

Study On Trend Analysis at John Deere

BHADRAPPA HARALAYYA

HOD and Associate Professor, Department of MBA, Lingaraj Appa Engineering College, Bidar

Abstract- Trend analysis is the process trying to look at current trends in order to predict future ones and is considered a form of comparative analysis. This can include attempting to determine whether a current market trend, such as gain in a particular market sector, is likely to continue, as well as whether a trend in one market area could result in a trend in another. Though analysis may involve a large amount of data, there is no guarantee that the results will be correct. The study was designed in the form of and empirical investigation to represent the current situation prevailing in the company. The necessary data and information were collected from primary and secondary sources as well as from both published and unpublished sources. The factual information was mainly collected from published annual reports of the company. Other information's were collected through interviews with company's senior personnel. A series of interviews were made the concerned authorities and staff of the company for necessary clarification. The study was carried within a short span of time. The study was limited only to management problems but not to the country's overall industrial and economics situation, which has direct bearing on the company's performance. This study is to assess overall performance of the company

I. INTRODUCTION

Trend analysis is technique used in technical analysis that attempts to predict the future price movements based on recently observed trend data. Trend analysis is based on the idea that what has happened in the past gives traders an idea of what will happen in the future.

In order to begin analysing applicable data, it is necessary to first determine which market segment will be analysed. An example of sector can include of focus a particular industry, such as the automotive or pharmaceutical Sector, as well as a particular type of Invest, such as the bond market. Once the sector has been selected, it is possible to examine the general

performance of the sector. This can include how the sector was affected by internal and external forces. Trend trading is a trading strategy that attempt to capture gains through the analysis of an asset's movements in a particular direction.

1.1 COMPANY PROFILE

The Deere & company (brand name John Deere) is an American corporation that manufactures agricultural, construction, and forestry machinery, diesel engines, drive trains (axles, transmission, gearboxes) used in heavy equipment, and lawn care equipment. In 2016, it was listed as 97th in the Fortune 500 America's ranking and was ranked 364th in Fortune Global 500 ranking in 2016.

John Deere also provides financial services and other activities.

Deere is listed on the New York stock exchange under the symbols DE. The company's slogan is "nothing runs like a Deere". And its logo is a leaping Deere, with the word's JOHN DEERE' under it. The logo of the leaping deer has been used by this company for over 155 years. Over the years, the logo has had minor changes and pieces removed. Some of the older style logos have the deer leaping over a log. The company uses different logo colours for agriculture vs. Construction Products. The company's agriculture products are identifiable by a distinctive shade of green paint with the inside border being yellow. While the construction products are identifiable by a shade of black with the deer being yellow, and the inside border also being yellow.

Deere & company began when John Deere, born in Rutland, Vermont, USA on February 7, 1804 moved to Grand Detour, Illinois' in 1836 in order to escape bankruptcy in Vermont. Already an established blacksmith, Deere opened a 1,378 square feet (128m²) shop in Grand Detour in 1837 which allowed him to serve as a general repairman in the village, as well as a manufacturer of small tools such as pitchforks and

shovels . small tools was just a start, the item that set him apart , was the self-scouring steel plow, which was pioneered in 1837 when John Deere fashioned a Scottish steel saw blade into a plow . prior to Deere's steel plow , most farmers used iron or wooden plows that the rich Midwestern soil stuck to and had to be cleaned frequently. The smooth sided steel plow solved this problem, and greatly aided migration into the American Great Plains in the 19th and early 20th century. Increased competition during the early 1900s from the new international harvest company led the company to expand its offering in the implement business , but it was the production of gasoline tractors which would come to define Deere & company's operations during the twentieth century.

II. THEORETICAL BACKGROUND OF THE STUDY

- Trend analysis is a useful tool for long term trend comparison. The analyst chooses a base period, for all items, with a number usually set at 100.
- The trend analyst endeavours to understand the in performance and financial position of the company.
- It requires understanding the company's ability to respond to change in the business environment and its strength and weakness in the context of position changes in the environment.
- Trend analysis requires an evaluation of the robustness of the business model of the company.

III. RESEARCH DESIGN

3.1 STATEMENT OF THE PROBLEM

Let start with the question: what does one mean when he/she wants to define a research problem? The answer may be that one wants to state the problem along with the bounds within which it is to be studied. In other words, defining a problem involves that task of laying down boundaries within which a research shall study the problem with a pre-determined objective in view. How to define a research problem is undoubtedly a herculean task. However, it is a task that must be tackled intelligently to avoid the perplexity encountered in a research operation. The

usual approach is that the researcher should himself pose a question (or in case someone else who wants the researcher to carry on research, the concern individual, organisation or an authority should pose the question to the researcher) and setup techniques and procedures for throwing light on the question concerned for formulating or defining the research problem. But such an approach generally does not produce definitive results because the questions phrased in such a fashion is usually in broad general terms and as such may not be in form suitable for testing.

Define a research problem properly and clearly is a crucial part of a research study and must in no case be accomplished hurriedly. However, in practice this is frequently overlooked which causes a lot of problem later on. Hence, the research problem should be defined in a systematic manner, giving due weightage to all relating points. The technique for the purpose involves the undertaking of the following steps generally one after the other:

Statement of the problem in general way: first of all the problem should be stated in a broad general way, keeping in view either some practical some scientific or intellectual interest. For this purpose, the researcher must immerse himself thoroughly in the subject matter concerning which he wishes to pose a problem. In case of social research, it is considered advisable to do some field observation and such the researcher may undertake some sort of preliminary survey or what is often called pilot survey. Then the researcher can himself state the problem or he can seek the guidance of the guide or the subject expert in accomplishing this task. Often, the guide puts forth the problem in general terms, and it is then up to the researcher to narrow it down and phrase the problem in operational terms. In case there some directive from an organisational authority, the problem then can be stated accordingly. The problem stated in a broad general way may contain various ambiguities which must be resolved by cool thinking and rethinking over the problem. At the same time feasibility of a particular solution has to be considered and the same should be kept in view while stating the problem.

Understanding the nature of the problem: the next step in defining the problem is to understand its origin and

nature clearly. The best way of understanding the problem is to discuss it with those who first raised it in order to find out how the problem originally came about and with what objectives in view. If the researcher has stated the problem himself, he should consider once again all those points that induced him to make a general statement concerning the problem. For a better understanding of the nature of the problem involved, he can enter into discussion with those who have a good knowledge of the problem concerned or similar other problems. The researcher should also keep in view the environment within which the problem is to be studied and understood.

3.2 NEED FOR THE STUDY

- To know the prices of different commodities in the market, as well as the supply and demand situation of the organisation.
- To know how market trend are the upward or downward movement of a market, during a period of time.
- To check relationships between numbers that should be related in a predictable way, such as ratios over time.
- To know trend analysis normally numbers to make comparisons easier, such as analysing amounts per person or relative to GDP or as an index value relative to a base year.

3.3 OBJECTIVES OF THE STUDY:

- To know financial position of John Deere tractor
- To know the income and expenditure statement and balance sheet
- To know the balance sheet
- To study the 3-year income and expenditure statement and balance sheet
- To calculate the trend analysis of each component of income and expenditure statement considering of 3 years
- To calculate the trend analysis of each component of balance sheet considering of 3 years
- To study the considering of base year and comparative with next two years of income and expenditure and balance sheet (base year is always 100%)

3.4 SCOPE OF STUDY

- This study is conducted at KESHAV ENTERPRISES JOHN DEERE, Bidar. The current study is conducted with the help of published annual reports of the year 2016-2018. The study gives an idea about the present financial position of the organisation.
- Trend analysis helps to investors and traders predict the trend of the market. Up trend, downtrend and sideways moves of the market are easy to predict, with the help of chart analysis. And it also indicates the movement of market makers and their activities related to a particular market. Another main advantage of trend analysis is that it gives an early signal when it comes to trend reversal.
- Trend analysis is helpful for short term trading, swing trading, and long-term investing. Trend analysis provides a lot of information that helps the traders and investors build their positions and take trades.
- I agree trend analysis is one of the best ways to trade.

3.5 RESEARCH METHODOLOGY:

The report is made to find out the consumer behaviour towards John Deere tractor by using two sources of data method of marketing research:

DATA COLLECTION:

1. Source of data
2. Sampling plan
3. Field work

Tools and techniques of data collection

Primary data

Primary method of collecting data through
Questionnaire method and interview method

Secondary data

- a) Book
- b) Company journal and records
- c) Internet

IV. ANALYSIS AND INTERPRETATIONS

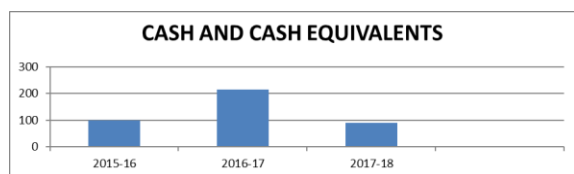
BALANCE SHEET OF JOHN DEERE

	BASE YEAR IS 2016				(Rs. Corers)	
	2018	%2018	2017	%2017	2016	%2016
Assets						
Cash and cash equivalents	3904.0	90.04	9334.90	215.30	4,335.80	100
Marketable securities	490.10	108.07	451.60	99.58	453.50	100
Receivables from an unconsolidated affiliates	21.70	131.51	35.90	217.57	16.50	100
Trade accounts and notes receivable-net	5004.30	166.18	3924.90	130.33	3011.30	100
Financing receivable-net	27054.10	114.14	25104.10	105.91	23702.30	100
Financing receivable securitized-net	4021.40	78.44	4158.80	81.12	5126.50	100
Other receivables	1735.50	170.40	1200.00	117.82	1018.50	100
Equipment on operating leases-net	7165.50	121.41	6593.70	111.72	5901.50	100
Inventories	6148.90	184.07	3904.10	116.87	3340.50	100
Property and equipment-net	5867.50	113.47	5067.0	98.0	5170.60	100
Investments in unconsolidated affiliates	207.30	89.12	182.50	78.46	232.60	100
Goodwill	3100.70	380.13	1033.3	126.67	815.70	100
Other intangible assets-net	1562.40	1500.87	218.0	209.41	104.10	100
Retirement benefits	1298.30	1387.07	538.2	575	93.6	100
Deferred income taxes	808.0	27.25	2415.0	81.47	2964.4	100
Other assets	1718.40	101.44	1623.60	95.84	1694.0	100
Total assets	70108.0	120.91	65786.30	144.64	57981.40	100
Liabilities and stock holder equity						
Liabilities						
Short-term borrowings	11061.40	160.02	10035.30	145.18	6912.20	100
Short-term securitization borrowings	3957.30	79.10	4118.70	82.33	5002.50	100
Payables to unconsolidated affiliates	128.90	157.97	121.90	149.39	81.60	100
Accounts payable and accrued expenses	10111.0	139.65	8417.0	116.25	7240.10	100
Deferred income taxes	555.80	334.82	209.70	126.32	166.0	100
Long term borrowings	27237.40	114.63	25891.30	108.97	23759.70	100
Retirement benefits and other liabilities	5751.0	69.50	7417.90	89.65	8274.50	100
Total liabilities	58802.80	144.32	56211.80	109.28	51436.60	100
Commitments and contingencies (note 22)	14.0	100	14.0	100	14.0	100

Redeemable non-controlling interest (note 4)						
Stock holder's equity						
Common stock,\$1 par value (authorized-1,200,000,000 shares; issued -536,431,204 shares in 2016 and 2015 ,2014,2013), at paid – in amount	4474.20	144.38	4280.50	109.42	3911.80	100
Common stock in treasury, 221,663,380 shares in 2016 and 219,743,893shares in 2015, 2014,2013 at cost	(16311.8)	104.04	(15460.8)	98.62	(15677.1)	100
Retained earnings	27553.0	115.23	25301.3	105.81	23911.30	100
Accumulated other comprehensive income (loss)	(4427.60)	78.70	(4563.70)	81.12	(5626.0)	100
Total Deere & company stockholders equity	11287.80	173.12	9557.30	146.58	6520.0	100
Non-controlling interests	3.40	31.48	3.20	29.63	10.80	100
Total stockholder's equity	11291.20	172.89	9557.30	146.34	6530.80	100
Total liabilities and stockholder's equity	70108.0	120.91	65786.30	113.46	57981.40	100

4.1 ANALYSIS OF CASH AND CASH EQUIVALENTS TREND ANALYSIS

YEAR	AMOUNT	% TREND ANALYSIS
2015-16	4335.80	100
2016-17	9334.90	215.30
2017-18	3904	90.04

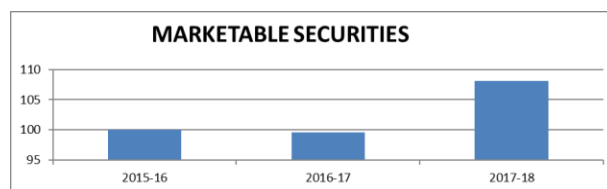


INTERPRETATION-

As per the above table Cash and Cash equivalents trend analysis in the year 2015-16 is 100 %, 2016-17 is 215.30 % and 2017-18 is 90.04 %. Considered Base Year is 2015-16.

4.2 ANALYSIS OF MARKET SECURITIES TREND ANALYSIS

YEAR	AMOUNT	% TREND ANALYSIS
2015-16	453.50	100
2016-17	451.60	99.58
2017-18	490.10	108.07



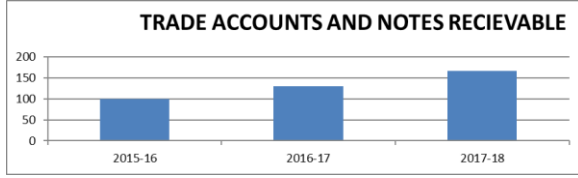
INTERPRETATION-

As per the above table marketable securities trend analysis in the year 2015-16 is 100%, 2016-17 is 99.58% and 2017-18 is 108.07%. Considered Based year is 2015-16.

4.3 ANALYSIS OF TRADE ACCOUNTS AND NOTES RECIEVABLE TREND ANALYSIS

YEAR	AMOUNT	% TREND ANALYSIS
2015-16	3011.30	100

2016-17	3924.90	130.33
2017-18	5004.30	166.18

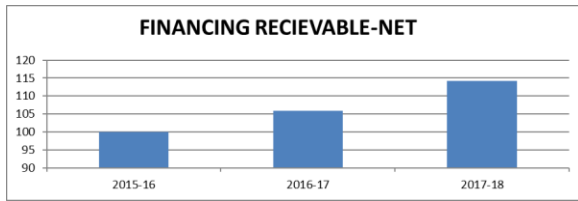


INTERPRETATION-

As per the above table trade accounts and notes receivable-net trend analysis in the year 2015-16 is 100%, 2016-17 is 130.33% and 2017-18 is 166.18%. Considered Based year is 2015-16.

4.4 ANALYSIS OF FINANCING RECEIVABLE-NET TREND ANALYSIS

YEAR	AMOUNT	% TREND ANALYSIS
2015-16	23702.30	100
2016-17	25104.10	105.91
2017-18	27054.10	114.14

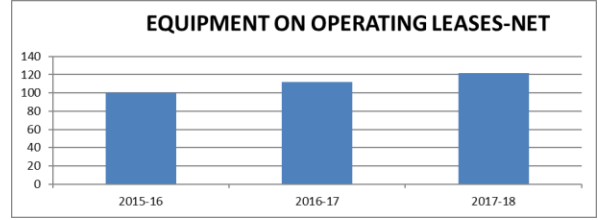


INTERPRETATION-

As per the above table financing receivable-net trend analysis in the year 2015-16 is 100%, 2016-17 is 105.91% and 2017-18 is 114.14%. Considered Based year is 2015-16.

4.5 ANALYSIS OF EQUIPMENT ON OPERATING LEASES-NET TREND ANALYSIS

YEAR	AMOUNT	% TREND ANALYSIS
2015-16	5901.50	100
2016-17	6593.70	111.72
2017-18	7165.50	121.41

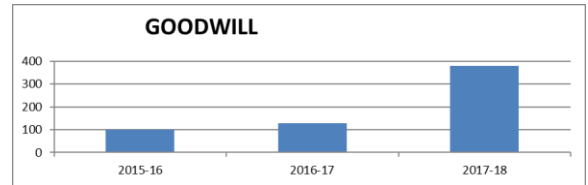


INTERPRETATION-

As per the above table equipment on operating leases-net trend analysis in the year 2015-16 is 100%, 2016-17 is 111.72% and 2017-18 is 121.41%. Considered Based year is 2015-16.

4.6 ANALYSIS OF GOODWILL TREND ANALYSIS

YEAR	AMOUNT	% TREND ANALYSIS
2015-16	815.70	100
2016-17	1033.30	126.67
2017-18	3100.70	380.13

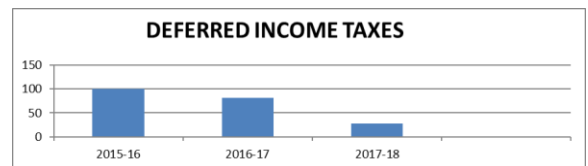


INTERPRETATION-

As per the above table goodwill trend analysis in the year 2015-16 is 100%, 2016-17 is 126.67% and 2017-18 is 380.13%. Considered Based year is 2015-16.

4.7 ANALYSIS OF DEFERRED INCOME TAXES TREND ANALYSIS

YEAR	AMOUNT	% TREND ANALYSIS
2015-16	2964.4	100
2016-17	2415.0	81.47
2017-18	808.0	27.25



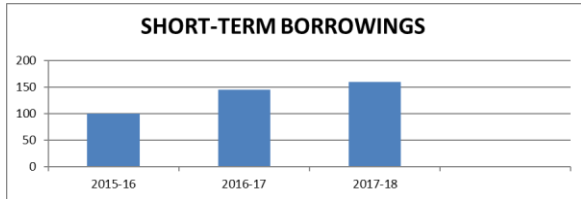
INTERPRETATION-

As per the above table deferred income taxes trend analysis in the year 2015-16 is 100%, 2016-17 is 81.47% and 2017-18 is 27.25%.

Considered Based year is 2015-16.

4.8 ANALYSIS OF SHORT-TERM BORROWINGS TREND ANALYSIS

YEAR	AMOUNT	% TREND ANALYSIS
2015-16	6912.20	100
2016-17	10035.30	145.18
2017-18	11061.40	160.02

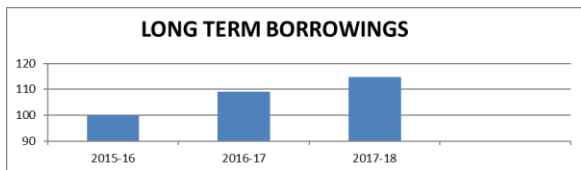


INTERPRETATION-

As per the above table short-term borrowings trend analysis in the year 2015-16 is 100%, 2016-17 is 45.18% and 2017-18 is 160.02%. Considered Based year is 2015-16.

4.9 ANALYSIS OF LONG-TERM BORROWINGS TREND ANALYSIS

YEAR	AMOUNT	% TREND ANALYSIS
2015-16	23759.70	100
2016-17	25891.30	108.97
2017-18	27237.40	114.63



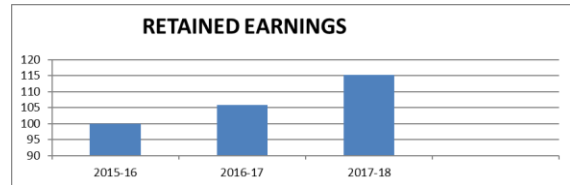
INTERPRETATION-

As per the above table long term borrowings trend analysis in the year 2015-16 is 100%, 2016-17 is 108.97% and 2017-18 is 114.63%.

Considered Based year is 2015-16.

4.10 ANALYSIS OF RETAINED EARNINGS TREND ANALYSIS

YEAR	AMOUNT	% TREND ANALYSIS
2015-16	23911.30	100
2016-17	25301.30	105.81
2017-18	27553.0	115.23

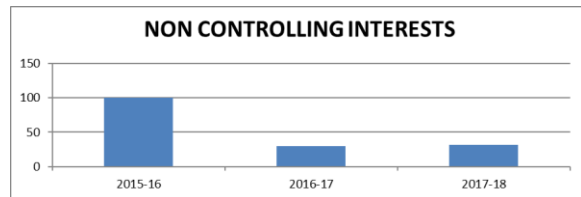


INTERPRETATION-

As per the above table retained earnings trend analysis in the year 2015-16 is 100%, 2016-17 is 105.81% and 2017-18 is 115.23%. Considered Based year is 2015-16.

4.11 ANALYSIS OF NON-CONTROLLING INTERESTS TREND ANALYSIS

YEAR	AMOUNT	% TREND ANALYSIS
2015-16	10.80	100
2016-17	3.20	29.63
2017-18	3.40	31.48



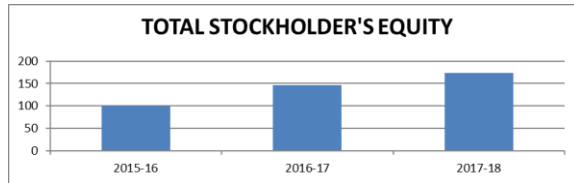
INTERPRETATION-

As per the above table non-controlling interests trend analysis in the year 2015-16 is 100%, 2016-17 is 29.63% and 2017-18 is 31.48%. Considered Based year is 2015-16.

4.12 ANALYSIS OF TOTAL STOCKHOLDER'S EQUITY TREND ANALYSIS

YEAR	AMOUNT	% TREND ANALYSIS
------	--------	------------------

2015-16	6530.80	100
2016-17	9557.30	146.34
2017-18	11291.20	172.89



INTERPRETATION-

As per the above table total stockholder’s equity trend analysis in the year 2015-16 is 100%, 2016-17 is 146.34% and 2017-18 is 172.89%. Considered Based year is 2015-16.

V. FINDINGS, CONCLUSION AND SUGGESTIONS

5.1 SUMMARY OF FINDINGS

- To know financial position of John Deere tractors.

The total liabilities of the organisation have shown an increasing trend.

The total assets have shown a progressive increasing trend.

The cash and cash equivalents of the organisation has shown increasing trend in 2017 but in 2018, it has decreased. It shown that the organisation has been doing the process in 2017 thereby reflecting the performance of the organisation.

- To know the income and expenditure statement.

The market securities ratio of trend analysis is good perform in 2017 of the bases of pervious year but in 2018 income ratio is better than 2017.

Equipment on operating leases expenditure has been increasing year by year. Income and expenditure those things are up and down like Sensex.

- To know the balance sheet.

Balance sheet has been shows total income and expenditure (assets and liabilities) and all kinds of

sources. Balance sheet is the one way to know the organisation profit and losses basis on sales and production. Operating profit margin is the appropriate measure of operating performance.

- To calculate the trend analysis of each component of income and expenditure statement considering of 3 years.

Based on balance sheet it is presumed that the automobile industry business of the organisation is showing increase trend and as such it will increase the income of the organisation.

5.2 CONCLUSION

To conclude the project of trend analysis is net worth and employee’s involvement is one of the most important for the growth of the organization. Overall, I learned in these 6 weeks how the theoretical study is impact on our practical work exposure and finally with this project I got experience in the industry.

5.3 SUGGESTION / RECOMMENDATIONS

- I suggested that John Deere tractor should provide high trend analysis compare to the previous year and should give high sales to the customers, which will company brand image get increase than automatically net worth will get increase.
- Company should take the vide advertisement activities in markets with different media.
- Now advertisement as became important rule in throat competitors.
- The efficiency of the tractors is good compare to the other company tractors.
- Coordination among the employees should increase.
- Should bring the cordial working relationship in the organization.

REFERENCES

[1] BHADRAPPA HARALAYYA , P.S.AITHAL , PERFORMANCE AFFECTING FACTORS OF INDIAN BANKING SECTOR: AN EMPIRICAL ANALYSIS, George Washington International Law Review, Vol.- 07 Issue -01,

- April-June 2021, PAGE No : 607-621, Available at: <http://archive-gwilr.org/wp-content/uploads/2021/06/Bhadrappa-Haralayya.pdf>
- [2] BHADRAPPA HARALAYYA , P.S.AITHAL , TECHNICAL EFFICIENCY AFFECTING FACTORS IN INDIAN BANKING SECTOR: AN EMPIRICAL ANALYSIS, Turkish Online Journal of Qualitative Inquiry (TOJQI), Vol.- 12 Issue -03, June 2021, PAGE No : 603-620, Available at: <https://www.tojqi.net/index.php/journal/article/view/791/242>
- [3] BHADRAPPA HARALAYYA , P.S.AITHAL , IMPLICATIONS OF BANKING SECTOR ON ECONOMIC DEVELOPMENT IN INDIA, George Washington International Law Review, Vol.- 07 Issue -01, April-June 2021, PAGE No : 631-642 Available at: <http://archive-gwilr.org/wp-content/uploads/2021/06/Bhadrappa-Haralayya-1.pdf>
- [4] BHADRAPPA HARALAYYA , P.S.AITHAL , STUDY ON PRODUCTIVE EFFICIENCY OF BANKS IN DEVELOPING COUNTRY, International Research Journal of Humanities and Interdisciplinary Studies (www.irjhis.com) ,Volume: 2, Issue: 5, May 2021, Page No : 184-194. Available at : <http://irjhis.com/paper/IRJHIS2105025.pdf>
- [5] Bhadrappa Haralayya ; P. S. Aithal . "Study on Model and Camel Analysis of Banking" Iconic Research And Engineering Journals ,Volume 4 ,Issue 11 ,May 2021 Page 244-259. Available at <https://irejournals.com/paper-details/1702750>
- [6] Bhadrappa Haralayya and Aithal, P. S.. "Analysis of cost efficiency on scheduled commercial banks in India". International Journal of Current Research, Volume 13, Issue 06, June 2021, pp 17718-17725 Available at: <https://www.journalcra.com/sites/default/files/issue-pdf/41580.pdf>
- [7] Bhadrappa Haralayya and P. S. Aithal, "A Study On Structure and Growth of Banking Industry in India", International Journal of Research in Engineering, Science and Management ,Volume 4, Issue 5, May 2021. Page no 225–230. Available at: <https://www.journals.resaim.com/ijresm/article/view/778/749>.
- [8] Bhadrappa Haralayya, Retail Banking Trends in India ,International Journal of All Research Education and Scientific Methods (IJARESM), Volume: 9, Issue: 5, Year: May 2021, Page No : 3730-3732. Available At http://www.ijaresm.com/uploaded_files/document_file/Bhadrappa_Haralayyaqscw.pdf
- [9] BHADRAPPA HARALAYYA, P.S.AITHAL, FACTORS DETERMINING THE EFFICIENCY IN INDIAN BANKING SECTOR : A TOBIT REGRESSION ANALYSIS", International Journal of Science & Engineering Development Research (www.ijedr.org), Vol.6, Issue 6, June-2021, page no.1 - 6, Available :<http://www.ijedr.org/papers/IJEDR2106001.pdf>
- [10] BHADRAPPA HARALAYYA , P.S.AITHAL , IMPLICATIONS OF BANKING SECTOR ON ECONOMIC DEVELOPMENT IN INDIA, flusserstudies, Volume 30, June 2021,Page No:1068-1080, Available at: <https://flusserstudies.org/archives/801>
- [11] BHADRAPPA HARALAYYA, P.S.AITHAL, STUDY ON PRODUCTIVE EFFICIENCY OF FINANCIAL INSTITUTIONS, International Journal of Innovative Research in Technology, Volume 8, Issue 1, June-2021 ,Page no: 159 – 164, Available: http://ijirt.org/master/publishedpaper/IJIRT151514_PAPER.pdf
- [12] BHADRAPPA HARALAYYA , STUDY OF BANKING SERVICES PROVIDED BY BANKS IN INDIA, International Research Journal of Humanities and Interdisciplinary Studies (www.irjhis.com), Volume: 2, Issue: 6, Year: June 2021,Page No : 06-12, Available at : <http://irjhis.com/paper/IRJHIS2106002.pdf>.
- [13] BHADRAPPA HARALAYYA, P.S.AITHAL , ANALYSIS OF BANK PERFORMANCE USING CAMEL APPROACH", International Journal of Emerging Technologies and Innovative Research (www.jetir.org | UGC and issn Approved), Vol.8, Issue 5, May-2021, page

- no 305-314, Available at :
<http://www.jetir.org/papers/JETIR2105840.pdf>
- [14] BHADRAPPA HARALAYYA, P.S.AITHAL, ANALYSIS OF BANK PRODUCTIVITY USING PANEL CAUSALITY TEST, Journal of Huazhong University of Science and Technology, Volume 50, Issue 6, June-2021 , Page no: 1 – 16, Available at: https://app.box.com/s/o71lh776opeypauvzucp9e_sntjwur9zf
- [15] BHADRAPPA HARALAYYA, P.S.AITHAL, INTER BANK ANALYSIS OF COST EFFICIENCY USING MEAN, International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET), Volume 10, Issue 6, June-2021 ,Page no: 6391-6397, Available at: http://www.ijirset.com/upload/2021/june/97_INTER_NC1.pdf
- [16] BHADRAPPA HARALAYYA, P.S.AITHAL , ANALYSIS OF TOTAL FACTOR PRODUCTIVITY AND PROFITABILITY MATRIX OF BANKS BY HMTFP AND FPTFP, Science, Technology and Development Journal, Volume 10, Issue 6, June-2021, Page no: 190-203, Available at: <http://journalstd.com/gallery/23-june2021.pdf>
- [17] BHADRAPPA HARALAYYA, P.S.AITHAL , ANALYSIS OF BANKS TOTAL FACTOR PRODUCTIVITY BY AGGREGATE LEVEL, Journal of Xi'an University of Architecture & Technology, Volume 13, Issue 6, June- 2021 ,Page no: 296-314, available at: <https://www.xajzkjdx.cn/gallery/28-june2021.pdf>
- [18] Bhadrappa Haralayya, P S Aithal, "ANALYSIS OF BANKS TOTAL FACTOR PRODUCTIVITY BY DISAGGREGATE LEVEL", International Journal of Creative Research Thoughts (IJCRT), Volume.9, Issue 6, June 2021, pp.b488-b502, Available at :<http://www.ijcrt.org/papers/IJCRT2106187.pdf>
- [19] Haralayya B. Importance of CRM in Banking and Financial Sectors Journal of Advanced Research in Quality Control and Management 2021, 6(1): 8-9
- [20] Haralayya B. How Digital Banking has Brought Innovative Products and Services to India. Journal of Advanced Research in Quality Control and Management 2021; 6(1): 16-18
- [21] Haralayya B. Top 5 Priorities That will Shape The Future of Retail Banking Industry in India. Journal of Advanced Research in HR and Organizational Management 2021; 8(1&2): 17-18.
- [22] Haralayya B. Millennials and Mobile-Savvy Consumers are Driving a Huge Shift in The Retail Banking Industry. Journal of Advanced Research in Operational and Marketing Management 2021; 4(1): 17-19
- [23] Haralayya B. Core Banking Technology and Its Top 6 Implementation Challenges. Journal of Advanced Research in Operational and Marketing Management 2021; 4(1): 25-27
- [24] Nitesh S Vibhute ; Dr. Chandrakant B. Jewargi ; Dr. Bhadrappa Haralayya . "Study on Non-Performing Assets of Public Sector Banks" Iconic Research And Engineering Journals Volume 4, Issue, 12 June 2021, Page 52-61 Available at <https://irejournals.com/formatedpaper/1702767.pdf>
- [25] Haralayya, Dr. Bhadrappa and Saini, Shrawan Kumar, An Overview on Productive Efficiency of Banks & Financial Institution (2018). International Journal of Research, Volume 05 Issue 12, April 2018, Available at SSRN: <https://ssrn.com/abstract=3837503>
- [26] Haralayya, Dr. Bhadrappa, Review on the Productive Efficiency of Banks in Developing Country (2018). Journal for Studies in Management and Planning, Volume 04 Issue 05, April 2018, Available at SSRN: <https://ssrn.com/abstract=3837496>
- [27] Basha, Jeelan and Haralayya, Dr. Bhadrappa, Performance Analysis of Financial Ratios - Indian Public Non-Life Insurance Sector (April 30, 2021). Available at SSRN: <https://ssrn.com/abstract=3837465>.
- [28] Haralayya, Dr. Bhadrappa, The Productive Efficiency of Banks in Developing Country With Special Reference to Banks & Financial Institution (april 30, 2019). Available at SSRN:

- <https://ssrn.com/abstract=3844432> or
<http://dx.doi.org/10.2139/ssrn.3844432>
- [29] Haralayya, Dr. Bhadrappa, Study on Performance of Foreign Banks in India (APRIL 2, 2016). Available at SSRN: <https://ssrn.com/abstract=3844403> or <http://dx.doi.org/10.2139/ssrn.3844403>
- [30] Haralayya, Dr. Bhadrappa, E-Finance and the Financial Services Industry (MARCH 28, 2014). Available at SSRN: <https://ssrn.com/abstract=3844405> or <http://dx.doi.org/10.2139/ssrn.3844405>
- [31] Haralayya, Dr. Bhadrappa, E-payment - An Overview (MARCH 28, 2014). Available at SSRN: <https://ssrn.com/abstract=3844409> or <http://dx.doi.org/10.2139/ssrn.3844409> .
- [32] Bhadrappa Haralayya . "Customer Satisfaction at M/s Sindol Bajaj Bidar" Iconic Research And Engineering Journals, Volume 4 ,Issue 12, June 2021, Page 157-169 Available at: <https://irejournals.com/formatedpaper/1702792.pdf>
- [33] Bhadrappa Haralayya . "Ratio Analysis at NSSK, Bidar" Iconic Research And Engineering Journals, Volume 4, Issue 12,June 2021, Page 170-182 Available at: <https://irejournals.com/formatedpaper/1702793.pdf>
- [34] Bhadrappa Haralayya . "Financial Statement Analysis of Shri Ram City Union Finance" Iconic Research And Engineering Journals, Volume 4, Issue 12,June 2021, Page 183-196 Available at: <https://irejournals.com/formatedpaper/1702794.pdf>
- [35] Bhadrappa Haralayya . "Employee Job Satisfaction at Big Bazaar" Iconic Research And Engineering Journals, Volume 4, Issue 12, June 2021, Page 197-206 Available at: <https://irejournals.com/formatedpaper/1702795.pdf>
- [36] Bhadrappa Haralayya . "Effect of Branding on Consumer Buying Behaviour at Vijay Bharat Motors Pvt Ltd, Bidar" Iconic Research And Engineering Journals, Volume 4, Issue 12, June 2021, Page 207-222 Available at: <https://irejournals.com/formatedpaper/1702796.pdf>
- [37] Bhadrappa Haralayya . "Study on Customer Perceptions Guru Basava Motors, Bidar" Iconic Research And Engineering Journals, Volume 4, Issue 12,June 2021, Page 223-231 Available at: <https://irejournals.com/formatedpaper/1702797.pdf>
- [38] Bhadrappa Haralayya . "Study on Loans and Advances for DCC Bank Main Branch Nayakaman, Bidar" Iconic Research And Engineering Journals, Volume 4, Issue 12, June 2021, Page 232-242 Available at: <https://irejournals.com/formatedpaper/1702798.pdf>
- [39] Bhadrappa Haralayya . "Work Life Balance of Employees at Karanja Industries Pvt Ltd, Bidar" Iconic Research And Engineering Journals, Volume 4, Issue 12, June 2021, Page 243-254 Available at: <https://irejournals.com/formatedpaper/1702799.pdf>
- [40] Bhadrappa Haralayya . "Working Capital Management at TVS Motors, Bidar" Iconic Research And Engineering Journals, Volume 4, Issue 12, June 2021, Page 255-265 Available at: <https://irejournals.com/formatedpaper/1702800.pdf>
- [41] Haralayya, Dr. Bhadrappa, Testing Weak Form Efficiency of Indian Stock Market – An Empirical Study on NSE (April 30, 2021). Emerging Global Strategies for Indian Industry (ISBN: 978-81-910118-7-6), 2021, Available at SSRN: <https://ssrn.com/abstract=3837488>
- [42] Haralayya, Dr. Bhadrappa, Top 10 Ways to Improve the Communication Skills (JUNE 20, 2016). Available at SSRN: <https://ssrn.com/abstract=3844410> or <http://dx.doi.org/10.2139/ssrn.3844410>
- [43] Haralayya, Dr. Bhadrappa, Multi-Inter-Trans Disciplinary Research Towards Management and Commerce (July 25, 2016). Available at SSRN: <https://ssrn.com/abstract=3847404>