

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	76.720	3	25.573	17.670	.173 ^a
Residual	1.447	1	1.447		
Total	78.167	4			

Table 5(C) shows regression analysis between dependent variable ROE and predictor variable CDR, IDR and CRDR of Axis bank. Value of R-Square reveals that liquidity variables influence 98.1% of level of return on equity. However the f value of 17.67 is statistically insignificant as p value $0.173 > 0.05$. Hence null hypothesis is accepted implying that liquidity variables such as CDR, IDR and CDR fail to predict the return on equity of axis bank.

Table 6(A)Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.605 ^a	.366	-.268	71.31065

a. Predictors: (Constant), CDR_k, IDR_K

Table 6(B)ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5868.190	2	2934.095	.577	.634 ^a
	Residual	10170.418	2	5085.209		
	Total	16038.608	4			

a. Predictors: (Constant), CDR_k, IDR_K

b. Dependent Variable: ROA_K

Table 6(A) shows regression analysis between dependent variable ROA and predictor variable CDR, IDR and CRDR of Kotak Mahindra bank. Value of R-Square reveals that liquidity variables influence 36.6% of profitability. However the f value of 0.577 is statistically insignificant as p value $0.634 > 0.05$. Hence null hypothesis is accepted implying that liquidity variables such as CDR, IDR and CDR fails to predict the return on assets of Kotak Mahindra bank.

Table 6(C)Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.263 ^a	.069	-.861	.84311

a. Predictors: (Constant), CDR_k, IDR_K

Table 6(D)ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.106	2	.053	.074	.931 ^a
	Residual	1.422	2	.711		
	Total	1.528	4			

a. Predictors: (Constant), CDR_k, IDR_K

b. Dependent Variable: ROE_K

Table 6 (C) shows regression analysis between dependent variable ROE and predictor variable CDR, IDR and CRDR of Kotak Mahindra bank. Value of R-Square reveals that liquidity variables influence mere 6.9% of profitability. The f value of 0.074 is also statistically insignificant as p

value $0.931 > 0.05$. Hence null hypothesis is accepted implying that liquidity variables such as CDR, IDR and CDR fails to predict the return on equity o Kotak Mahindra bank.

Conclusion

Liquidity analysis plays an important role in analyzing the financial performance of any enterprise. Various studies reinforced that liquidity variables have significant influence over profitability of a company. However, few researchers also maintained that liquidity does not exert any influence over the profitability of a company. The research study tries to find the relationship between liquidity and profitability of two selected bank- Axis bank and Kotak Mahindra bank. Liquidity was analyzed with the help of cash deposit ratio, investment deposit ratio and credit deposit ratio. Return on assets and return on equity was used to measure of profitability of selected banks. Results of the study revealed that Axis Bank scores better than Kotak Mahindra Bank with respect to CRDR, CDR. Although, Axis Bank has greater return on Assets (ROA) signifying higher operational efficiency, but Return on Equity (ROE) of Kotak Mahindra Bank is more than twice ROE of Axis Bank. There was no significant correlation between variables of liquidity and profitability except in case of credit deposit ratio and return on assets of Axis bank. Further it was found that independent variables of liquidity were failed to predict level of profitability. Hence it can be inferred that there are host of other variable influencing the profitability of banks.

References

- Bagh, T., Razzaq, S., Azad, T., Liaqat, I., & Khan, M. A. (2017). The causative impact of liquidity management on profitability of banks in Pakistan: An empirical investigation. *International Journal of Academic Research in Economics and Management Sciences*, 6(3), 153-170.
- Dahiyat, A. (2016). Does liquidity and solvency affect banks profitability? Evidence from listed banks in Jordan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(1), 35-40.
- Elsharif TA (2016). The impact of liquidity management on profitability. Retrieved from Research Gate; <http://www.researchgate.net/publication/309176083>
- Étienne Bordeleau & Christopher Graham (2010). The Impact of Liquidity on Bank Profitability, "Staff Working Papers 10-38, Bank of Canada.
- Horvath, R., Seidler, J., & Weill, L. (2016). How bank competition influences liquidity creation. *Economic Modelling*, 52, 155-161.
- Malik, M. S., Awais, M., & Khursheed, A. (2016). Impact of liquidity on profitability: A comprehensive case of Pakistan's private banking sector. *International Journal of Economics and Finance*, 8(3), 69-74.
- Olarewaju, O. M., & Adeyemi, O. K. (2015). Causal relationship between liquidity and profitability of Nigerian deposit money banks. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 5(2), 165-171.
- Paul, S. C., Bhowmik, P. K., & Famanna, M. N. (2021). Impact of Liquidity on Profitability: A Study on the Commercial Banks in Bangladesh. *Advances in Management and Applied Economics*, 11(1), 73-90.
- Sahyouni, A., & Wang, M. (2019). Liquidity creation and bank performance: evidence from MENA. *ISRA International Journal of Islamic Finance*.

AN ANALYSIS OF EFFICACY OF FINANCIAL DISTRESS PREDICTION SPRINGATE AND GROVER MODEL

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Abstract

The global economy has stagnated as a result of COVID-19. This slowdown is poised to turn into an economic recession, with enterprises experiencing financial difficulties leading to bankruptcy. It is vital to predict such defaults in order to protect the financial market and stakeholders' interests. The aim of this research is to compare the best bankruptcy prediction models from Springate and Grover model by checking the efficacy of these models. For this study, 3 bankrupt NBFC's i.e. DHFL (Dewan Housing Finance Corporation Limited), ILFS Infrastructure Leasing & Financial Services Limited and Srei Infrastructure Finance Ltd are selected for the period of 05 years from 2014-15 to 2018-19. The collected data analyzed by using Microsoft excel software. The present research is useful to the investors, financial institutions and suppliers for investments, loans and supplying raw materials. The result of this study shows that, when compared to the Grover model, the Springate model is more efficient for predicting the financial health of selected companies.

Keywords: Financial Health, Bankruptcy Prediction Model, NBFC's, Springate Model and Grover Model

INTRODUCTION

Insolvency is defined as the inability of a company or individual to pay its debts on time; people who are insolvent are referred to as insolvent. There are two types of insolvency: cash-flow and balance-sheet insolvency. Cash-flow insolvency occurs when a person or company has sufficient assets to pay their debts but lacks the suitable method of payment. A person may, for example, have a huge house and a valuable car but not have liquid assets to pay a debt when it is due. Generally negotiation is the best approach to get out of a cash flow insolvency. Balance sheet insolvency, it occurs when a person or company's assets are insufficient to cover all of their debts.

It is possible that the person or company will file for bankruptcy, although this is not always the case. In today's competitive market, financial distress is a critical factor. Financial health refers to a company's ability to manage its earning resources for expenses and debt repayment. Investors and analysts use financial health as a measure to determine whether or not a company is financially sound. Many banking and financial institutions around the world have failed as a result of the global financial crisis. Despite the fact that the application of financial distress models to predict financial instability has long been a topic of study, the crisis has highlighted the need for more research.

LITERATURE REVIEW

J. Sun, and X.F. Hui (2006) believe that stakeholders including as creditors, managers, investors, employees, and others suffer significant personal losses as a result of bankruptcy. Meanwhile, if the volume is large enough, it will have an impact on the country's economic progress.

Agrawal Ankit and Patni Ity (2019) examined the Z-score, Ohlson, Zmijewski, Springate, and Grover models in terms of their ability to forecast a company's financial soundness. The Zmijewski and Springate model is the best model for predicting financial health, according to the results. They also recommended that at the time of investment, investors have to focus on Zmijewski and Springate model because both are early forecaster models.

The study carried out by Indriyanti Mia (2019) study for measuring accuracy of financial distress models in prediction of financial health of world's largest technological companies using compared Ohlson, Z-score, Springate, Grover, Taffler, Fulmer and Zmijewski financial distress models. The study predicted Grover model got highest accuracy level i.e. 96.6%, followed by Z-score model with the accuracy level of 86.60%. Researcher concluded conclude that Grover financial distress model is superior model in prediction of financial health of companies.

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OBJECTIVES OF THE STUDY

- 1) To examine the financial distress status or financial health of a sample company.
- 2) To check the efficacy of bankruptcy models in prediction of financial health of companies.

SAMPLE DESIGN

Three Sample Company i.e DHFL (Dewan Housing Finance Corporation Limited), ILFS Infrastructure Leasing & Financial Services Limited and Srei Infrastructure Finance Ltd is selected for the purpose of this study. This research is based on secondary data acquired from publicly available sources i.e. Annual reports of the sample company and from the website www.google.com for the period of five years (2014-15 to 2018-19).

TOOLS AND TECHNIQUES

In this study, Springate S Score and Grover G Score model are used. Analysis has been done using Excel.

a) Springate Model

Springate model was the first model to be introduced by Gordon LV Springate (1978). Basically, this model is a revolution of the Altman model developed by Multiple Discriminant Analysis (MDA). Springate model development process initially used 19 financial ratios that have been frequently used. However, after testing, Springate finally chose four financial ratios to be used to determine whether the company is said to be either a healthy company or potentially insolvent. Springate is also a model that can be used as an early warning system of bankruptcy.

Equation models proposed by Springate are:

$$S = 1.03A + 3.07B + 0.66C + 0.4D$$

Description:

A = Working Capital or Total Assets

B = Net Profit before Interest and Taxes or Total Assets

C = Net Profit before Taxes or Current Liabilities

D = Sales or Total Asset

S-Score Scale

Prediction

$S > 0.862$

Not Bankrupt

$S < 0.862$

Bankrupt

b) Grover Model

Grover Model is a model created by restoration or redesigns of the model of the Altman Z-Score. It takes X1 and X3 of the Altman model and then adds profitability ratios which are indicated by ROA.

Equation in this is as follows:

$$G = 1.650X1 + 3.404X2 - 0.016ROA + 0.057$$

Description:

X1 = Working capital or Total assets

X2 = Earnings before interest and taxes or total assets

ROA = net income or total assets

G-Score Scale

Prediction

$G \leq -0.02$

Bankrupt

$G \geq 0.01$

Not Bankrupt

ANALYSIS AND INTERPRETATION

Springate model

Springate model analytic result can be seen as follow:

Table 1: Springate Analysis Result

Springate S-Score	2015	2016	2017	2018	2019
DHFL	-0.02	0.07	0.28	0.044	0.07
	Bankruptcy	Bankruptcy	Bankruptcy	Bankruptcy	Bankruptcy
ILFS	0.03	0.17	0.2	-0.002	-13.87
	Bankruptcy	Bankruptcy	Bankruptcy	Bankruptcy	Bankruptcy
Srei	-0.2	-0.26	-0.15	0.12	0.19
	Bankruptcy	Bankruptcy	Bankruptcy	Bankruptcy	Bankruptcy

The above table No.1 shows calculated Springate score of all three companies included in sample, namely DHFL, ILFS and Srei, we can observe that all three companies are consistently for all the study periods i.e. 2015-2019 is below 0.0862 hence, these companies found financially distressed and in bankruptcy zone.

Grover model

Grover model analytic result can be seen as follow:

Table 2: Gover Analytic Result

Grover G Score	2015	2016	2017	2018	2019
DHFL	-0.15	-0.01	0.2	-0.03	0.12
	Bankruptcy	Not-Bankruptcy	Not-Bankruptcy	Bankruptcy	Not-Bankruptcy
ILFS	0.35	0.19	0.22	-0.03	-16.56
	Not-Bankruptcy	Not-Bankruptcy	Not-Bankruptcy	Bankruptcy	Bankruptcy
Srei	-0.36	-0.45	-0.3	0.17	0.27
	Bankruptcy	Bankruptcy	Bankruptcy	Not-Bankruptcy	Not-Bankruptcy

In 2015, the company predicted to experience bankruptcy was DHFL, ILFS and Srei.

In 2016 and 2017, there was only one additional company which was predicted to experience bankruptcy. The company was Srei. While companies which were not predicted to experience bankruptcy were DHFL and ILFS.

In 2018, two companies was predicted to experience bankruptcy was DHFL and ILFS. While in 2019, only one company i.e. ILFS was predicted to experience bankruptcy.

Table 3: Average Springate model and Grover model

	S Score	G Score
DHFL	0.09	0.03
	Bankruptcy	Not-Bankruptcy
ILFS	-2.64	-3.17
	Bankruptcy	Bankruptcy
Srei	-0.06	-0.13
	Bankruptcy	Bankruptcy

Figure 1 Average Springate score and Grover score

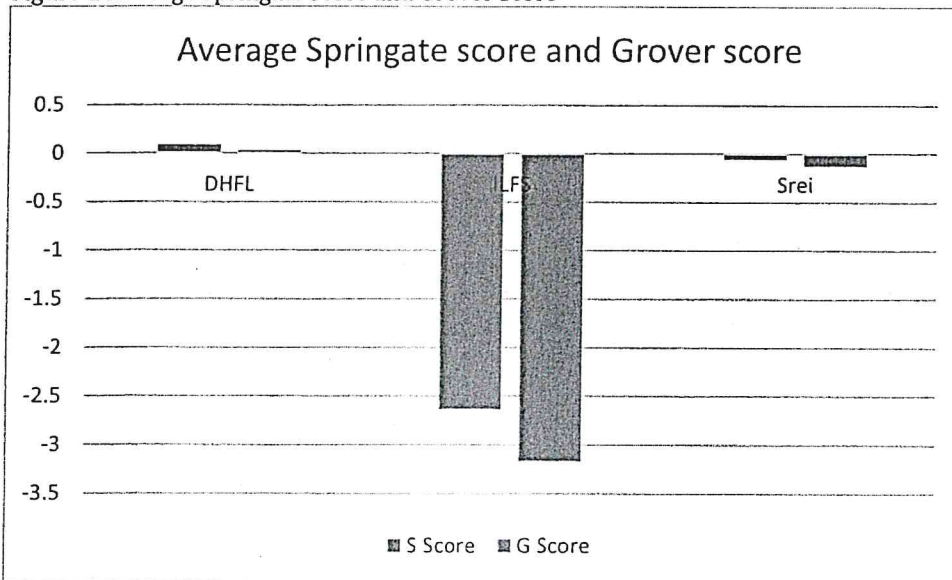


Table No.3 shows Average Springate score of selected sample companies. For the Study Period 2014-15 to 2018-19. From the above table it can be observed that all three namely DHFL, ILFS and Srei companies found as financially distressed companies as S score found below 0.862. As per Grover score only one company (DHFL) is found solvent and rest two companies, ILFS and Srei are financially distressed.

Figure 1 indicates Average Springate score and Grover score of Selected companies for the study period 2014-15 to 2018-19. From the above chart it can be seen clearly that S score and G score of ILFS is the most financially distressed NBFC followed by Srei and DHFL. As per Grover score DHFL is solvent company.

CONCLUSION

Every stakeholder in an organization is concerned about the company's financial health. Financial health determines the company's growth prospects and, consequently, its investment worthiness. If a company is financially stable, it has a better chance of succeeding. In this research paper researcher analyze financial distress of three bankrupt NBFCs for the study period 2014-15 to 2018-19 by using Springate S score model and Grover G score model. Results of the study revealed that all three NBFCs namely DHFL, ILFS and Srei were

financially distressed as per Score model. The calculation of Grover's model gave inconsistent results. When comparisons were made between the two bankruptcy analysis models, Sprigate recorded accurate results.

REFERENCES

- [1] J. Sun, and X.F. Hui, " Financial Distress Prediction Based on Similarity Weighted Voting", CBR, 2006, 947-958
- [2] Patni, A. A. (2019). Bankruptcy Prediction Models: An Empirical Comparison. International Journal of Innovative Technology and Exploring Engineering, 131- 139.
- [3] Indriyanti, M. (2019). The Accuracy of Financial Distress Prediction. International Conference on Economics, Education, Business and Accounting, 442-450.
- [4] Primasari, N. (2017). Analysis Altman Z-Score, Grover Score, Springate and Zmijewski as Financial Distress Signaling. Accounting and Manajemen Journal, 23-42
- [5] Saragih, F., Sinambela, E., & Sari, E. N. (2019). Bankruptcy Prediction By Using The Grover Method.
- [6] Shafitranata, R. C., & Arshed, N. (2020). Prediction of Islamic Banking Bankruptcy in Indonesia: Comparative Study of Altman Z-Score and Springate Models.
- [7] Dalvadi, Y. M., & Pandit, M. J. B. (2018). An Analysis of Financial Distress of Selected Public Sector Enterprises of India using Springate Score Model. Journal of Commerce and Trade, 13(1), 107-112.
- [8] Peyman Imanzadeh, Mehdi Maran-Jouri, Petro Sepehri. (2011). A Study of the Application of Springate and Zmijewski Bankruptcy Prediction Models in Firms Accepted in Tehran Stock Exchange. Australian Journal of Basic and Applied Sciences , 11 (5), 1550-1555.
- [9] Rajasekar ,Sania Ashraf ,Malabika Deo. (2014). An Empirical Enquiry on the Financial Distress of Navratna Companies in India. Journal of Accounting and Finance , vol. 14(3)

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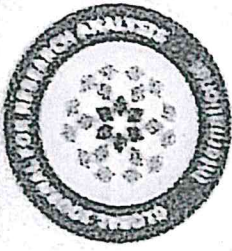
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ORIGINAL RESEARCH PAPER

COMPONENTS AND KINDS OF WORKING CAPITAL WITH IMPORTANCE OF ADEQUATE WORKING CAPITAL

Accountancy
KEY WORDS: Working Capital, Management, Components

Prof. Dharmendra C. Parmar*

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ABSTRACT

Working Capital refers to funds required to be invested in the business for a short period usually up to one year. It is also known as short-term capital or circulating capital. Working Capital may be regarded as the lifeblood of a business. Its effective provision can do much to ensure the success of a business. Its inefficient management can lead not only to loss of profit but also to the downfall of a business. A study of Working Capital is of major importance to internal and external analysis because of its close relationship with the current day-to-day operations of a business. Every business needs funds for two purpose. Long term funds are required to create production facilities through purchase of fixed assets, such as, plants, machineries, land, building etc.

WORKING CAPITAL :

Any firm, from time to time, employs its short-term assets as well as short-term financing sources to carry out its day to day business. It is this management of such assets as well as liabilities which is described as Working Capital Management. Working Capital represents a company's ability to pay its current liabilities with its current assets. Working Capital is an important measure of financial health since creditors can measure a company's ability to pay off its debts within a year. Working Capital, also known as net working capital, is the difference between a company's current assets, such as cash, accounts receivable (debtors) and inventories (stock) of raw materials and finished goods, and its current liabilities, such as accounts payable (creditors).

HOW TO CALCULATE WORKING CAPITAL :

Working Capital can be calculated by determining the current assets and the current liabilities of a company. Current assets include a company's liquid cash as well as other assets that can be converted to cash within one year or less. Some examples of current assets include money in checking accounts, inventories, supplies, equipment, and temporary investments. Current liabilities include all the expenses and debts that a company needs to pay within one year. Examples of current liabilities are account payable (creditors), dividends and income taxes owed.

CONCEPT OF WORKING CAPITAL :

There are two concepts of Working Capital: Gross and Net.

The term gross working capital, also referred to as working capital, means the total current assets.

The term net working capital can be defined in two ways: (1) the most common definition of net working capital is difference between current assets and current liabilities and (2) alternate definition of net working capital is that portion of current assets which is financed with long-term funds.

The task of the financial manager in managing working capital efficiently is to ensure sufficient liquidity in the operations of the enterprise. The liquidity of a business firm is measured by its ability to satisfy short-term obligations as they become due. The three basic measures of a firm's overall liquidity are (1) Current Ratio, (2) Acid-test Ratio and (3) Net working capital.

Net Working Capital, as a measure of liquidity, is not very useful for comparing the performance of different firms, but it is quite useful for internal control. The Net Working Capital helps in comparing the liquidity of the same firm over time.

For purpose of Working Capital Management, therefore, Net

Working Capital can be said to measure the liquidity of the firm. In other words, the goal of Working Capital Management is to manage the current asset and liabilities in such a way that an acceptable level of Net Working Capital is maintained.

WORKING CAPITAL VS. NET WORKING CAPITAL :

Working Capital represents a company's overall liquidity and ability to meet short-term demands. However, net working capital is determined by removing the cash from the asset category and short-term debt from the liability side of the equation. Net working capital can be calculated as follows :

$$\text{Net Working Capital} = \text{Current Assets (less cash)} - \text{Current Liabilities (less debt)}$$

OR

$$\text{Net Working Capital} = \text{Accounts Receivable} + \text{Inventory} - \text{Accounts Payable.}$$

1. COMPONENTS OF WORKING CAPITAL :

The term working capital refers to the gross working capital and represents the amount of funds invested in current assets. Current assets are those assets which in the ordinary course of business can be converted into cash within a short period of normally one accounting year.

Example of current assets are :Cash and Bank Balance, Short term Loans and Advances, Bills Receivables, Sundry Debtors, Inventories (such as Raw materials, Work-in-progress, Finished goods) Prepaid Expenses, Accrued Incomes, Money receivable within 12 months In a narrow sense, the term working capital refers to the net working capital. Net working capital is the excess of current assets over current liabilities,

or

$$\text{Net Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$

Current liabilities are those liabilities which are intended to be paid in the ordinary course of business within a short period of normally one accounting year.

Examples of current liabilities are : Bills Payable, Sundry Creditors, Accounts Payable, Short-term Borrowings, Dividend Payable, Statutory Liabilities, Accrued or Outstanding Expenses, Bank Overdraft, Provident Fund Dues, Any other payment due within 12 months.

Nature of Working Capital :

The nature of working capital is described with the help of nature of operation cycle of the firm. The process of cash or operation cycle starts when a firm uses cash to purchase raw materials and pay for other manufacturing cost to produce goods. These goods are carried as inventory for some time till they are sold. When goods are sold either cash is received or accounts receivable, are credited. Account receivables are

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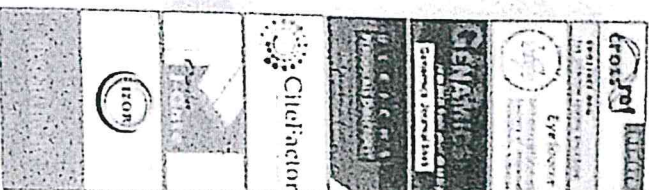
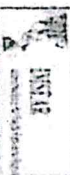
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CORPORATE SOCIAL RESPONSIBILITY IN INDIA AND PROVISIONS OF COMPANIES ACT-2013 (SECTION 135 OF THE 2013 ACT)

Prof. Dharmendra C. Parmar

Asst. Prof. Government Commerce College, Naroda, Ahmedabad

ABSTRACT Corporate Social Responsibility is a way of conducting business, by which corporate entities visibly contribute to the social good. Socially responsible companies do not limit themselves to using resources to engage in activities that increase only their profits. Globally, the notion of CSR and sustainability seems to be converging, as is evident from the various definitions of CSR put forth by global organisations. As the business environment gets increasingly complex and stakeholders become vocal about their expectations, good CSR practices can only bring in greater benefits. Several human resource studies have linked a company's ability to attract, retain and motivate employees with their CSR commitments. Interventions that encourage and enable employees to participate are shown to increase employee morale and a sense of belonging to the company. The genesis of this convergence can be observed from the preamble to the recently released draft rules relating to the CSR clause within the Companies Act, 2013 which talks about stakeholders and integrating it with the social, environmental and economic objectives, all of which constitute the idea of a triple bottom line approach.

KEYWORDS : Corporate Social Responsibility, Companies Act-2013

WHAT IS CSR?

Corporate Social Responsibility is the process by which an organization thinks about and evolves its relationships with stakeholders for the common good, and demonstrates its commitment in this regard by adoption of appropriate business processes and strategies. Thus CSR is not charity or mere donations. CSR is a way of conducting business, by which corporate entities visibly contribute to the social good. Socially responsible companies do not limit themselves to using resources to engage in activities that increase only their profits. They use CSR to integrate economic, environmental and social objectives with the company's operations and growth.

THE GLOBAL CONTEXT :

While there may be no single universally accepted definition of CSR, each definition that currently exists underpins the impact that businesses have on society at large and the societal expectations of them. Although the roots of CSR lie in philanthropic activities of corporations, globally, the concept of CSR has evolved and now encompasses all related concepts such as triple bottom line, corporate citizenship, philanthropy, strategic philanthropy, shared value, corporate sustainability and business responsibility. This is evident in some of the definitions presented below:

Ecl defines CSR as "the responsibility of enterprises for their impacts on society". To completely meet their social responsibility, enterprises "should have in place a process to integrate social, environmental, ethical human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders"

The WBCSD defines CSR as2 "the continuing commitment by business to contribute to economic development while improving the quality of life of the workforce and their families as well as of the community and society at large."

CORPORATE SOCIAL RESPONSIBILITY IN INDIA :

Corporate Social Responsibility in India has traditionally been seen as a philanthropic activity. And in keeping with the Indian tradition, it was an activity that was performed but not deliberated. As a result, there is limited documentation on specific activities related to this concept. However, what was clearly evident that much of this had a national character encapsulated within it, whether it was endowing institutions to actively participating in India's freedom movement, and

embedded in the idea of trusteeship.

As some observers have pointed out, the practice of CSR in India still remains within the philanthropic space, but has moved from institutional building to community development through various projects. Also, with global influences and with communities becoming more active and demanding, there appears to be a discernible trend, that while CSR remains largely restricted to community development, it is getting more strategic in nature than philanthropic, and a large number of companies are reporting the activities they are undertaking in this space in their official websites, annual reports, sustainability reports and even publishing CSR reports. The Companies Act, 2013 has introduced the idea of CSR to the forefront and through its disclose-or-explain mandate, is promoting greater transparency and disclosure. Schedule VII of the Act, which lists out the CSR activities, suggests communities to be the focal point. It will be interesting to observe the ways in which this will translate into action at the ground level, and how the understanding of CSR is set to undergo a change.

CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABILITY :

Sustainability is derived from the concept of sustainable development which is defined by the Brundtland Commission as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" CSR in India tends to focus on what is done with profits after they are made. On the other hand, sustainability is about factoring the social and environmental impacts of conducting business, that is, how profits are made. Hence, much of the Indian practice of CSR is an important component of sustainability or responsible business, which is a larger idea, a fact that is evident from various sustainability frameworks.

Globally, the notion of CSR and sustainability seems to be converging, as is evident from the various definitions of CSR put forth by global organisations.. It is also acknowledged in the Guidelines on Corporate Social Responsibility and Sustainability for Central Public Sector Enterprises issued by the DPE in April 2013. The new guidelines, which have replaced two existing separate guidelines on CSR and sustainable development, issued in 2010 and 2011 respectively, mentions the following:

"Since corporate social responsibility and sustainability are

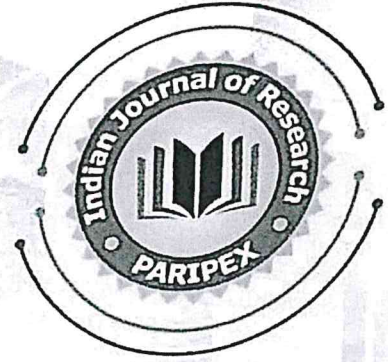
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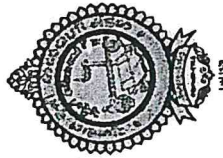
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"A CONCEPTUAL ANALYSIS OF RISK ASSESSMENT STRATEGIES IN BANKS"

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Abstract

In current globalized market banking industry is rapid growing sector with significant part in economy of the country. Banking sector is highly competitive in current era as more and more public as well as private sector banks are being a part of development. The cost and management profession has biggest opportunity as the banking sector needs different tools and systems of cost reduction to survive, grow and maintain their profitability in highly competitive era. We analyze the risk assessment procedure in banks to manage risk.

Key Words: Risk Management, Bank, Strategies

INTRODUCTION

Banking is one of the services with a long history. The banks have grown over a period in size and variety of products and customers. It includes small cooperative bank to MNCs like CITI bank and large banks like State bank, ICICI, UTI, Kotak bank, etc. All the new banks are technologically superior and the public sector banks have gradually making efforts to upgrade themselves. The highly competitive markets have made the need for utilization of highly sophisticated management accounting tools available and develop them for the organizational needs.

The cost and management accountant profession has the biggest opportunity as the banking services needs their tools to develop and sustain their profitability in the highly competitive globalized market. Currently bank offers a wide range of banking products and financial services to their customers through a variety of delivery channels and through their specialized branches in the areas of banking, life and non-life insurance, venture capital, asset management etc. Banks also provide cross border needs of clients.

WHAT BANKS REQUIRE?

The bank wants to satisfy its customers. Banks are also interested in knowing their profitability and growth. So, it is proposed to examine the various needs of the banks relevant to the cost and management accountant. Banks may have needed help of cost and management accountant in the following decisions. These are only examples and are not limited for the purpose.

1. Which products are profitable?
2. What is the overall profitability?
3. What is the profitability of different branches?
4. Should a branch be closed or continued?
5. Should a new product be introduced? What will be the profitability level?
6. What will be marketing costs?
7. Benefit of investment in technology?

RISK MANAGEMENT STRATEGIES

Role of Cost and Management Accountant

The tools handling by cost and management accountant should be relevant and easy to understand. The system developed by cost and management accountant should not be too much complicated and should be well balanced with the need of banks. It can be easily understood and reasonably priced.





after long time. The management accountant specially trained in these techniques will be consultant for the management on these crucial matters.

Evolving standard costs

The management accountant can evolve a standard cost for each activity after a proper study of the various factors involved. The standard should be achievable. Also the actual costs incurred can be compared with standard cost to analyze the efficiency. This could be done with the help of management accountant who are professionally trained to operate such systems.

Other functions of cost and management accountant.

The following are the other activities but not limited to where services of cost and management accountant can be utilized.

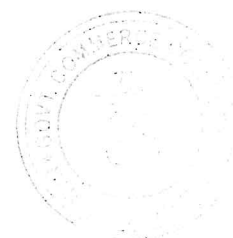
- Internal audit of branches.
- Audit of specific products like housing loan in an area.
- Management audit of specific activities
- Stock and receivables audit of units financed.
- Review of projects financed once a year with analysis of deviations from the original estimates and reevaluation of risks.
- Review of costs of specific firms.

CONCLUSION

The cost and management accountant has an important role in banking industry and they can do better to meet the challenges in global economy. The present situation is that the management accountants and banking industry needs each other to implement a successful strategic cost management. The door should be open for Cost and management accountant equally with chartered accountant. This article involves broad area on role of cost and management accountant but it can be further analyze in detail according to the subject matter.

REFERENCES

- Subramanian, K. S., FICWA, FIIBF, 'Cost and management accounting in Banks.' The management accountant, Volume 41, No. 7, July 2006, pp 540-546.
- Andersen, T. J. 2008. The Performance Relationship of Effective Risk Management: Exploring the Firm-specific Investment Rationale. *Long Range Planning* 41: 155-176.
- Ballou, B., P. C. Brewer & D. L. Heitger, 2006. Integrating the Balance Scorecard and Enterprise Risk Management. *Internal Auditing*. 21(3): 34-38.
- Basel Committee on Banking Supervision. 2004. *International Convergence of Capital Measurement and Capital Standards: A Revised Framework*. Basel, Switzerland.
- Bessis, J. 2002. *Risk Management in Banking*. Chicester: John Wiley & Sons.
- Hakenes, H. 2004. Banks as Delegated Risk Managers. *Journal of Banking and Finance*. 28: 2399-2426.
- Marshall, C. L. 2001. *Measuring and Managing Operational Risks in Financial Institutions*. Singapore: John Wiley & Sons (Asia) Pvt. Ltd.
- Yudistira, D. 2004. Efficiency in Islamic Banking: An Empirical Analysis of Eighteen Banks. *Islamic Economics Studies*. 12(1).



**Corporate Governance Practices & Profitability:
A Study of Selected Pharmaceutical Companies in India**

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Abstract

Corporate governance is concerned with the establishment of system whereby the directors are entrusted with the responsibility and duties in relation to direction of company affairs. It is concerned with the morals, ethics, values, parameters and its management. It is voluntary ethical code of business of companies. Corporate Governance and Profitability of organization are always having some sort of relationship. Organization may maximize profit element in short run by ignoring Corporate Governance in short run but consistent profit maximization is possible only with the help of optimum Corporate Governance. The said research study has tried to establish some correlation between Corporate Governance Practices and Profitability by considering selected Pharmaceutical Companies in India. Researcher found low negative correlation between Corporate Governance Practices and Profitability in selected five pharmaceutical companies in India. It may turn positive in the long run.

Keywords: Corporate Governance, CG Score, Profitability, Earnings Per Share.

INTRODUCTION

A Corporation is a congregation of various stakeholders namely customers, employees, investors, vendors, partners, government and society. In today's period of globalisation, the corporate world requires a fair governance system. Corporate governance is about enhancing corporate ethics, fairness, transparency and accountability. In recent years, the area of corporate governance has been in discussion and has attracted increased attention of academicians and researchers worldwide due to high-profile scandals and corporate collapses like Enron, Satyam etc. Does good corporate governance leads to good profitability for any organization? This is the most important aspect which every stakeholder is interested to know.

RATIONALE OF STUDY

Corporate governance is concerned with the establishment of system whereby the directors are entrusted with the responsibility and duties in relation to direction of company affairs. It is concerned with the morals, ethics, values, parameters and its management. It is voluntary ethical code of business of companies. It deals with exercise of powers over the directions of the enterprise, the supervision of the execution action, acceptance of duty is accountable and regulation of the affairs of the company.

Due to above philosophy several researchers had tried to correlate corporate governance with profitability with an attempt to know if corporate governance and profitability are correlated? If yes, to what extent? Present research paper is also an effort in similar direction considering five pharmaceutical companies selected in the top ten on the basis of market capitalization as on present situation.

LITERATURE REVIEW

Mita Mehta and Arti Chandani had conducted study on "Where Indian Pharma Corporate Stand - Study With Reference To Corporate Governance Practices and CSR" The study identified the co-relation between CSR and Performance of the firm. The broad objectives of the research were to Study the CSR approach among Indian corporate sector, to study CSR disclosures among sample companies as a part of CG disclosures, to measure the impact of CSR on financial performance of corporate and to make suggestions for accelerating CSR initiatives. Five Top Pharmaceutical companies were selected on the basis of their market capitalization during the time period from 2009 to 2014. The researcher identified two variables namely CSR and performance of the company being financial performance. They used correlation method to understand

Selection of Parameters for measuring corporate governance:

For the purpose of the study the corporate governance parameters are designed on the basis of mandatory as well as non-mandatory requirements issued under Clause 49 along with requisites of Companies act 2013.

Selection of Indicators of Profitability:

For measuring financial performance of given 5 companies, Earning per Share (EPS) is considered of the year 2015-16. EPS indicates earning per share available to equity shareholders. It does not show how much is paid as dividend or how much is retained in business but provides information on how much earning is available to equity shareholders on each share.

ANALYSIS AND INTERPRETATION

The table 2 shows the corporate governance score chart calculated for the sample companies. The various corporate governance parameters designed on the basis of mandatory and non-mandatory requirements issued under Clause 49 along with requisites of Companies act 2013 are shown in column no.2. The "YES" mentioned indicates fulfillment of disclosure norms while "NO" indicates that the disclosure is not made by the sample company in its annual report. The table also shows the corporate governance score of each of the sample companies on the basis of which the ranks are allotted. The table also shows the Total Corporate Governance Score obtained by each of the sample companies on the basis of which the ranks are allotted.

Table 2
Corporate Governance Score Chart for the year 2015-16

No	PARAMETERS	CHL	GSPL	DLL	TP	GPL
1	Composition of Board of Directors	YES	YES	YES	YES	YES
2	Board meeting	YES	YES	YES	YES	YES
3	Meeting of Independent directors	YES	NO	YES	NO	YES
4	Audit committee	YES	YES	YES	YES	YES
5	Audit committee Meetings	YES	YES	YES	YES	YES
6	Code of Conduct	YES	YES	YES	YES	YES
7	Nomination and remuneration committee	YES	YES	YES	YES	YES
8	Risk management committee	YES	YES	YES	YES	YES
9	CSR committee	YES	YES	YES	YES	YES
10	Stakeholders relationship committee	YES	YES	YES	YES	YES
11	Boards report and responsibility statement	NO	NO	NO	NO	YES
12	Related party transaction disclosures	YES	YES	YES	YES	YES
13	Subsidiary companies	YES	NO	YES	NO	YES
14	Whistle blower policy	YES	YES	YES	YES	YES
15	Prohibition of Insider trading	YES	NO	NO	NO	YES
16	Non Mandatory requirements	YES	YES	NO	NO	NO
Score:		15/16	12/16	13/16	11/16	15/16
Ranks:		1.5	4	3	5	1.5

(Source – Annual reports of Sample companies for the year 2015-16)

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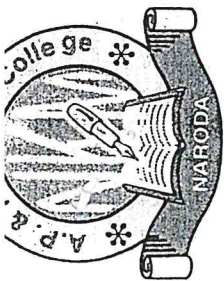
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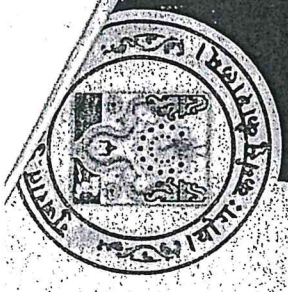
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**Development of Dairy Industry in the Co-operative Sector in Gujarat
Obstacles in the Development of Dairy and its Solution**



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Abstract

Dairy co-operative is an important sub-sector of Indian agriculture, accounting for nearly 17% of value of output from agriculture and allied activities. Dairy has emerged as an important source of income and employment in rural areas, especially for marginal and small farmers, who about 33 percent of cultivable land mass but account for almost 60% of female cattle and buffaloes in the country. Dairy contributes to a third of the gross income of rural households and nearly half for the landless farmers.

In short, despite the fact that the dairy industry has developed a lot, there are some difficulties that are proving to be a hindrance in this sector which we will look at, in addition, we will provide detailed information in the research paper on how to overcome the problems that are hindering the dairy industry.

Keywords : Dairy, Co-operative, Development, Problems, Solution.

Introduction

The Government of India has taken several measures to improve the quality and productivity of dairy cows under the Flagship Village Program, which was initiated under the Five Year Plan and Intensive Livestock Program. The most important plan was presented by the Government of India to increase milk production with the livestock keepers of the whole country in mind.

Gujarat is going to complete 60 years of its formation in 2020, during the period Gujarat has achieved some targets dream about in past and has also dreams worth dreaming. Looking from the perception of economic development and growth, the entire world has been taking interest in the economy of Gujarat.

Over the last 60 years, Gujarat has revolutionized agriculture and industry. In the process of this development, some industries have also developed which produced friction by creating inequality of income and wealth, while some industries have also developed, by inter-linking agriculture and industry and the production tools associated with it, a new

identity and life. One such industry which acquired a key position in the economy of Gujarat is dairy co-operative industry.

Meaning and Definition of Co-operation:

“Generally, the word dairy is associated with milk hence the total science related to milk integrated in it.”

“Usually, the place where milk is kept, processed and sold is known as dairy”

“A cooperative is a union of people who voluntarily cooperate for their mutual benefit”. (Social, Economic, Cultural)

The establishment of a dairy cooperative is another feature of the modern Indian dairy industry. In order to successfully run economic enterprises in our villages, they must be given a corporate image. In most developed countries, cooperatives have become a fairly coherent peasant organization. On the one hand, they provide a dependent area between economic gain and individualistic tendencies, and on the other hand they provide a middle ground between excessive centralization and regimentation. It has the ability to combine dwarf independence and opportunity with large-scale management and the goodwill and support of the organization and the community.

Objective of the Study :

The specific objective of the present study are as follows:

- To know the development of dairy industry in the co-operative sector in Gujarat.
- Learn about the factors that hinder the development of a dairy.
- To know the remedy to remove the inhibitory factors of dairy co-operative.

Database and Methodology

Present study is based on secondary data which have been obtained from both online and offline sources such as Census of India, District Census Handbook and Government Online Sources. Simple statistical tools and qualitative techniques have been used for the analysis of the data. Mapping and cartographic techniques have also been used to depict the results clearly.

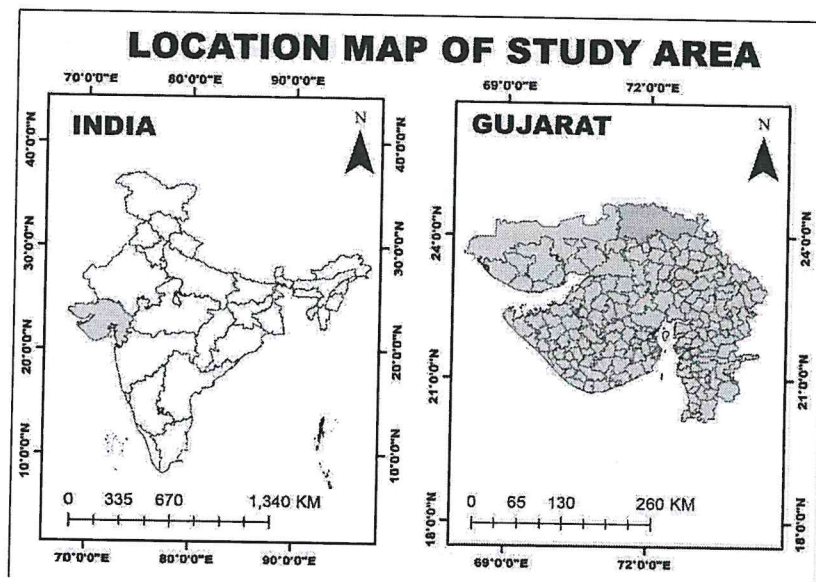
Development of Dairy Industry in Gujarat :

The roots of dairy industry of Gujarat are very deep. Military Dairy farm service established in 1886, central creamery started in Ahmedabad, establishment of Imperial Institute (Karnal) of Animal Husbandry in 1929, establishment of National Dairy Research Institute at Karnal (Haryana), Palson Dairy established by pestanji Polson in Anand, Many noteworthy institutions beginning has helped get this infant – industry of Gujarat a world class majesty. Like Denmark exclusive position in the Dairy industry field in the world, Gujarat is on top in Indian dairy industry sector. In Gujarat, the first milk co-operative society on co-operative basis started in the year 1939 in Choryas; taluka of Surat District and in year 1946 dairy industry started in Khedu district on co-operative basis.

Location and Study Area

The latitudinal and longitudinal extents of the state are 20° 01' N and 24 ° 07' N, and 68 °04' E and 74 ° 04' E respectively. Gujarat is located on the west coast of India and has a coastline of Sixteen Hundred Kilometre. The Arabian Sea extends beyond the western and south-western boundaries of the state. Gujarat extends from Kaucha in the

west to Daman and Dadar in the south. In the east there are the Oldest Aravalli Mountains and in the west there are lush green forests, hills, plains and rivers. Rajasthan is located in the northeast of Gujarat, Maharashtra in the south-east and Madhya Pradesh in the east. It also connects the international border of Pakistan in the northwest. The state has 33 districts, ranking ninth in the region and tenth in population. It has fertile rivers, semi-deserts, marshes, grasslands, etc. This state has been an important business and trading center since ancient times due to its strategic position.



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Problems in the Development of the Co-operative Dairy Industry

It is very difficult for any industry to achieve the peak of development and production, because they have to encounter many problems before reaching there. Those problems depended many factors:

1. Lack of better bread dairy animals:

All the farmers in Gujarat have dairy cows for their own use in dairy production. However, both females and males are inferior. However, as dairy laboratories currently produce artificially grown cells from high quality milch cattle, most farmers are unwilling to accept these new cultured breeds.

2. Lack of protein and fat reach food :

Most of the farmers in Gujarat live below the poverty line. Such farmers also have less land, due to which farmers do not get enough protein rich food for their livestock, it is very difficult to reach for the food required for consumption of their own pets, before and after delivery female animals get enough protein and Fat is not found which results in a decrease in milk production and in fact a reduction in milk leads to poverty.

3. Availability of green fodder :

Animals are given dry and green grass as food in which green grass is especially preferred by the animals, There is a special need for water in the cultivation of green fodder but a large part of Gujarat is a part of water scarcity which makes it difficult for livestock to get green fodder. Milk production per animal has declined in the summer season mainly due to lack of green grass during the summer season which has resulted in people having to buy milk at higher prices. Thus the government and co-operatives should strive for good quality seeds to meet the demand for green fodder.

4. Lack of accommodation for milch animals:

Habitat is a basic need of every living thing. Planned and lined accommodation works to protect against rain, heat and cold, Lined sheds also affect the quality of animal milk and milk productivity. The development of animal husbandry business is especially prevalent in rural areas of Gujarat, economically weaker people do not have lined manholes and lined sheds for livestock housing due to which the effect of different seasons is seen on animals including bad effect on lactating animals and reared animals. Lack of lined sheds also leads to mosquito-borne diseases and toxic organisms in monsoons, as well as heat stroke in summer and severe cold in winter, which can lead to a decline in milk production.

5. Poor Pastoralists:

Special capital is required in the business of animal husbandry. Basic necessities like purchase of dairy cattle through capital investment, provision of land and water for fodder, nutritious mining and care of animals etc. are required. Due to lack of capital, animal husbandry remains a dream for landless farmers. Capital remains the main driving force of this business. Due to poverty, pastoralists are not able to provide adequate and nutritious food to the animals due to which the business of animal husbandry cannot develop.

6 Lack of Veterinary Services in Rural Areas:

Even today, there is a lack of affordable government veterinary medicine in many rural areas in Gujarat. In many rural areas of Gujarat, emergency veterinary and emergency veterinary facilities are not available in times of emergency. As a result, often during animal delivery and artificial insemination and sick animals cannot be treated in time. Late treatment in rural areas or poor development of veterinary medicine has also led to deaths of animals.

7 Lack of Scientific Perspective :

1. The commercial importance of milk declined as a result of the traditional belief that white goods should not be sold in society.
2. The use of home-grown grass and cereals alone has led to lower milk production due to the price of non-feeding of livestock.
3. The spirit of not giving pets as vegetable ghee and oil food for nutritional purposes.
4. Due to the belief that animals should not be watered frequently, the animals could not be properly cared for which resulted in a decline in milk production.
5. Due to the sentiment of not giving artificial insemination to cows as sacred, the proportion of more milk producing native cows has decreased.

Solution of the Problems

1. To Develop an Animal Breeding Center:

In order to maintain good milch breeds, village dairy herds should take care of and maintain good male buffaloes and bulls so that excellent breeding is maintained. In addition, the District Milk Union should give more milk in their area, raise calves, store their semen in the semen center and make efforts to develop a good milch breed.

2. Arranging a Nutritious Diet:

Most of the farmers and pastoralists we have there are poor, because of poverty they cannot afford to buy expensive nutritious food for their animals. For such pastoralists, the district co-operative societies should make arrangements to get nutritious food at reasonable prices in their village on a co-operative basis.

3. Loan Facility for Purchase of Livestock:

Animal husbandry is an important occupation in our state but so far no good loan scheme has been formulated for the purpose of animal husbandry. But in today's changing times and in order to increase the employment rate, loan facility has become necessary. Today's educated youth want to get employment by engaging in animal husbandry but due to lack of money, youth cannot take up animal husbandry business, as a result they move to cities in search of employment.

4. Organizing infertility prevention camps:

Animals often have a variety of problems related to the reproductive system, including infertility. This troubled animal does not produce calves or milk because it does not provide semen to the breeders, which makes it expensive to care for. To solve this problem, dairy federations should organize sterilization camps for such animals to enable them to breed so that they can produce new calves and milk.

5. Animal care training to pastoralists:

Training for pastoralists should be organized at different levels from time to time. In such training, various matters related to animal grooming, animal feed as well as animal health should be imparted so that the business of animal husbandry can be developed properly.

6. Creating a competitive environment in milk producers:

Organizing various types of positive competitions among the milk filling members plays an important role in improving milk production and quality. Competitions such as prizes on increased milk production, promotion of adherence to traditional or indigenous breeds and cleaning of milk house etc. bring positive results in the long run.

Conclusion :

Gujarat is at the forefront whenever it comes to the co-operative dairy industry. Water is a widespread problem in many parts of Gujarat. However, compared to other states, Gujarat has made significant progress in this area today. Amul is known as a very well known dairy brand in the world and also the most productive co-operative dairy in Asia is located in Banaskantha district of Gujarat. apart from the fact that most of the pastoralists in Gujarat are poor and illiterate, many other problems are hindering the development of the dairy industry. If such challenges are overcome, the dairy industry can still grow well if the problems of the farmers are solved quickly, the farmers will be able to become self-sufficient and prosperous.

References

- (1) "Dairy Science", Author: Joshi C.H., University Granth Nirman Board, Gujarat State
- (2) Paper presentation "Jignesh Shaha* and Darshana Dave."
- (3) "Economics and Animal Marketing Management", Author: Desai Muktishanker M. University Granth Nirman Board, Gujarat State
- (4) www.indiandairy.com
- (5) Page-58 – Annual Report – 2018-19 NDDB
- (6) Basic animal husbandry statistic, DAHD & F, GOI (&) FAO (2005a) (fao.org)
- (7) <http://nddb.org/statistics>
- (8) National Accounts Statistics – 2019 Central Statistical Organization, GOI
- (9) Shaker Darsan - Jagdishchandra M. Mulani.- Pramukh Patkasan

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IDEES –International Multidisciplinary Research Journal**(Peer Reviewed)****A Research Paper****On****Analysing current status of Integrated Reporting in India: A study of Nifty 50 Companies****By****Dr. Sweta Taneja**

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ror.dips@gmail.com**Abstract**

Today, corporate reporting in India is not only limited to financial information. It has changed from conventional reporting to crisper reporting and includes both financial as well as non - financial information. Investors as well other information seekers also expect both financial and non-financial information to take their investment decisions. Integrated report provides both financial and non-financial information. Integrated Reporting provides a cohesive view of the performance and ability to create value consistently through six capitals – financial, manufactured, intellectual, human, social & relationship, and natural. As per SEBI guidelines top 500 listed companies are advised to adopt Integrated reporting on a voluntary basis from financial year 2017-18. The present study analyses the current status of integrated reporting taking annual reports of Nifty 50 companies for the year 2019-20 i.e. two years after the voluntary adoption of integrated reporting. The study found that only 40% of the companies have disclosed their capitals in a separate section. There is no uniformity in sector wise disclosure.

Keywords: *Integrated Report, Six Capitals, Nifty 50*

Introduction

Over the centuries, companies bring out their annual reports and present their financial information to the investors and other stakeholders. But the scenario now has been changed. Investors expect not only financial information but they go beyond the numbers and expect both financial and non-financial information to take their investment decision. Integrated report represents both the sides of the coin by presenting both financial and non-financial information.

Integrated Reporting (IR) is an emerging concept in the world of corporate reporting that has increased significantly in the last 10 years. It is a new approach of corporate reporting that is built around an organisation's strategy to create and sustain value in short, medium and long term. Integrated reporting provides a concise information about an organization's strategy, governance, performance, risks and opportunities in such a manner that it reflects the economic, social and environmental context within which it operates and prospects creates value over time. It helps investors and other stakeholders with the relevant financial and non-financial information helping them in taking investment decisions. Integrated report includes six capitals- financial, manufactured, intellectual, human, social & relationship, and natural which are identified by International Integrated Reporting Council (IIRC). The integrated report includes these capitals and informs regarding capital allocation and provides a unified view of performance and how these six capitals help in value creation. A business's ability to sustain value over the long-term depends on how it manages, utilises and integrates all these tangible and intangible resources.

An Integrated Report gives a clear and complete picture and a better insight into the underlying health of the business which a historical financial information fails to provide. Integrated Reporting aligns reporting around strategy and value creation and depicts how an organization uses capital. It provides a consistent message to a variety of stakeholders, from investors to regulators to local communities.

Integrated Reporting in India

In order to help shareholders in taking a well informed and relevant investment decision and improve disclosure practices, Top 500 Listed entities in India who were supposed to submit business responsibility report mandatory are now required to prepare the Integrated Report voluntary from financial year 2017-18 for which Securities and Exchange Board of India (SEBI) has issued Circular SEBI/HO/CFD/CMD/CIR/P/2017/10 dated February 06, 2017. SEBI has prescribed Guiding Principles for preparing Integrated Report as presented by International Integrated Reporting Council ('IIRC') to provide investors with both financial and non-financial information.

SEBI has also advised that the Information related to Integrated Reporting may be provided separately in the Annual report under a specific head, or by incorporating in 'Management Discussion & Analysis' in the Annual Report, or in a separate report as per IR framework. If the company has already provided the relevant information in any other report prepared in accordance with national/international requirement / framework, so as to avoid duplication of information, it may provide appropriate reference to the same in its Integrated Report. Also, as a green initiative,

the entities may host the Integrated Report on their website and appropriate reference to the same should be provided in the Annual Report.

Reporting across capital

IIRC framework emphasized the organizations dependency on various forms of capital for their growth and success. So, in order to take well informed investment decision, it is important that all such forms of capital are disclosed to stakeholders. IIRC considered these capitals as store of value and categorized the forms of capitals as Financial capital; Manufactured capital; Intellectual capital; Human capital; Social and relationship capital; and Natural capital.

Literature Review

Ghosh S. (2019) examined annual reports of 102 companies ranked on the basis of market capitalisation for the period 2010-16. The study concluded that the companies reported on governance and performance. Amongst the capital reported, finance and human capital were the most reported capital. The study also found that 38.24% of the companies fell into the category of high integration and 26.47% of the companies fell into the category of low integration. The study concluded that Indian companies are prepared for Integrated Reporting.

Abhishek and Divyashree (2019) conducted a study to analyze the current status of Integrated Reporting system in Indian context and also analysed the compliance level of IR disclosures. The study found that all the companies selected disclosed human and social and relationship capital-related information in a good manner and that these companies' motivate other Indian companies to practice integrated reporting voluntarily.

Barin and Ansari (2016) conducted a study on Integrated Reporting practices of Indian Petroleum companies. The study examined whether the integrated reports prepared by the companies are in compliance with IIR framework or not and also studied the relationship between the disclosure index and companies' performance (ROA) and position (ROE). The annual reports of the selected companies were analyzed using content analysis. The study concluded that due to the absence of statutory laws in India regarding Integrated Reported, there was no uniformity in reporting.

Research Gap

The above literature review reveals that though many studies have been conducted on Integrated Reporting globally but very few studies have been conducted on integrated reporting in India. Though guidelines on integrated reporting had been given by SEBI in 2017, no study has been conducted for the adherence level of integrated reporting and reporting of capitals by Indian companies. Hence, the present study is undertaken to fill this research gap.

Objectives of the Study

The present study has been conducted to analyse the current situation of Integrated Reporting after the voluntary guidelines by SEBI on Integrated Reporting. The present study takes Annual reports of the companies and studies how many companies have reported integrated report as a part of their Annual report apart from sustainability and other reports. Following are the objectives of the study.

1. To study the presence of Integrated Report in Annual Report with the Annual report named as Integrated Report
2. To determine the percentage of companies who have adopted and disclosed their integrated report as a part of their annual reports.
3. To determine the number and percentage of companies that disclose the different forms of capital.
4. To study the sector specific disclosure of integrated report and capitals
5. To examine the location of disclosure of capitals disclosed after the IIRC guidelines.

Research Methodology

With an objective to study the analyse the current status of Integrated Reporting in India and disclosure of capitals, annual reports of NIFTY 50 companies for the year 2019-20 are taken. The year 2019-20 has been taken as guidelines on voluntary adopting integrated reporting was applicable from financial year 2017-18 and annual reports of 2019-20 i.e., two years after the guidelines were introduced will give the clear picture of compliance level of integrated reporting voluntarily. The study is based on secondary data which is collected from Annual Reports and presented in form of tables.

In India SEBI has asked to present integrated report as a part of the annual report and hence the company annual reports have been studied and analyzed. Annual reports of Nifty 50 Companies for the year 2019-20 are selected for the study. The NIFTY 50 is a diversified 50 stock index that accounts for 13 sectors of the economy and represents the overall stock markets. These companies are torch bearer of Indian equities market since last 25 years. These companies have high market capitalization and investors look into these companies for their investment decisions. Also SEBI guidelines is for top 500 entities to present integrated report so NIFTY 50 companies forms part of these 500 companies.

Results and Discussion

Table 1: Table showing Presence of Integrated Reports and Disclosure of Capitals with their respective location of Disclosure for NIFTY 50 Companies

Company Name	Integrate d Report	Disclosu re of Capitals	Location of disclosure of Capitals
Adani Ports and Special Economic Zone Ltd.	√	√	Separate Section
Asian Paints Ltd.			
Axis Bank Ltd.			
Bajaj Auto Ltd.			
Bajaj Finance Ltd.			

Bajaj Finserv Ltd.			
Bharat Petroleum Corporation Ltd.			
Bharti Infratel Ltd.	√	√	Separate Section
Bharti Airtel Ltd.	√	√	Separate Section
Britannia Industries Ltd.			
Cipla Ltd.		√	Separate Section
Coal India Ltd.			
Dr. Reddy's Laboratories Ltd.			
Eicher Motors Ltd.			
GAIL (India) Ltd.			
Grasim Industries Ltd.			
HCL Technologies Ltd.			
HDFC Bank Ltd.	√	√	Separate Section
Hero MotoCorp Ltd.			
Hindalco Industries Ltd.			
Hindustan Unilever Ltd.	√		Separate Section
Housing Development Finance Corporation Ltd.			
ICICI Bank Ltd.	√	√	Separate Section
Indian Oil Corporation Ltd.	√	√	Separate Section
IndusInd Bank Ltd.			
Infosys Ltd.			
ITC Ltd.			
JSW Steel Ltd.		√	Separate Section
Kotak Mahindra Bank Ltd.			
Larsen & Toubro Ltd.			
Mahindra & Mahindra Ltd.	√	√	Separate Section
Maruti Suzuki India Ltd.	√	√	Separate Section
Nestle India Ltd.			

NTPC Ltd.	√	√	Separate Section
Oil & Natural Gas Corporation Ltd.			
Power Grid Corporation of India Ltd.		√	Separate Section
Reliance Industries Ltd.	√	√	Separate Section
State Bank of India			
Sun Pharmaceutical Industries Ltd.			
Tata Consultancy Services Ltd.	√	√	Management discussion & Analysis
Tata Motors Ltd.	√	√	Separate Section
Tata Steel Ltd.	√	√	Separate Section
Tech Mahindra Ltd.			
Titan Company Ltd.		√	Separate Section
UltraTech Cement Ltd.			
UPL Ltd.		√	Business Model
Vedanta Ltd.	√	√	Separate Section
Wipro Ltd.	√	√	Management and Board Reports
Yes Bank Ltd.			
Zee Entertainment Enterprises Ltd.			

The above table shows that out of 50 companies studied, only 16 companies have their integrated report present in their annual report and also these companies named their reports as Integrated Annual Reports. Out of the 50 companies studied, 20 companies have disclosed their data on all the six capitals. Majority of the reports disclosing six capitals have their separate section on Capitals disclosed Only TCS and Wipro have disclosed their capitals under Management Discussion and Analysis which is also advised by SEBI. And UPL Ltd. Have disclosed their capitals in their Business model. Hence reporting guidelines have brought a uniformity in disclosure practices.

Sector Wise Analysis

Table 2: showing No. of companies in various sectors

Sectors	No. of Companies	No. of Companies having Integrated Report as their name	No. of companies disclosing all Six Capitals
Automobile	6	3	3
Cement and Cement Products	2	-	-
Construction	1	-	-
Consumer Goods	6	1	2
Energy	7	3	4
Fertilizers	1	0	1
Financial Services	10	2	1
IT	5	2	2
Media and Entertainment	1	-	-
Metals	5	2	3
Pharma	3	-	1
Services	1	1	1
Telecom	2	2	2
Total	50	16	20

Table 3: Number and Percentage of Companies with Integrated Report and Disclosing Six Capitals

	No. of companies	Percentage of Companies
Companies with presence of Integrated Reports as their Annual Report named with Integrated Companies	16	32%
Companies with Disclosure of all 6 Capitals as mentioned in SEBI Circular as per IIRC Guidelines	20	40%

From the above table 2 and 3, it can be seen that NIFTY 50 companies are from various 13 sectors. But there is no sector specific disclosure of capitals and integrated report in Annual reports. Only 32% i.e., 16 companies have their reports as Integrated Reports and only 40% of the companies have disclosed their capitals.

Limitations of the Study

Only Annual reports are considered to study the current status of Integrated Report. Websites and other sustainability reports are not taken into consideration. Also disclosure index have not been taken into consideration. Only the presence or non-presence of Integrated report and capital disclosure is taken into consideration.

Conclusions and Recommendations

Integrated Reporting is still in a nascent stage and trying to bridge the reporting gaps. The result shows that only few companies have their integrated reports after the two year of the guidelines issued by SEBI indicating the priority given by the companies is less to explain the stakeholders how organization creates value. Companies have their integrated reports but still only a few companies have reported their capitals. Some mandatory guidelines from government will increase the disclosure level of the companies. With the guidelines of the SEBI in line with IIRC, uniformity in reporting and disclosure practices is seen. For further studies more number of companies with their weighted disclosure index can be taken and integrated reporting practices of the companies can be studied.

References

- Athma P, and Rajyalakshmi N. Integrated Reporting in India: An analysis of Select Companies. *Indian Journal of Accounting*
- Barin A. and Ansari A. (2016). Integrated Reporting Practices in Select Indian Petroleum Companies-An Analysis. *EPRA International Journal of Economic and Business Review*, 4(12)
- Basu, A. (2017). INTEGRATED REPORTING: AN INDIAN PERSPECTIVE. *International Journal of Business and Administration Research Review*, 3(20) 77
- Ghosh, Sumona & Bhattacharya, Arabinda. (2020). Understanding Integrated Reporting: A Study of Selected Companies in India. 10.1007/978-3-030-53775-3_11.
- Ghosh, Sumona. (2019). Integrated Reporting in India: Research Findings and Insights: Antecedents and Perspectives for Organizations and Stakeholders. 10.1007/978-3-030-01719-4_18.
- Ivan, Oana. (2018). Integrated Reporting in the Context of Corporate Governance. Case study on the Adoption of Integrated Reporting of Romanian Companies listed on BSE. *Valahian Journal of Economic Studies*. 9. 127-138. 10.2478/vjes-2018-0024.
- N, Abhishek and M. S., Divyashree, Integrated Reporting Practices in Indian Companies (JUNE 30, 2019). *Focus: Journal of International Business*, Volume 6, Issue 1, January-June, pp. 140-151, 2019, Available at SSRN: <https://ssrn.com/abstract=3472651>
- https://www.sebi.gov.in/sebi_data/attachdocs/1486375066836.pdf
- <https://www.bseindia.com/corporates/Displaydata.aspx?Id=C1E2B986-AD21-4F4F-BE86-57CD52386BE0&Page=cir>

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Organized by the Local Sports Committee Gujarat University from 2nd to 4th January, 2023 held at Mount Abu
He/She was a Participant / Resource Person at the Faculty Development Programme.

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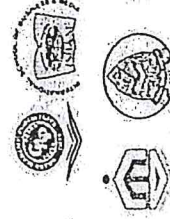
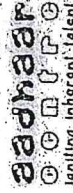
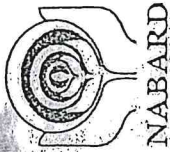
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Brass Industry of Jamnagar District in Gujarat State

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Abstract: -

By human beings according to their own intellectual cultural and economic situation by changing the look of natural resources the process by which it can be used is called utilization.

At the present time the development of that nation depends on industries in ancient times the brass industry development on a small scale. Whose machines were made by hand at home? At present the demand for brass part in the market is increasing globally. Due to which in the present time new machinery based on technology is being used on which the development of brass industry has gained momentum globally.

Keywords: Brass Industry, Brass Part, History, Machines, Problems, Association

Introduction: -

The brass industry is a mineral based industry, Brass Copper, Zinc Copper, Aluminum etc. are used gate book, gas stove, spare parts, brass lighting parts, brass auto parts etc. are made of brass part.

Industry development in India is seen in states like Gujarat, Haryana, Assam, Uttar Pradesh and Orissa.

Study Area: -

Paper in the present study, Jamnagar district has been studied in detail as a town of brass. The district of Jamnagar line between 21.41 N to 22.58 N. Latitude and 68.57 N to 70.39 E Longitude. The area of Jamnagar district 5,846 Sq.Km. in 2011.

Objectives: -

- To get information about the history of Brass Industry of Jamnagar.
- To study the development of Brass Industry in Jamnagar.
- To know about the problem related to Brass Industry.

Hypothesis: -

The development of brass industry would have provided employment to the local people.

Database: -

The study of the present research paper is based on secondary data. The information has been obtained from books online, previous researcher's reports and processing associations as well as government and non government sources.

History of Brass Industry Jamnagar: -

Beginning of industry in Jamnagar can be considered before independence. That is in the period of 1944-45. Then it developed in 1956-57. The contribution of carpenter caste is of the great importance in the development of brass industry. Darji mistry of the carpenter caster was the hand operator at that time and was electronic operator. By his own intelligence he made brass button at a nominal cost of Rs. 1000 to 2000. So that even the common man can turned to employment and became self-employed by purchasing these tools to run the housing industry.

Development of Brass Industry of Jamnagar: -

City of Jamnagar known worldwide as the city of brass. There are about small and medium sized brass factories in the city. Every import of 75,000 tons of metal scrap is done.

The development of brass industry has seen an increase in the city of Jamnagar with the development of industrial estate in urban areas. While in Jamnagar rural it is seen that villages like Dhanvav, Morsanda, Khimaliya, Juna nagna, Nava nagna, Aapa, Khambhaliya, Theba, Khimrana etc. are developed.

Which is made from Britain and the countries of South East Asia. Various brass parts are produced by ordering meal scrap. Jamnagar district produces 80% of the brass part sold in the country. The remaining 20% of production is from Uttar Pradesh and Haryana.

Upto 1980 in Jamnagar district producing brass part during this period was about 3500 small and large units were set up including brass counties, manufacture of brass part machines includes about 100 electro plating units. By 2000-2021 the number had reached to 4000.

Various types of electrical appliances in the industry in Jamnagar district, brass of automobile, bicycle valve, electronic parts, brass parts like faucet bolts are exported.

Industry has been developed in Jamnagar district for more than 60 years. In 1940 it is believed to have started later. The industry employs 4 to 5 people in small units. Whiles in large units 4000 to 5000 persons work.

During this time brass buttons were made which were in high demand in abroad.

Problem of Brass Industry: -

The problems of the brass industry are as follows: -

- At the present time the impact of the war in Russia on brass industry is the main problem. As the raw material for the brass industry is imported from Russia to India.
- The brass industry has been affected due to the covid-19 pandemic.
- The residential area in Jamnagar district has been adversely affected by the industry.
- Exhaust fumes from brass used in brass industry have health effects.
- Chemical contaminated water used in brass industry discharges into the soil spreads land pollution which affects the environment and human life.
- Older technical machines are used in most of the machine in the brass parts industry of Jamnagar. So that the production decreases. It is necessary to change the machines as per the demand of the product.
- The brass industry is largely based on re-processing. So such machines should be used for the of brass parts.
- The brass industry has many suppliers between manufacturer and consumer. Due to which the place where the goods are often arrives late. Many times even after delivery of goods. Its money is not received on time.

- Unit owners unit in capital production process after production variety in commodity price, transportation sales, electricity, marketing.
- China market is considered better for copper export than India. But once the copper is used. It cannot be used again. Unsustainable international prices of the rupee lead to higher import costs of scrap and lower production.
- The price of brass scrap used for making brass part is based on the price of copper on London metal exchange. Which is imported into India due to the high cost of transportation which has an economic impact on the brass industry.
- The raw material for brass industry is 450 Rs. Per kg. in which if G.D.P. increases then rupee strengthens.
- Brass is contested with iron. The price of iron is 90 Rs. Per kg. while the price of brass is Rs. 650 Per kg. That means the price of brass is three times more than iron in which 18% GST is levied.
- In addition plastic taps for drinking water cost less but are more expensive because of the crew brass.

Conclusion: -

In the past machines for brass parts production more made by hand at home. At present large machines have been developed based on technology due to the increasing demand for brass part globally, its production has also started increasing.

The industry employs 4 to 5 people in small units. While in large units 4000 to 5000 persons work.

There are a lot of problems in the brass industry like, The problem of air pollution, The problem of payment of capital of employers and worker, the problem of not getting labour, the problem of transportation, the problem of selling brass parts, the problem of electricity, the problem of marketing etc.

References: -

- 'Gazetteer of India' (1970) Jamnagar: Gujarat State Gazetteers.
- Dr. J.G. Rangiya, Pro. Y. Pathak (2015) 'Bharat ni Bhugol' Ahmedabad, University Granth Nimang Board.
- Dr. R. S. Patel (2017) 'Methods of Research' Gujarat University, Ahmedabad.
- District Statistics Report, District Panchayat Jamnagar (Census-2011)
- www.copper.org
- en.m.wikipedia.org (Brass – Wikipedia)

www-2022

An Analytical Study of Competitiveness of Unicorn Ed-tech Startups in India

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Abstract

Startup India Scheme is an initiative by the Government of India for generation of employment and wealth creation. The goal of Startup India is the development and innovation of products and services and increasing the employment rate in India. This research paper attempts to analyze the competitiveness of edtech-start up namely Byjus and Unacademy selected for the purpose of study. The study uses secondary data available on various digital portals. These two edtech start up will be studied on various parameters such as business models, investor and funding, marketing strategies and growth and revenues. This paper makes a key contribution to the existing literature by empirically identifying key factors that impact the performance and growth of unicorn edtech companies. The findings of the

study will help the young aspiring and creative mind and policy makers to provide impetus to enhance the competitiveness of educational startups based in India.

Key words: Start up, Edtech, Byjus, Unacademy

Introduction

With the advancement of technology and increased accessibility of digital services, every sector has undergone revolutionary change in recent past and education sector is no exception. And the onset of Covid-19 pandemic has redefined the new way of educating and learning. Education Technology, mostly referred as EdTech has has emerged. The EdTech sector has emerged strongly in the post-covid-19 as online education which was supposed to be supplement content to a face-to-face learning, has taken up the front seat with most of the schools and colleges being closed amidst lockdown. This is one of the prime reason for majority of edtech startups, in experience operation, in added in number of users, investment and funding. According to Google Trend, Edtech searches has gained more than 50% of the Indian Internet between April and December 2020. Another report, released by by BARC India and Nielsen stated that the time spent on education apps were increased by 30% in the first three months of lockdown.

In this highly EdTech competition two startups from India Byju's and Unacademy are competing fiercely. Both the companies are now Unicorn. It is noteworthy to see that not only existing edtech startups reached to next level but also a number of new online learning portals launched during this phase. In a nutshell Digital Learning has brought revolution in the educational sector of India. Present study examines the competitiveness of two Edtech giants namely, Unacademy Vs Byjus in the EdTech space.

The Bangalore based educational startup, BYJU'S is an online tutoring and teaching company founded in 2011 by Byju Raveendran. The parent firm of BYJU'S is Think and Learn Pvt Ltd. Core objective of the said startup is to post videos, lectures for the children in grade 1 to 12. Gradually, it started focusing on content for student aspiring for competitive exam such as JEE, NEET, CAT, GRE and GMAT. BYJU'S launched its Learning app in the year 2015. Byju's have a total user base of 40 million, 3 million annual paying customers, and Byju's retention rate is almost 85% which means customers are highly satisfied with companies' product and service. BYJU'S encourages each child to learn on their own by developing framework which involves learning and re-invention. It has world class, teacher, tested pedagogical methodologies, and personalized learning.

Unacademy is an e-learning company founded by Gaurav Munjal, along with his co-founders Hemesh Singh and Roman Sami in 2015. The company had its beginnings as Youtube channel created by Gaurav Munjal. The company offers courses and lectures for several competitive examination such as CAT, JEE, NEET, CLAT, UPSC, IAS, KRB and video classes on various subjects, thus empowering the students to excel in this competitive world. The company boasts of a community of more than 3 million subscribers and 250 million view on its Youtube channel. The Unacademy is now working to create videos in multiple language to cater the needs of students globally, including worthy content, test preparation modules, quiz for all competitive exams.

Objectives of the study

The primary objective of the study is to make comparative assessment between two edtech giants- Byjus and Unacademy.

Secondary objective is to study the growth and prospects of edtech startups in India.

Research Design

The study is based on secondary data available on various websites, magazines, research journal and newspaper. Here the comparative study is conducted between two Unicorn Byjus and Unacademy. These Edtech giants were examined on the parameters as to their competitive advantages, fundings, acquisition, growth and revenue, SWOT analysis, and future prospects.

Table: A Competitive Analysis of BYJU'S and Unacademy

Company Highlights	Company Profile	BYJU'S	Unacademy
	Head quarter	BYJU'S was founded in the year 2011 by Byju Raveendran Bangalore	Unacademy Founded by Gaurav Munjal, Dr. Roman Sami, Hemesh Singh in 2015 Bangalore and Karnataka
	Parent Organisation	Think and Learn Private Ltd	Sorting Hat Technologies Private Limited
	Key competitive Advantage	BYJU'S - The Learning App, the flagship product launched in 2015 for K-12 school students.	India's largest online learning app that provides learning opportunities to the students preparing for competitive exams like UPSC, NEET, SSC exams, etc.
Business and Revenue Model		Operates on B2B and B2C business models. It generates its	Unacademy operates on B2B and B2C business models. Unacademy's basic

INDUSTRIAL EDUCATION AND SUSTAINABILITY IN THE TECHNO-ORIENTED WORLD

Revenue through Freemium Model	revenue model is of a Freemium Type
It offers both the company income of customers in the form of membership fees (free) and paid (premium) services	The main income of the company lies in paid membership the (premium) they offer
Byjus provides one to one mentoring to its students	The Unacademy offers mainly two type of learning resources, a Pre-recorded Video and b LIVE sessions
It also provides feedback to parents over the progress of their ward	Though most of the pre-recorded videos are viewable for free, LIVE sessions are chargeable.
The Unicorn provides classroom teaching in the areas of Gurugram and other nearby areas.	Edtech also provides For paid subscriptions you get current affairs for UPSC exams on daily basis
Inapp After 15 days expired has to purchase the course content to continue their	Focuses on both academics and enhancing your personal skills
Purchases	Subscriptions: Major source of revenue is
After free trial of 15 days, student has to purchase the course content to continue their	get collections from paid subscriptions
expired has to purchase the course content to continue their	Sale of educational material is another generating revenue

INDUSTRIAL EDUCATION AND SUSTAINABILITY IN THE TECHNO-ORIENTED WORLD

Study with Byjus	source
Sale of Tablets	Company also earns from advertisement
Revenue from room and other operations	
Class teaching	
Valuation \$21 Billion (December 2021)	\$3.44 Billion (November 2021)
Total Funding \$3.19 Billion (October 2021)	\$838.5 Million (2021)
Lead Investors	Asmaan Ventures, Mirae Asset, ARK Ncore, Temasek, Softbank, Tiger Global, Sachin Tendulkar Tiger Global
	Chan Zuckerberg Initiative & Sequoia Capital India
	Sequoia Capital India & Sofina
Acquisition	2017- Vidhyarthi, TutorVista, 2018: Edurite, 2018: Maths Adventures, 2019: Osmo, 2020: WhiteHat Jr., LabInApp, 2021: Aakash Educational Services, scholix, Hashlearn, Toppr, Epic, Great Learning, Whodax
	2018: WifStudy, 2020: Kreativa, CodeChef, PrepLadder, Mastree, Coursavy, NeoStencil, 2021: TapChief, Handa ka Funda, Riteo TV, Spayce, Swiftlearn

INDUSTRIAL EDUCATION AND BUSINESS ASSESSMENT IN THE 21ST CENTURY WORLD

Key Financial Statistics	Tech. Yankee Geogebra	For the FY 2020
		Expenses Rs 2,030 Cr
SWOTT Information	Strength	Operating Revenue Rs. 2,587 Cr
		Net Profit (Loss) Rs. 262.1 Cr
		BYJU'S Learning App became popular among students that its number of users increased BYJU'S learning app had more than 3.5 lakhs subscribers on average spend more than 40 minutes a day
		Unacademy spread out the burden of creating new content by bringing more educators on board as collaborators with an exclusive app meant for educators. Unacademy was able to monetize at the right time

The creator of BYJU'S found it difficult to turn students into paid customers after the expiry of free trial period.

Opportunities
Byju Raveendran is looking to create a powerful educational working with more than 100 million views every month, the company is

INDUSTRIAL EDUCATION AND BUSINESS ASSESSMENT IN THE 21ST CENTURY WORLD

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Creation of BYJU'S School in 2021, which would be led by WhiteHat Founder Karan Bajaj.
--

Discussion

- With regard to competitive advantage, BYJU'S -The learning app, which cater schools students also coaches for CAT, NEET, the civil services exams. The BYJU'S learning app uses animations, engaging video, and study material from India's best teachers. These features make this app as one of the most popular learning app amongst the school going community. On the other hand, by penetrating on courses which needs relearning, Unacademy hit the proverbial gold mine. In a country like India where lakhs of people aspire for civil service exams, courses offered by unacademy bound to gain popularity as these courses required continuous learning and preparation. Further, the nature of the content created by the educators is easily replicable and scalable to be rechristened as multiple offerings. As for example, the content prepared for CAT exams can be more or less be useful for other competitive exams, Banking entrance exams too. Also, a free YouTube offering by IAS officer is like an icing on cake.
- Both BYJU'S and Unacademy operate on B2B and B2C business models. BYJU'S functions on a Freemium Business Model. The BYJU'S provide knowledge with the help of creative visual content. BYJU'S has been successful enough to make right blend of technology and

knowledge for genX. The company offers free trial for 15 days period. Once the stipulated period get over, student has to pay subscription fees in order to get access over the complete content. The app contains numerous section, tests, quiz etc. Most of the courses on BYJU'S require students to purchase tablet when they enroll with BYJU'S courses. The tablet contains videos, practice question, etc. BYJU'S also generates revenue from Class room teaching. However, it is restricted to few areas of NCR. Unacademy major source of revenue is collections from paid subscriptions which is more than 95% of total revenue generations. Sale of educational material is another revenue generating source. Company also earns on from advertisement and other operations

- Wide range of services are being offered by BYJU'S and Unacademy. BYJU'S took a positive step during the coronavirus crisis. With the onset of pandemic in 2020, when schools in the country shut down due to outbreak of coronavirus, BYJU'S made generous effort by making its learning app free for the students for the first quarter of 2020. This attempt of BYJU'S resulted in uninterrupted learning for the students. Byju's, the Unicorn, also partnered with the Indian government's public policy think tank. This collaboration aimed to foster a quality learning with the aid of technology driven programs that intends to cover 112 districts across the country. As a part of this collaboration school-going children between Classes (6-12) avail themselves of scholastic content from Byju's Learning App for 3 years, in its drive for 'Education for All'. Unacademy also offers a range of services for free, which the audiences can continue. However, if student want qualitative content, he has to pay a small fee for the

same. The premium subscription are available for Unacademy Plus, Revel, Graphy, Unacademy UPSC, etc. Revel-platform is designed to help job seekers find their jobs within 15 days of application. Graphy- platform that welcomes the influencers, educators, and domain experts from across the country to host live cohort courses. Different Youtube channels under names like Unacademy JEE, Unacademy UPSC. The company regularly offers discounts on live classes, study materials, and other premium content.

- Total amount of fund raised by BYJU'S is \$3.19 billion and its valuation as on 4th October, 2021 was at \$18 billion. It can be said that the company is in full mode swing in raising capital as out of total funds raised, \$ 2 billion was raised in the year 2021. On the other hand Unacademy has a valuation of \$3.41 Billion. It had raised funds from Temasek, Softbank, Tiger Global, and others. Total amount of fund raised by Unacademy is \$838.5 Millions in 12 funding rounds.

- Total 19 companies have been acquired by BYJU'S up till now. Of which 10 acquisitions took place in the year 2021. In its aggressive acquisition spree company spent over \$2.4 Billion, thus embracing unilateral market. It acquired GeoGebra, an Austria based Math learning tool with intends to make math learning fun and and visually appealing. Facebook-based Unacademy has acquired 12 startups including CodeChef, Coursavv, Handa Ka Fanda, and more to date to strengthen its position in the Edtech Sector. Swiflearn is the last acquisition which it acquired in November 2021.

- BYJU'S growth in the fiscal year 2019-2020 were as under. The revenue of BYJU'S inflated around 81% to Rs

2,381 crores. Further, the company witnessed net profit has surged to 152% jump. BYJU'S expenses were noted to be Rs 3,02 crores. There has been an increase in global earnings from operations in the year calendar year 2020. Earning were augmented to Rs. 306 crores as compared to Rs. 1168 crores in 18-19.

- According to the financials statements of Unacademy, its losses multiplied to Rs 1,537.4 crore from Rs 258.6 crore in FY20. This led to an increment by 494% in the current year. The company also witnessed increase in 349% expenses and 350% revenues in the current year. The total income of the company was recorded at Rs 103 crore in fiscal, which rose to Rs 398 crore. The revenue of the firm recorded an increase of 81%, which reached to Rs 2,381 Cr th current year.

- Byju's App provides students with a self-paced learning experience. The app make use of numerous modern approaches such as web-based learning, visual graphics, and so on to make learning experience memorable. The software uses latest technology and is student friendly according to the majority of responders. However, converting a potential customer into a regular user after the expiry of 15 days trial is a big challenge for the company. Byju's App is working hard to make it more economic so that it will undoubtedly reach a wider citizens. BYJU'S decided to enter the U.S. and other English speaking international markets because of large demand for "better learning", a strong electronic payment interface and a willingness and affordability to pay subscription fees.

Future Plans

BYJU'S led The Future School, aspires to bridge the gap between passive and active learning through an interactive learning platform that involves coding as well as other subjects such as English, Math, Science, and others. In May, The Future School will be launched in the United States, the United Kingdom, Australia, Brazil, Indonesia, and Mexico. Furthermore, BYJU'S coaches 3,000 meritorious students with the help of the Aakash-BYJU'S Career-Plus program. In the current scenario Unacademy is also launching celebrity-laugh extra-curricular courses. This new venture will be propagated as 'Unacademy Icons'. Unacademy's 'Unacademy Genex' program is meant for the children of employees and educators without any charge. The offer will accommodate the present employees as well as future employee who join the company henceforth. Unacademy had announced its ESOP buyback plan which would be the company's largest employee stock ownership plan for the team members as well as the educators of the platform.

Conclusion

Education technology or edtech was one of the least funded sectors in India until 2019, but with the onset of remote learning during the COVID-19, education sector was given a new set of wings to this otherwise ignored segment. Between 2020 to 2021, India has seen three startups turning into unicorn and one into a decacorn. A company can become a unicorn when it is valued at above \$1 billion and a decacorn when it is valued above \$10 billion.

Byju's was the first Indian educational company to become a unicorn in 2018. Today BYJU'S is into another category of decacorn with a valuation of \$16.5 billion, putting it as the highest valued edtech startup across the globe. On the

otherhand Unacademy took two years to be labeled as second edtech unicorn on September 2020. BYJU'S has won several laurels in its journey to decacorn. Byju has been awarded by CNBC-TV 18 Big Research Nifty Profit Business & Service Excellence Award, Deloitte Technology and many more. On the other hand, Unacademy has the largest distribution of free educational videos. Now every educator on board can create their own material and put it on the internet portal. The founders were able to perceive that YouTube might always remain free for all the platform and they would not able generate revenue from this, so they created app and drawn their faithful followers to use it. Since the company has an array of free educational videos and millions of views every month, the company for the benefit of global-student community creating content and modules in multiple languages. Unacademy has been one of the lucky ones to get all the combinations right along with being present at the right place at the right time.

References:

- Adhana, D.(2016) Start-up India, Stand-up India, India turning into a start-up hub by prospering entrepreneurial culture;International Journal in Management and Social Science, volume 4, issue 2, p. 368 - 384
- Adhana, D(2020). Start-Up Ecosystem in India: A Study With Focus on Entrepreneurship and University Business Incubators Available at SSRN: <https://ssrn.com/abstract=3702510> or <http://dx.doi.org/10.2139/ssrn.3702510>
- Baporikar, N. (2013). Entrepreneurship in a Modern Networked Indian Economy. International Journal of Asian Business and Information Management, 4(4), 48-66. doi:10.4018/ijabim.2013100104

Chandiok, S. 2016: India the world's fastest growing startup ecosystem: A Study Amity Research Journal of Tourism, Aviation and Hospitality Vol. 01, issue 02, July-Dec

Forbes India, Article on Startup India, January 18, 2016. •

Government of India, "Fostering Entrepreneur"
[.http://business.gov.in/enterprise/fostering.php](http://business.gov.in/enterprise/fostering.php). •

<https://startuptalky.com/byjus-learning-app-success-story/>

<https://startuptalky.com/unacademy-success-story/>

<https://www.nextbigbrand.in/>

<https://www.researchgate.net/publication/323855305> Indian Startups- Issues, Challenges and Opportunities

KPMG Survey Report for 2015 •

Sabrina Korreek, "The Indian Startup Ecosystem: Drivers, Challenges and Pillars of Support". *ORF Occasional Paper No. 210*, September 2019, Observer Research Foundation.

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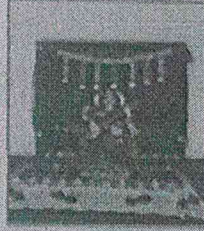
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