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A Comparative Study of Working Capital Management of Selected Paper Companies in India

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Abstract:* *This research paper describes paper companies is core sector for any of the country. Working Capital Management has its impact on liquidity as well profitability. The impact on effectiveness and profitability of working capital is tried to find out by measuring the fluctuation in fixed assets, current assets and sales. The industry plays a vital role in development of economics of enterprises as well as country. So at this financial appraisal of paper companies will be very useful to many of its stakeholders. This research paper mainly based on the secondary data. Its main objectives are to evaluate the liquidity position of the paper companies. For use ratio analysis for accounting tools and statistical tools for getting results like as average, S.D. C.V. Maximum and Minimum and used One way ANOVA test. Mainly included two ratios in this research paper like as current ratio and quick ratio.

I. INTRODUCTION

The present research seeks to study in depth the Working Capital Management of selected paper companies in India, with special emphasis on an examination of the management performance in regard to financial management. It hardly needs mentioning that inventory, accounts receivables and cash and its alert administration can go a long way in solving the problem of the efficient working capital management. In fact, the present research of working capital management needs special attention for the efficient working and the business. It has been often observed that the shortage of working capital leads to the failure of a business. The proper management of working capital may bring about the success of a business firm. The management of working capital includes the management of current assets and current liabilities. The present research undertakes to deal with the net concept of working capital: excess of current assets over current liabilities.

Some important questions to which the research attempts to seek answer as follows:-

1. Whether paper companies have planted their working capital requirement properly.
2. Have the paper companies utilized the investment in current assets?
3. Have the paper companies controlled and utilized cash resources effectively and profitably?
4. Whether paper companies resort to high build up of inventory.
5. How far have the paper companies been successful in collecting their `different administration of its various components: like as inventory, account receivable, cash, and accounts payables.

II. DEFINITIONS OF WORKING CAPITAL

Definitions of Working Capital, as per various management experts are as under:

"Working Capital is the excess of C.A. over current liabilities**."**

- H.G, Guthmann

"Working Capital is descriptive of that capital which is not fixed. But the more common use of the Working Capital is to consider it as the difference between the book value of the C.A. and current liabilities."

-Hoglend. J. Bierman, and A. K. Mc Adams

"Working Capital represents the excess of C.A. over current liabilities"

-J.L. Brown and L.R. Housard

III. CONCEPT OF WORKING CAPITAL MANAGEMENT

There are two concepts of working capital viz .quantitative and qualitative. Some people also define the two concepts as gross concept and net concept. According to quantitative concept, the amount of working capital refers to 'total of current assets'. What we call current assets? Smith called, 'circulating capital'. Current assets are considered to be gross working capital in this concept.

The qualitative concept gives an idea regarding source of financing capital. According to qualitative concept the amount of working capital refers to "excess of current assets over current liabilities." L.J. Guthmann defined working capital as "the portion of a firm's current assets which are financed from long–term funds."

It is necessary to understand the meaning of current assets and current liabilities for learning the meaning of working capital, which is explained below.

CURRENT ASSETS

It is rightly observed that "Current assets have a short life span. These type of assets are engaged in current operation of a business and normally used for short– term operations of the firm during an accounting period i.e. within twelve months. The two important characteristics of such assets are, (i) short life span, and (ii) swift transformation into other form of assets. Cash balance may be held idle for a week or two; account receivable may have a life span of 30 to 60 days, and inventories may be held for 30 to 100 days." Fitzgerald defined current assets as, "cash and other assets which are expected to be converted in to cash in the ordinary course of business within one year or within such longer period as constitutes the normal operating cycle of a business."

CURRENT LIABILITIES

The firm creates a Current Liability towards creditors (sellers) from whom it has purchased raw materials on credit. This liability is also known as accounts payable and shown in the balance sheet till the payment has been made to the creditors. The claims or obligations which are normally expected to mature for payment within an accounting cycle are known as current liabilities. These can be defined as "those liabilities where liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets, or the creation of other current assets, or the creation of other current liabilities."

IV. TITLE OF THE PROBLEM

"A Comparative Study of Working Capital Management of Selected Paper Companies in India"

V. REVIEW OF LITERATURE

DR. VIRENDRA C. JAIN has done his Ph.D. on "Working capital management of fertilizer industries of Gujarat " In this study profile of the concept and measurement of working capital, fertilizer industries, analysis of receivables management, analysis of working capital, analysis of inventory management, analysis of cash management, analysis of financing of working capital, summary of findings.

DR. JAYESHKUMAR P. VORA has done his Ph.D. on " Working capital management of trading houses in India " In this study profile of trading house, working capital management, history and development, of selected companies working as trading house in India, analytical study of working capital management of trading house in India, findings, suggestions and conclusions.

DR. ASHVINKUMAR H. SOLANKI has done his Ph.D. on " Working capital management in selected small scale industries of Gujarat State " In this study profile of nature and growth of small scale industries in Gujarat, working capital management practices and working finance in small scale industries, management of cash, management of accounts receivables, inventory management practices comparative performance analysis of selected small scale industries of Gujarat state Summary, findings and suggestions.

VI. SOME IMPORTANT QUESTIONS OF THE STUDY

Some important questions to which the study attempts to seek answer as follows:-

- Whether paper companies have planted their working capital requirement properly.
- Have the paper companies utilized the investment in current assets?

VII. OBJECTIVES OF THE STUDY

- To study the various factor affecting working capital requirements in selected paper companies in India.

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- To analyze and evaluated working capital management with respect to trade off between liquidity.
- To analyze relative asset liquidity and relative finance liquidity in selected paper companies in India.

VIII. TESTING OF HYPOTHESES

Ho: Null Hypothesis:

- There is no significant difference in Current Ratio of selected paper companies in India.
- There is no significant difference in Quick Ratio of selected paper companies in India.

H1: Alternative Hypothesis:

- There is significant difference in Current Ratio of selected paper companies in India.
- There is significant difference in Quick Ratio of selected paper companies in India.

IX. RESEARCH METHODOLOGY

The study was preliminary based on the published accounts and annual report of all the selected paper companies under review. Out of which selected companies were in the public sector and private sector.

X. PERIOD OF THE STUDY

The present study was undertaken by the researcher for the period of seven (7) Accounting years from 2005-2006 to 2011-12. The researcher had selected the base year 2005-2006 because this year was normal for the present research of analysis and evaluation.

XI. SAMPLE OF THE STUDY

By the researcher following companies were had been selected for the purpose of the present research.

- International Andhra Pradesh Paper Mills Limited
- Ballarpur Paper Mills Limited
- JK Paper Mills Limited
- Orient Paper and Industries Limited
- Seshasayee Paper and Boards Limited
- Sirpur Paper Mills Limited
- South India Paper Mills Limited
- Star Paper Mills Limited
- T. N. Newsprint Paper Mills Limited
- West Coast Paper Mill

XII. METHOD OF DATA COLLECTION

The main source of data used for the study was secondary drawn from the annual profit and loss account and balance sheet figures as found in the annual reports of the selected paper companies. The selected data was complemented through selected paper companies web site and capital line software.

XIII. METHODS OF ANALYSIS AND INTERPRETATION OF DATA

In order to analyze the present research work on "A COMPARATIVE STUDY OF WORKING CAPITAL MANAGEMENT OF SELECTED PAPER COMPANIES IN INDIA" various techniques of financial management like as ratio analysis and various statistical techniques used by the researcher as under:-

- Accounting Techniques
- Statistical Techniques

ACCOUNTING TECHNIQUES:

The researcher picks up the techniques to suit their requirement and also basis to data available to them. The accounting techniques which are used for the analysis is as under.

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RATIO ANALYSIS:

A ratio is a quotient of two numbers and the relation expressed between two figures. Ratio analysis is a process of comparison of one figure against another, which makes ratio. Ratio analysis is a very powerful. The ratio analysis concentrates on the inter-relation-ship among the figures appearing in the financial statement.

STATISTICAL TECHNIQUES:

The statistical techniques which are used for the analysis are as under:

ARITHMETIC MEAN:

It is called as the average of difference of the values of items from some average of the series. According to Gulerian "The most commonly used average is the arithmetic mean, briefly referred to as the mean" the mean has been found by adding all the variables and dividing it by the total number of years taken.

THE STANDARD DEVIATION:

The standard deviation concept was introduced by 'Karl Pearson' in 1823. Standard deviation is most widely used measure of dispersion of a series and is commonly denoted by the symbol 'σ' (pronounced as 'sigma'). Standard deviation is retired as the square –root of the average of squares of deviations, when such deviations for the values of individual items in series are obtained from the arithmetic average.

CO-EFFICIENT OF VARIATION:

Co-efficient of variation has been defined as the percentage of the standard deviation to the mean. It should be noted that higher the variability the greater would be the co-efficient of variation. Therefore, it may be pointed out that for the stability of results, Co-efficient of variation must be low. Coefficient of variation (C.V.) may be calculated with the help of standard deviation and mean

$$\text{CO-EFFICIENT OF VARIATION} = \frac{\text{STANDARD DEVIATION}}{\text{ARITHMETIC MEAN}} \text{X } 100$$

One-way Analysis of Variance Test (ANOVA)

It is useful for inter-unit comparisons. Statistical analysis has been tools which used for financial analysis. The researcher will picks up the techniques of ANOVA – Single Factor at specific level at significance for accepting as rejecting the null hypothesis.

XIV. CURRENT RATIO

MEANING:

This Ratio establishes a relationship between current assets and current liabilities.

OBJECTIVE:

The objective of computing this ratio is to measure the safety margin available for short –term creditors.

COMPONENTS:

- Current Assets: it's refers to those assets which are held for their conversation into to cash normally within a year.
- Current Liabilities: it's refers to those liabilities which are expected to be matured normally within a year.

COMPUTATION AND INTERPRETATIONS:

This ratio is computed by dividing the current assets and current liabilities. This ratio is usually express as a pure ratio e.g. 2:1. In the form of a formula, this ratio may be express as follows:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Currnet Liabilities}}$$

This ratio indicates rupees of current assets available for each rupee of current liability. Higher the ratio, greater the margin of safety for short-term creditors. Too high and too low ratio calls for further investigation since the too high ratio may indicate the presence of idea funds with the firm or the absence of investment opportunities with the firm and too low ratio may indicate the over treading or under capitalization if the capital turnover ratio is high. a current ratio of 2:1 is considered to be a satisfactory ratio. On the basis of this rule , if the current ratio is 2 or more , its means the firm is adequately liquid and has the ability to meet its current obligations but if the current ratio is less than 2 , it means the firms has difficulty in meeting its current obligations.

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TABLE NO. 1.1

Current Ratio In % From 2005 –'06 To 2011 –'12										
Year	**Company Name**									
	IAPPM	**BILT**	**JKPM**	**OPIL**	**SPBL**	**SPML**	**SIPL**	**SPM Ltd**	**TNNPL**	**WCPML**
2005-2006	1.08	3.71	2.81	1.92	1.41	1.00	2.27	0.92	1.73	1.97
2006-2007	1.45	3.05	2.17	1.87	1.54	1.21	2.49	1.25	1.42	2.58
2007-2008	1.65	4.11	2.39	1.84	1.42	0.93	2.54	1.29	1.26	2.92
2008-2009	1.50	3.70	2.75	1.42	1.80	1.21	3.18	1.34	1.64	2.98
2009-2010	1.93	1.77	2.17	1.58	2.15	1.30	3.12	1.01	1.78	2.44
2010-2011	2.01	1.82	2.14	1.73	3.33	1.08	3.24	0.91	1.75	2.87
2011-2012	1.02	1.14	1.30	0.98	1.05	0.90	1.86	0.64	0.67	0.75
Average	1.52	2.76	2.25	1.62	1.81	1.09	2.67	1.05	1.46	2.36
S.D.	0.38	1.17	0.50	0.33	0.75	0.15	0.53	0.25	0.40	0.79
C.V.	25.19	42.34	22.28	20.57	41.52	14.14	19.68	24.18	27.24	33.53
Min	1.02	1.14	1.30	0.98	1.05	0.90	1.86	0.64	0.67	0.75
Max	2.01	4.11	2.81	1.92	3.33	1.30	3.24	1.34	1.78	2.98

The above mentioned Table No- 1.1 show the indicated a fluctuating trends of the Current Ratio of selected paper companies in India from 2006-2006 to 2011-20112.

INTERNATIONAL ANDHRA PRADESH PAPER MILLS LIMITED:

The table no 1.1 shows that the current ratio of the International Andhra Pradesh Paper Mills Limited during the study period form 2005 –'06 to 2011 –'12, the highest current ratio was 2.01 times in the year 2010 –'11 and the lowest current ratio was-1.02 times in the year of 2011 –'12.

In the year 2005 –'06 the current ratio was 1.08 times, which has been increase in 2006 –'07 to 2007 –'08 has been 1.45 times and 1.65 times in the shows above table 1.1. But in the year 2008 –'09 the current ratio was decrease and reached 1.05 times and in 2009 –'10 it has been increase and reached highest at 1.93 times, than after current ratio was increase in 2010 –'11 and reached highest position 2.01 time in selected study period. But the last year of the study period it has been decreased and reached 1.02 times in 2011 –'12.

So, the average (AVG.) current ratio is 1.25 times, the standard deviation (S.D) is 0.38 times and co-efficient variance (C.V) is 25.19 % which is shows in table – 4.11. Which solvency of International Andhra Pradesh Paper Mills limited because the average current ratio shows satisfactory ratio during the study period.

BALLARPUR PAPER MILLS LIMITED:

The table no 1.1 shows that the current ratio of the Ballarpur Paper Mills Limited during the study period form 2005 –'06 to 2011 –'12, the highest current ratio was 4.11 times in the year 2007 –'08 and the lowest current ratio was 1.14 times in the year of 2011 –'12.

In the year 2005 –'06 the current ratio is 3.711times, which has been decrease in 2006 –'07 and reached 3.05 times, it has been increase in 2007 –'08 ad reached highest point at 4.11 times. but then after the current ratio continuously decrease from 2008 –'09 to 2011 –'12 to 3.70 times, 1.77 times, 1.82 times and 1.14 times for the last four year respectively.

So, the average (AVG.) current ratio is 2.76 times, the standard deviation (S.D) is 1.17 times and co-efficient variance (C.V) is 42.34 % which is shows in table – 1.1. Which solvency of Ballarpur Paper Mills limited because the average current ratio shows satisfactory ratio during the study period.

JK PAPER MILLS LIMITED:

The table no 1.1 shows that the current ratio of the J. K. Paper Mills Limited during the study period form 2005 –'06 to 2011 –'12, the highest current ratio is 2.81 times in the year 2005 –'06 and the lowest current ratio was 1.30 times in the year of 2011 –'12.

In the year 2005 –'06 the current ratio has been 2.81 times and it has been decrease in 2006 –'07 to 2.17 times, but it has been increase 2.39 times in 2007 –'08. In 2008 –'09 it has been also increase to 2.75 times. In the year 2009 –'10 to 2011 –'12 the current ratio trend show in the table continuality decreased as 2.17 times, 2.14 times and 1.30times respectively.

So, the average (AVG.) current ratio is 2.25 times, the standard deviation (S.D) is 0.50 times and co-efficient variance (C.V) is 22.28 % which is shows in table – 1.1. Which solvency of J. K. Paper Mills Limited because the average current ratio shows satisfactory ratio during the study period.

ORIENT PAPER AND INDUSTRIES LIMITED :

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The table no 1.1 shows that the current ratio of the Orient Paper and Industries Limited during the study period form 2005 –'06 to 2011 –'12, the maximum current ratio was 1.92 times in the year 2005 –'06 and the minimum current ratio was 0.98 times in the year of 2011 –'12.

In the present the table – 1.1 shows the current ratio of Orient Paper and Industries Limited is fluctuating in the whole study period. In 2005 –'06 current ratio is 1.92 times and it is increasing and decreasing from 2006 –'07 to 2011 –'12 as 1.87 times, 1.84 times 1.42 times, 1.28 times, 1.73 times, and 0.98 times respectively .

So, the average (AVG.) current ratio is 1.62 times, the standard deviation (S.D) is 0.33 times and co-efficient variance (C.V) is 20.57 % which is shows in table – 1.1. Which solvency of Orient Paper and Industries Limited because of the average current ratio shows satisfactory ratio during the study period.

SESHASAYEE PAPER AND BOARDS LIMITED:

The table no 1.1 shows that the current ratio of the Seshasayee Paper and Boards Limited during the study period form 2005 –'06 to 2011 –'12, the maximum current ratio was 3.33 times in the year 2010 –'11 and the minimum current ratio is 1.05 times in the year of 2011 –'12.

In the table – 1.1 shows the current ratio of Seshasayee Paper and Boards Limited is zigzag trend. It was 1.41 times in 2005-'06 and it was continually increasing next year and reached 11.54 times in 2006 –'07, but it was decrease at 1.42 times in 2007 –'08, it was increase in 2008 –'09 and reached 1.80 times, it was again increase for next two year and reached at 2.15 times and 3.33 times in 2009 –'10 and 2010 –'11. Then after the next year of the study period it was decline as 1.05 times in 2011 –'12.

So, the average (AVG.) current ratio is 1.81 times, the standard deviation (S.D) is 0.75 times and co-efficient variance (C.V) is 41.52 % which is shows in table – 1.1. Which solvency of Seshasayee Paper and Boards Limited because of the average current ratio shows satisfactory ratio during the study period.

SIRPUR PAPER MILLS LIMITED:

The table no 1.1 shows that the current ratio of the Sirpur Paper Mills Limited during the study period form 2005 –'06 to 2011 –'12, the maximum current ratio was 1.30 times in the year 2009 –'10 and the minimum current ratio was -0.90 times in the year of 2011 –'12.

In the year 005 –'06 the current ratio has been 1.00 times. Current ratio has been increase 1.21 times in 2006 –'07 and it was decrease 0.93 times in 2007 –'08. Which has been increase in 2008 –'09 at 1.21 times but, again current ratio has been increase from 2009 –'10 1.30 times. It has been decreases in last two year for the study period form 2010 –'11 to 2011 –'12 as 1.08 times to 0.90 times respectively.

So, the average (AVG.) current ratio is 1.09 times, the standard deviation (S.D) is 0.15 times and co-efficient variance (C.V) is 14.14 % which is shows in table – 1.1. Which solvency of Sirpur Paper Mills Limited because the average current ratio shows satisfactory ratio during the study period.

SOUTH INDIA PAPER MILLS LIMITED:

The table no - 1.1 shows that the current ratio of the South India Paper Mills Limited the study period form 2005 –'06 to 2011 –'12, the maximum current ratio was 3.24 times in the year 2010 –'11 and the minimum current ratio is 1.86 times in the year of 2011 –'12.

In the table - 1.1 and graph – 5.1 show the current ratio of South India Paper Mills Limited form 2005 – '06 to 2011 –'12. It is fluctuated during the study period are as 2.27 times, 2.49 times, 2.54 times, 3.18 times, 3.12 times, 3.24 times and 1.86 times respectively.

So, the average (AVG.) current ratio is 8.74times, the standard deviation (S.D) is 1.43times and co-efficient variance (C.V) is 16.38 % which is shows in table – 1.1. Which solvency of South India Paper Mills Limited because the average current ratio shows satisfactory ratio during the study period.

STAR PAPER MILLS LIMITED:

The table no - 1.1 shows that the current ratio of the Star Paper Mills Limited the study period form 2005 –'06 to 2011 –'12, the maximum current ratio was 1.34 times in the year 2008 –'09 and the minimum current ratio was 0.64 times in the year of 2011 –'12.

The table – 1.1 shows the current ratio has been increased & decreased from 2005 – '06 to 2011 –'12. For the first four year of the study period the current ratio has been increasing continually as 0.92 times, 1.25 times, 1.29 times, 1.34 times from 2005 –'06 to 2008 –'09. But last three years of the study period the current ratio has been decrease from 2009 –'10 to 2011 –'12 as 1.01 times, -0.91 times and 0.64 times respectively.

So, the average (AVG.) current ratio is 1.05 times, the standard deviation (S.D) is 0.25 times and co-efficient variance (C.V) is 24.18 % which is shows in table – 1.1. Which solvency of Star Paper Mills limited because the average current ratio shows satisfactory ratio during the study period.

T. N. NEWSPRINT PAPER MILLS LIMITED:

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The table no - 1.1 shows that the current ratio of the T. N. Newsprint Paper Mills Limited the study period form 2005 –'06 to 2011 –'12, the maximum current ratio was 1.78 times in the year 2009 –'10 and the minimum current ratio was 0.67 times in the year of 2011 –'12.

The above table – 1.1 shows fluctuate trend in current ratio from 2005 – '06 to 2011 –'12. In 2005 –'06 the current ratio has been 1.73 times. It has been deceased in the year 2006 –'07 at 1.42 times. But then after it has been decrease in 2007 –'08 at 1.26 times. But it has been again in the year 2008 –'09 increase at 1.64times. For the next year in 2009 –'10 at 1.78, in 2010 –''11 and 2011 –'12 it has been decreasing to 1.75 times to 0.67 times respectively.

So, the average (AVG.) current ratio is 1.46 %, the standard deviation (S.D) is 0.40 times and co-efficient variance (C.V) is 27.24 times which is shows in table – 1.1. Which solvency of T. N. Newsprint Paper Mills Limited because the average current ratio shows satisfactory ratio during the study period.

WEST COAST PAPER MILLS LIMITED:

The table no - 1.1 shows that the current ratio of the West Coast Paper Mills Limited the study period form 2005 –'06 to 2011 –'12, the maximum current ratio was 2.98 times in the year 2008 –'09 and the minimum current ratio was 0.75 times in the year 2011 –'12.

In the West Coast Paper Mills Limited current ratio has been increased study period from 2005 – '06 to 2008 –'09, A current ratio has been 1.97 times 2.58 times, 2.92 times, and 2.98 times. but then after the current ratio has been decrease at 2.44 times in 2009 –'10. But again it has been increase in at 2.87 times in 2010 –'11. At the last year of the study period the current ratio decrease at 0.75 times in 2011 –'12.

So, the average (AVG.) current ratio is 2.36 times, the standard deviation (S.D) is 0.79 times and co-efficient variance (C.V) is 33.53 % which is shows in table – 1.1. Which solvency of West Coast Paper Mills Limited because the average current ratio shows satisfactory ratio during the study period.

XV. ANOVA TEST OF CURRENT RATIO

HYPOTHESIS:

Ho: Null Hypothesis:
There is no significant difference in Current Ratio of selected paper companies in India.

H1: Alternative Hypothesis:
There is significant difference in Current Ratio of selected paper companies in India.

Level of Significance: 5%

Table-1.1.1

ANOVA						
Source of Variation	**SS**	**D.F**	**MS**	**F**	**P-value**	**F crit**
Between Groups	24.1348	9	2.6816	7.4733	3.1088	2.0401
Within Groups	21.5297	60	0.3588			
Total	45.6646	69				

- Degree of freedom = 70-1= 69
- Table Value of 'F' =2.0400
- Calculate Value of 'F' = 7.4733
    - F calculate > F table
    - 7.4733 > 2.0401
    - F calculate > F table

Table No-1.1.1 indicates the calculate value of 'F' is 7.4733 and the table value of 'F' at 5% levels of significance is 2.0401 so, the calculate value 'F' which is greater than the table value. It indicates that the Null Hypothesis is rejected and Alternate Hypothesis is accepted. It indicates that there is significant difference in current ratio of selected paper companies in India.

XVI. QUICK RATIO

MEANING:
This Ratio establishes a relationship between quick assets and quick liabilities.

OBJECTIVE:

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The objective of computing this ratio is to measure the ability of the firm to meet its short term obligation as and when due without relying upon the realization of stock.

COMPONENTS:

1. Quick Assets: it's refers to those quick assets which can be converted into cash immediately or at a short notice without a loss of value.
2. Quick Liabilities: quick liabilities refer to those liabilities which are expected to be matured normally within a year.

COMPUTATION AND INTERPRETATIONS:

This ratio is computed by dividing the quick assets and quick liabilities. This ratio is usually express as a pure ratio e.g. 2:1. In the form of a formula, this ratio may be express as follows:

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Quick Liabilities}}$$

This ratio indicates rupees of quick assets available for each rupee of quick liability. Traditionally, a quick ratio of 1:1 is considered to be a satisfactory ratio. However, this traditional rule should not be used blindly since a firm having a quick ratio of more than 1, may not be meeting its short term obligations in time if its quick assets consist of doubtful and slow paying Ebor's while a firm having quick ratio of less than, may be meeting is short term obligation in time because of its very efficiency inventory management. The quick Ratio of selected companies of Automobile Industry in India is given in the Table No-1.2 as follows:

TABLE-1.2

Quick Ratio In Times From 2005 –'06 to 2011 –'12										
YEAR	COMPANY NAME									
	APPM	BILtd	JKPM	OPIL	SPBL	SPML	SIPL	SPM Ltd	TNNPL	WCPML
2005-'06	0.52	2.89	2.10	1.32	1.02	0.76	1.66	0.59	1.20	0.91
2006-'07	0.73	2.34	1.63	1.33	1.14	0.88	1.76	0.50	0.82	1.47
2007-'08	0.86	3.74	1.68	1.31	0.99	0.69	1.82	0.51	0.78	2.10
2008-'09	0.65	3.35	1.99	1.02	1.22	0.94	2.31	0.52	1.04	2.28
2009-'10	1.03	1.43	1.48	1.10	1.69	0.95	2.09	0.44	1.27	1.59
2010-'11	0.54	1.29	1.52	1.26	2.92	0.84	2.06	0.28	1.26	1.87
2011-'12	0.62	0.81	1.00	0.73	0.77	0.64	1.08	0.27	0.43	0.34
Average	0.71	2.26	1.63	1.15	1.39	0.81	1.83	0.44	0.97	1.51
S.D.	0.18	1.12	0.36	0.22	0.73	0.12	0.40	0.12	0.31	0.68
C.V.	26.10	49.44	22.11	19.14	52.54	14.90	21.74	28.20	31.90	45.34
Min	0.52	0.81	1.00	0.73	0.77	0.64	1.08	0.27	0.43	0.34
Max	1.03	3.74	2.10	1.33	2.92	0.95	2.31	0.59	1.27	2.28

The above mentioned Table No- 1.2 show the indicated a fluctuating trends of the Quick Ratio of selected paper companies in India from 2005-2006 to 2011-20112.

INTERNATIONAL ANDHRA PRADESH PAPER MILLS LIMITED:

The table no 1.2 shows that the quick ratio of the International Andhra Pradesh Paper Mills Limited during the study period form 2005 –'06 to 2011 –'12, the highest quick ratio is 1.03 times in the year 2009 –'10 and the lowest quick ratio is 0.52 times in the year of 2005 –'06.

In the year 2005 –'06 the quick ratio is 0.52 times, which has been increase in 2006 –'07 to 2007 –'08 has been 0.73 times and 0.86 times in the shows above table 1.2. But in the year 2008 –'09 the quick ratio is decrease and reached 0.65 times and in 2009 –'10 it has been increase and reached highest at 1.03 times, than after quick ratio was decrease in 2010 –'11 and reached at 0.54 times in selected study period. But the last year of the study period it has been decreased and reached 0.62 times in 2011 –'12.

So, the average (AVG.) quick ratio is 0.71 times, the standard deviation (S.D) is 0.18 times and co-efficient variance (C.V) is 26.10% which is shows in table – 1.2. Which solvency of International Andhra Pradesh Paper Mills limited because the average quick ratio shows satisfactory ratio during the study period.

BALLARPUR PAPER MILLS LIMITED:

The table no 1.2 shows that the quick ratio of the Ballarpur Paper Mills Limited during the study period form 2005 –'06 to 2011 –'12, the highest quick ratio is 3.74 times in the year 2007 –'08 and the lowest quick ratio is 0.81 times in the year of 2011 –'12.

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In the year 2005 –'06 the quick ratio is 2.89 times, which has been decrease in 2006 –'07 and reached at 2.34 times, it has been increase in 2007 –'08 and reached highest point at 3.74 times. But then after the quick ratio continuously decrease from 2008 –'09 to 2011 –'12 to 3.35 times, 1.43 times, 1.29 times and 0.81 times for the last four year respectively.

So, the average (AVG.) quick ratio is 2.26 times, the standard deviation (S.D) is 1.12 times and co-efficient variance (C.V) is 49.44% which is shows in table – 1.2. Which solvency of Ballarpur Paper Mills limited because the average quick ratio shows satisfactory ratio during the study period.

JK PAPER MILLS LIMITED:

The table no 1.2 shows that the quick ratio of the J. K. Paper Mills Limited during the study period form 2005 –'06 to 2011 –'12, the highest quick ratio is 2.10 times in the year 2005 –'06 and the lowest quick ratio is 1.00 times in the year of 2011 –'12.

In the year 2005 –'06 the quick ratio has been 2.10 times and it has been decrease in 2006 –'07 to 1.63 times, but it has been increase 1.68 times in 2007 –'08. In 2008 –'09 it has been also increase to 1.99 times. In the year 2009 –'10 to 2011 –'12 the quick ratio trend show in the table continuality decreased as 1.48 times, 1.52 times and times respectively.

So, the average (AVG.) quick ratio is 1.63 times, the standard deviation (S.D) is 0.36 times and co-efficient variance (C.V) is 22.11% which is shows in table – 1.2. Which solvency of J. K. Paper Mills Limited because the average quick ratio shows satisfactory ratio during the study period.

ORIENT PAPER AND INDUSTRIES LIMITED:

The table no 1.2 shows that the quick ratio of the Orient Paper and Industries Limited during the study period form 2005 –'06 to 2011 –'12, the maximum quick ratio was 1.33 times in the year 2006 –'07 and the minimum quick ratio is 0.73 times in the year of 2011 –'12.

In the present the table – 1.2 shows the quick ratio of Orient Paper and Industries Limited is fluctuating in the whole study period. In 2005 –'06 quick ratio is 1.32 times and it is increasing and decreasing from 2006 –'07 to 2011 –'12 as 1.33 times, 1.31 times 1.02 times, 1.10 times, 1.26 times, and 0.73 times respectively .

So, the average (AVG.) quick ratio is 1.15 times, the standard deviation (S.D) is 0.22 times and co-efficient variance (C.V) is 19.14 times which shows in table – 1.2 are. Which solvency of Orient Paper and Industries Limited because of the average quick ratio shows satisfactory ratio during the study period.

SESHASAYEE PAPER AND BOARDS LIMITED:

The table no 1.2 shows that the quick ratio of the Seshasayee Paper and Boards Limited during the study period form 2005 –'06 to 2011 –'12, the maximum quick ratio is 2.92 times in the year 2010 –'11 and the minimum quick ratio is 0.77 times in the year of 2011 –'12.

In the table – 1.2 shows the quick ratio of Seshasayee Paper and Boards Limited is zigzag trend. It is 1.02 times in 2005-'06 and it is continually increasing next year and reached 1.14 times in 2006 –'07, but it is decrease at 0.99 times in 2007 –'08, it has been increase in 2008 –'09 and reached 1.22 times, it is again increase for next two year and reached at 1.69 times and 2.92 times in 2009 –'10 and 2010 –'11. Then after the next year of the study period it is decline as 0.77 times in 2011 –'12.

So, the average (AVG.) quick ratio is 1.39 times, the standard deviation (S.D) is 0.73 times and co-efficient variance (C.V) is 52.54% which is shows in table – 1.2. Which solvency of Seshasayee Paper and Boards Limited because of the average quick ratio shows satisfactory ratio during the study period.

SIRPUR PAPER MILLS LIMITED:

The table no 1.2 shows that the quick ratio of the Sirpur Paper Mills Limited during the study period form 2005-06 to 2011-12, the maximum quick ratio is 0.95 times in the year 2009-10 and the minimum quick ratio is 0.64 times in the year of 2011-12.

In the year 005 –'06 the quick ratio has been 0.76 times. Quick ratio has been increase 0.88 times in 2006 –'07 and it is decrease 0.69 times in 2007 –'08. Which has been increase in 2008 –'09 at 0.94 times but, again quick ratio has been increase from 2009 –'10 0.95 times. It has been decreases in last two year for the study period form 2010 –'11 to 2011 –'12 as 0.84 times to 0.64 times respectively.

So, the average (AVG.) quick ratio is 0.81 times, the standard deviation (S.D) is 0.12 times and co-efficient variance (C.V) is 14.90% which is shows in table – 1.2. Which solvency of Sirpur Paper Mills Limited because the average quick ratio shows satisfactory ratio during the study period.

SOUTH INDIA PAPER MILLS LIMITED:

The table no-1.2 shows that the quick ratio of the South India Paper Mills Limited the study period form 2005-06 to 2011-12, the maximum quick ratio is 2.31 times in the year 2008- 09 and the minimum quick ratio is 1.08 times in the year of 2011-12.

In the table - 1.2 show the quick ratio of South India Paper Mills Limited form 2005 – '06 to 2011 –'12. It is increasing during the 2005 –'06 to 2008 –'09 study period are as 1.66 times, 1.76 times,1.82 times, 2.3 times. but last three year of study period the quick ratio decreasing from 2009 –'10 to 2011 –'12 are as, 2.09 times, 2.06 times and 1.08 times respectively.

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So, the average (AVG.) quick ratio is 1.83 times, the standard deviation (S.D) is 0.40 times and co-efficient variance (C.V) is 21.74% which is shows in table – 1.2. Which solvency of South India Paper Mills Limited because the average quick ratio shows satisfactory ratio during the study period.

STAR PAPER MILLS LIMITED:

The table no - 1.2 shows that the quick ratio of the Star Paper Mills Limited the study period form 2005 –’06 to 2011 –’12, the maximum quick ratio is 0.59 times in the year 2005 –’06 and the minimum quick ratio is 0.27 times in the year of 2011 –’12.

The table – 1.2 shows the quick ratio has been increased & decreased from 2005 – ’06 to 2011 –’12. For the first year of the study period the quick ratio is 0.59 times in 2005 –’06. In 2006 –’07 it is decreasing as 0.50 times but next two years of the study period the quick ratio has been increase from 2007 –’08 to 2008 –’09 as 0.51 times and 0.52 times respectively. Lat three years of the study period the quick ratio had been decreased from 2009 -’10 to 2011 –’12 are as 0.44 times, 0.28 times and 0.27 times respectively.

So, the average (AVG.) quick ratio is 0.44 times, the standard deviation (S.D) is 0.12 times and co-efficient variance (C.V) is 28.20 % which is shows in table – 1.2. Which solvency of Star Paper Mills limited because the average quick ratio shows satisfactory ratio during the study period.

T. N. NEWSPRINT PAPER MILLS LIMITED:

The table no - 1.2 shows that the quick ratio of the T. N. Newsprint Paper Mills Limited the study period form 2005 –’06 to 2011 –’12, the maximum quick ratio is 1.27 times in the year 2009 –’10 and the minimum quick ratio is 0.43 times in the year of 2011 –’12.

The above table – 1.2 shows fluctuate trend in quick ratio from 2005 – ’06 to 2011 –’12. In 2005 –’06 the quick ratio has been 1.20 times. It has been deceased in the year 2006 –’07 at 0.82 times. But then after it has been decrease in 2007 –’08 at 0.78 times. But it has been increase in the year 2008 –’09 increase at 1.04times. For the next year in 2009 –’10 increase at 1.27 times, in 2010 –‘’11 and 2011 –’12 it has been decreasing to 1.26 times to 0.43 times respectively.

So, the average (AVG.) quick ratio is 0.97 times, the standard deviation (S.D) is 0.31 times and co-efficient variance (C.V) is 31.90% which is shows in table – 1.2. Which solvency of T. N. Newsprint Paper Mills Limited because the average quick ratio shows satisfactory ratio during the study period.

WEST COAST PAPER MILLS LIMITED:

The table no-1.2 shows that the quick ratio of the West Coast Paper Mills Limited the study period form 2005-06 to 2011-12, the maximum quick ratio is 2.28 times in the year 2008 –’09 and the minimum quick ratio is 0.34 times in the year 2011 –’12.

In the West Coast Paper Mills Limited quick ratio has been increased study period from 2005 – ’06 to 2008 –’09, A quick ratio has been 0.91 times 1.47 times, 2.10 times, and 2.28 times. But then after the quick ratio has been decrease at 1.59 times in 2009 –’10. But again it has been increase in at 1.87 times in 2010 –’11. At the last year of the study period the quick ratio has been decrease at 0.0.34 times in 2011 –’12.

So, the average (AVG.) quick ratio is 1.51 times, the standard deviation (S.D) is 0.68 times and co-efficient variance (C.V) is 45.34% which is shows in table – 1.2. Which solvency of West Coast Paper Mills Limited because the average quick ratio shows satisfactory ratio during the study period.

XVII. ANOVA TEST OF QUICK RATIO

HYPOTHESIS:

Ho: Null Hypothesis:
There is no significant difference in Quick Ratio of selected paper companies in India.

H1: Alternative Hypothesis:
There is significant difference in Quick Ratio of selected paper companies in India.

LEVEL OF SIGNIFICANCE: 5%

TABLE-1.2.1

ANOVA						
Source of Variation	**SS**	**D.F**	**MS**	**F**	**P-value**	**F crit**
Between Groups	19.66668	9	2.185186	7.933635	1.302386556	2.040098
Within Groups	16.52599	60	0.275433			
Total	36.19267	69				

- Degree of freedom = 70-1= 69
- Table Value of ‘F’ =2.0401
- Calculate Value of ‘F’ = 7.4733

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- F calculate > F table
- 7.9336 > 2.0401
- F calculate > F table

Table No-1.2.1 indicates the calculate value of ‘F’ is 7.7.9336 and the table value of ‘F’ at 5% levels of significance is 2.0401 so, the calculate value ‘F’ which is greater than the table value. It indicates that the Null Hypothesis is rejected and Alternate Hypothesis is accepted. It indicates that there is significant difference in quick ratio of selected paper companies in India.

XVIII. LIMITATIONS OF STUDY

The limitation of study is as under:

- Study is undertaken by individual researcher therefore all the limitation of the individual researcher exists here also.
- It is a secondary data based study, so the limitations of the secondary data reveals with this study.

XIX. CONCLUSION

The present research show the both the null hypothesis has been rejected. And alternative hypostasis is accepted show there is significant difference of the both ratio like as current ratio and quick ratio.

REFERENCES

1. Praveen Kumar jai, Working Capital Management, (R B S A Publishers: Jaipur) First Edition-1993, Page no-1 to 2.
2. H. G. Guthmann, analysis Of Financial Statements,(New Yourk: Prentice Hall) IV Edition-1953,
3. Hoglend. J. Bierman, and A. K. Mc Adams, Management Decisions for Cash and Marketable Securities,(New York : Graduate School of Business, Cornell University), 1962.
4. J. L. Brown and L.R. Howard. Principle and practice of management accountancy. (London: Mac Donald & evans Ltd.,) 1975 , Page
5. J. Fred Weston and F. Eugene Brigham, Managerial Finance,(New York: Dryden Press) First Edition-1975,
6. Ravi M. Kishore. “Advanced Management Accounting”
7. C.R.Kothari, “Research methodology”.
8. Vijay Prakash Joshi, “Working Capital Management”, New Delhi, 1995.
9. I.M.Pandey: “Financial Management theory and practices”, Vikas publishing house Pvt. Ltd., New Delhi(2000).
10. Agrawal N.K. “Management of working capital” sterling publication(p) ltd, New Delhi.
11. S.N.Maheshwari “Principal of Management Accounting” New Delhi
12. Kulkarni P.V. and Satyaprasad B.G. “Financial Management” Himalaya publishing House ,Bombay.
13. Gupta R. L., “Financial Statement Analysis”, Sultan Chand & Sons, New Delhi, 1998.
14. Annual report of The Andhra Pradesh Paper Mills Limited from 2005 –’06 to 2011 – ’12 and www.andhrapaper.com
15. Annual report of Ballarpur Industries Limited from 2005 –’06 to 2011 – ’12 and www.bilt.com
16. Annual report of J. K. Paper mills limited from 2005 –’06 to 2011 – ’12 and http://www.jkpaper.com
17. Annual report of Orient Paper and Industries from 2005 –’06 to 2011 – ’12 and http://www.orientpaperindia.com
18. Annual report of Seshasayee Paper and Boards from 2005 –’06 to 2011 – ’12 and http://www.spbltd.com
19. Annual report of Sirpur Paper Mills from 2005 –’06 to 2011 – ’12 and http://www.sirpurpaper.com
20. Annual report of South India Paper Mills from 2005 –’06 to 2011 – ’12 and http://www.sipaper.com
21. Annual report of Star Paper Mills from 2005 –’06 to 2011 – ’12 and httpw://ww.starpapers.com
22. Annual report of Tamil Nadu Newsprint and Papers from 2005 –’06 to 2011 – ’12 and http://www.tnpl.com
23. Annual report of West Coast Paper Mills from 2005 –’06 to 2011 – ‘12 and http://www.westcoastpaper.com

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