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**An Analysis of Profitability and Liquidity Position of Selected Auto Ancillaries Companies of India (with Special Reference to Tyres Manufacturing Companies)**

**Vyas Krishna Ashutoshbhai**

Visiting Lecturer

Shree J H Bhalodia Women's College

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**ABSTRACT:**

The high development potential of the Auto Ancillary Industry of India makes it one of the sunrise industries in Indian market. That is the reason why researcher has chose to conduct research on this industry. In present research analysis on five auto ancillary companies manufacturing Tyre is carried out considering five years through ANOVA test and trend analysis using graph.

**KEY WORDS:** Auto Ancillary Industry, India, Profitability, Liquidity, ANOVA test

**INTRODUCTION:**

The Auto Ancillary Industry consists of those companies which offer supporting tools to the main products of a vehicle company. This supporting tools are comprises of Tyres, Battery, Brakes, Suspension, etc., correspondingly vehicle companies can concentrate on their core proficiencies consequently they will produce those parts in which they are specialize in. Auto Ancillary industry of India is flourishing day by day as result of technical advancement. There is wide scope available to this industry to reach at top most in the world. With the help of profitability and liquidity analysis one will get to know about the efficiency and limitation of that company.

**INDIAN AUTO ANCILLARIES COMPANIES:**

Auto ancillary industry plays a major role in the economic progress of an India. Not only in developed country but also in developing country like India Auto ancillary industry occupies a vital place. Day by day the two-wheeler and commercial tyre sector is observing marvelous development, passenger cars tyre sector is also fastest rising category. Discussion about the technological side, the market is getting advance by new technology like tubeless tyres, radicalization and retreading.

**REVIEW OF LITERATURE:**

**Nilesh P. M. (2015).** conducted **"**A Study on Capital Structure Analysis and Profitability of Indian Tyres Industry". The main objective behind the study was to identify relationship between capital structure and profitability during five years from 2009-10 to 2013-14. Secondary data were analyzed through descriptive statistic; at last researcher found that there is significant relation between capital structure and profitability.

**Sunil M. Kantesha S. (2014).** made "A Study On Financial Performance: A Comparative Analysis Of JK Tyres Industries Ltd And Selected Tyre Companies In India." This research consists of five years.

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Researchers had used secondary data, different ratios, further for analysis purposes ANOVA test was applied.

**Nisha R. (2013).** conducted a research on "An Overview of The Financial Performance Of Indian Tyre Industry – Comparison Among Leading Tyre Companies." Study covers eight years and four companies were selected. For analysis secondary data were used and mean, ANOVA test and Post Hoc Tests were applied. The study suggested that the tyre industry was passing from tumultuous time.

**OBJECTIVES OF THE STUDY:**

- To assess profitability position of selected Auto Ancillaries Companies of India.
- To assess liquidity position of selected Auto Ancillaries Companies of India.

**HYPOTHESES:**

Ho = There is no significant difference in the Net Profit Margin (%) of the selected Auto Ancillaries Companies of India during the study.

Ho = There is no significant difference in the Return on Capital Employed (%) of the selected Auto Ancillaries Companies of India during the study.

Ho = There is no significant difference in the Return on Assets (%) of the selected Auto Ancillaries Companies of India during the study.

Ho = There is no significant difference in the Asset Turnover Ratio (%) of the selected Auto Ancillaries Companies of India during the study.

Ho = There is no significant difference in the Current Ratio (X) of the selected Auto Ancillaries Companies of India during the study.

Ho = There is no significant difference in the Inventory Turnover Ratio (X) of the selected Auto Ancillaries Companies of India during the study.

Ho = There is no significant difference in the Quick Ratio (%) of the selected Auto Ancillaries Companies of India during the study.

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## SCOPE FOR THE FUTURE RESEARCH:

The research is limited to the selected companies listed in Bombay Stock exchange. Study is limited up to the five years from 2013-14 to 2017-18. From now, there are ample scopes presented for additional research.

## LIMITATION OF THE STUDY:

Present study completely based on secondary data while it covers only seven years from 2013-14 to 2017-18. In research, only five Auto Ancillaries Companies (Manufacturing Tyres) selected. Analysis in this research is done taking into account various financial ratios.

## RESEARCH METHODOLOGY:

## NATURE OF THE STUDY:

The present research is analytical and quantitative in nature because selected Auto Ancillaries Companies of India is analyzed through quantitative data.

## SAMPLE SELECTION:

There are numerous Auto Ancillaries Companies working presently in India of which five Auto Ancillaries Companies of India listed in Bombay stock exchange is been selected.

## SAMPLE OF THE STUDY:

- MRF
- Balkrishna Industries
- TVS Srichakra
- JK Tyre And Industries
- Apollo Tyres Ltd.

## COLLECTION OF DATA:

The significant data in the present research is gathered from secondary data sources.

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**PERIOD OF THE STUDY:**

The current research contains period of five years from 2013-14 to 2017-18.

**TOOLS AND TECHNIQUES:**

**ANALYSIS OF DATA:**

| Table: 1 Net Profit Margin (%) | | | | | | |
|---|---|---|---|---|---|---|
| **Auto Ancillaries Companies** | **Year** | | | | | **Average** |
| | **2013-14** | **2014-15** | **2015-16** | **2016-17** | **2017-18** | |
| MRF | 6.8 | 13.76 | 12.43 | 10.95 | 7.36 | 10.26 |
| Balkrishna Industries | 13.65 | 12.93 | 17.51 | 19.19 | 16.62 | 15.98 |
| TVS Srichakra | 2.83 | 5.47 | 9.57 | 7.92 | 5.46 | 6.25 |
| JK Tyre And Industries | 2.26 | 4.13 | 6.81 | 5.55 | 0.66 | 3.882 |
| Apollo Tyres Ltd. | 5.08 | 7.21 | 11.44 | 8.98 | 6.04 | 7.75 |
| Average | 6.124 | 8.7 | 11.552 | 10.518 | 7.228 | 8.8244 |
| **F Calculate Value** | 15.022 | | | | | |
| **F Table Value** | 2.86608 | | | | | |
| **P Value** | 8.01999 | | | | | |

Here, F-calculated value is 15.022 which are higher than F-table value 2.86608, so the null hypothesis is rejected which indicates that there is significant difference in the Net Profit Margin (%) of the selected Auto Ancillaries Companies of India during the study.

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**Figure: 1.1 Net Profit Margin (%)**
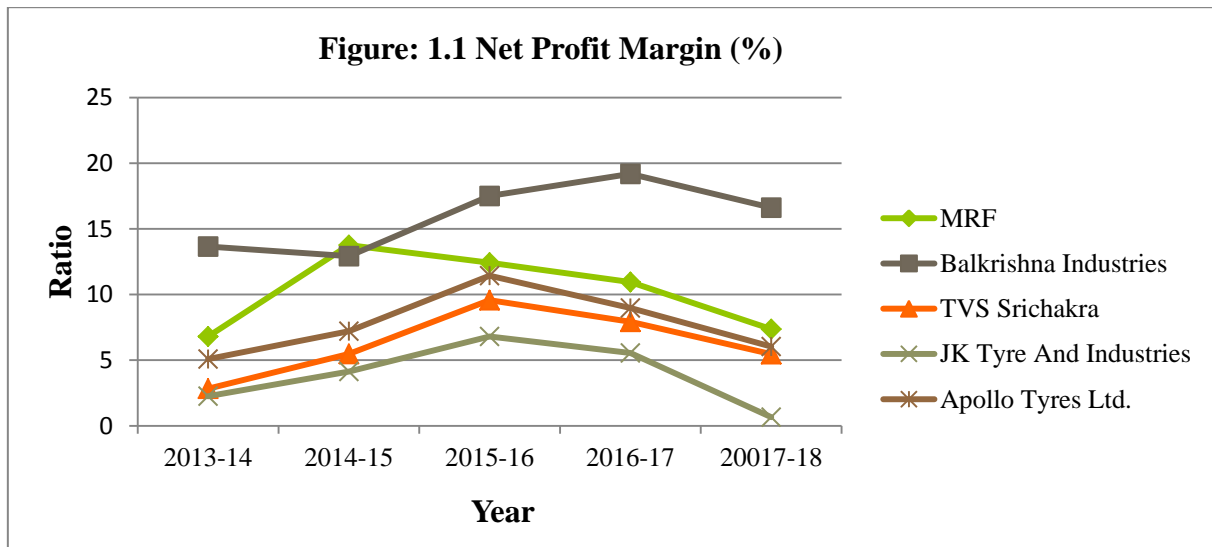


The above figure demonstrates trends of Net Profit Margin (%). In initial years almost all companies' exhibits increasing trend and then it gradually started decreasing. Throughout these five years overall Net Profit Margin Balkrishna Industries is highest & that of JK Tyre and Industries is lowest.

| Auto Ancillaries Companies | Year | | | | | Average |
|---|---|---|---|---|---|---|
| | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | |
| MRF | 12.49 | 0 | 27 | 13.88 | 9.29 | 12.532 |
| Balkrishna Industries | 13.01 | 12.72 | 14.67 | 25.96 | 25.43 | 18.358 |
| TVS Srichakra | 13.54 | 26.25 | 34.73 | 32.39 | 24.75 | 26.332 |
| JK Tyre And Industries | 5.14 | 7.98 | 10.92 | 8.3 | 1.13 | 6.694 |
| Apollo Tyres Ltd. | 11.47 | 16 | 18.41 | 11.46 | 6.18 | 12.704 |
| Average | 11.13 | 12.59 | 21.146 | 18.398 | 13.356 | 15.324 |
| **F Calculate Value** | 5.60918 | | | | | |
| **F Table Value** | 2.86608 | | | | | |
| **P Value** | 0.00339 | | | | | |

**Table: 2 Returns on Capital Employed (%)**

Here, F-calculated value is 5.60918 which are higher than F-table value 2.86608, so the null hypothesis is rejected which indicates that there is significant difference in the Returns on Capital Employed (%) of the selected Auto Ancillaries Companies of India during the study.

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Figure : 2 Returns on Capital Employed (%)
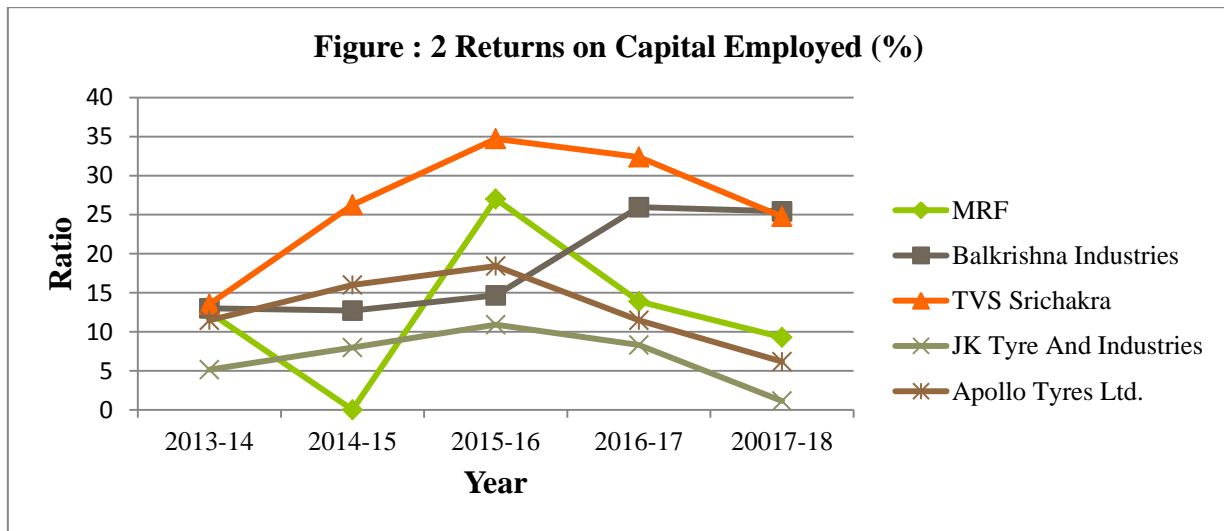
The above figure demonstrates trends of Returns on Capital Employed (%). TVS Srichakra exhibits almost a bell shape trend. Apollo Tyres Ltd. & JK Tyre and Industries has decreasing trend while Balkrishna Industries has increasing trend and MRF has almost zigzag trend.

| Table: 3 Return on Assets (%) | | | | | | |
|---|---|---|---|---|---|---|
| **Auto Ancillaries Companies** | **Year** | | | | | **Average** |
| | **2013-14** | **2014-15** | **2015-16** | **2016-17** | **2017-18** | |
| MRF | 9.16 | 0 | 18.78 | 9.72 | 6.7 | 8.872 |
| Balkrishna Industries | 10.01 | 9.19 | 10.56 | 12.43 | 12.64 | 10.966 |
| TVS Srichakra | 5.65 | 12.96 | 20.58 | 11.05 | 8.15 | 11.678 |
| JK Tyre And Industries | 2.63 | 4.3 | 6.31 | 4.7 | 0.6 | 3.708 |
| Apollo Tyres Ltd. | 7.24 | 10.53 | 13.32 | 8.12 | 4.73 | 8.788 |
| Average | 6.938 | 7.396 | 13.91 | 9.204 | 6.564 | 8.8024 |
| **F Calculate Value** | 2.53668 | | | | | |
| **F Table Value** | 2.86608 | | | | | |
| **P Value** | 0.07210 | | | | | |

Here, F-calculated value is 2.53668 which are lower than F-table value 2.86608, so the null hypothesis is accepted which indicates that there is no significant difference in the Return on Assets (%) of the selected Auto Ancillaries Companies of India during the study.

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Figure: 3 Return on Assets (%)
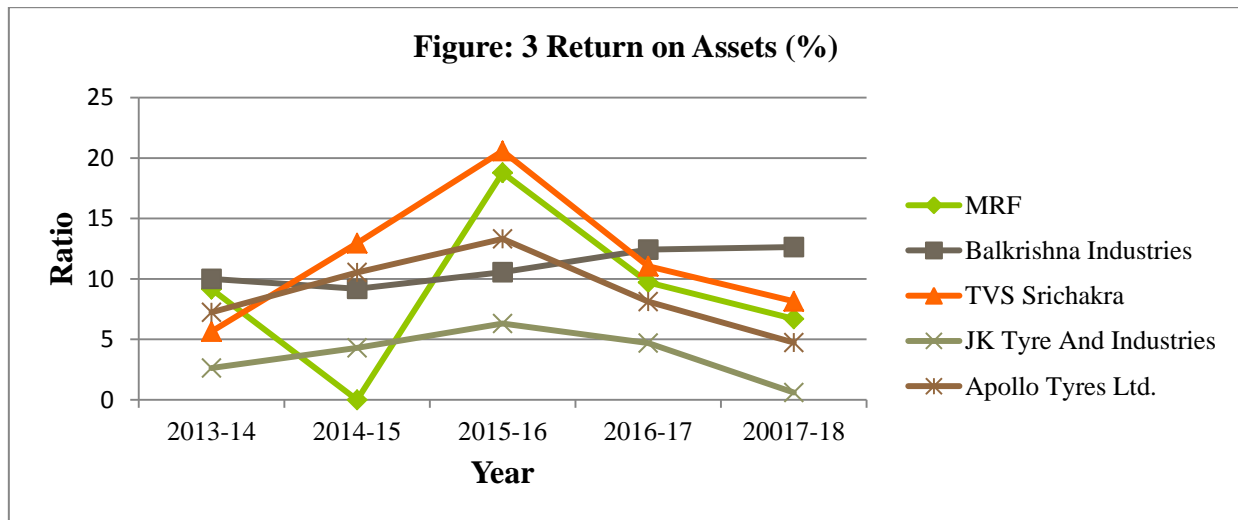
The above figure demonstrates trends of Return on Assets (%).TVS Srichakra and Apollo Tyres Ltd. Exhibits almost a bell shape trend. Balkrishna Industries has almost constant but slowly increasing trend while JK Tyre and Industries has constant but slowly decreasing trend. MRF has zigzag trend.

| Table: 4 Asset Turnover Ratios (%) | | | | | | |
|---|---|---|---|---|---|---|
| **Auto Ancillaries Companies** | **Year** | | | | | **Average** |
| | **2013-14** | **2014-15** | **2015-16** | **2016-17** | **2017-18** | |
| MRF | 134.71 | 0 | 151 | 88.74 | 90.92 | 93.074 |
| Balkrishna Industries | 73.38 | 71.12 | 60.32 | 64.76 | 76.09 | 69.134 |
| TVS Srichakra | 199.26 | 236.87 | 214.99 | 139.57 | 149.31 | 188 |
| JK Tyre And Industries | 116.23 | 104.1 | 92.55 | 84.69 | 89.89 | 97.492 |
| Apollo Tyres Ltd. | 142.53 | 146 | 116.45 | 90.45 | 78.36 | 114.758 |
| Average | 133.222 | 111.618 | 127.062 | 93.642 | 96.914 | 112.492 |
| **F Calculate Value** | 8.080279 | | | | | |
| **F Table Value** | 2.86608 | | | | | |
| **P Value** | 0.000478 | | | | | |

Here, F-calculated value is 8.080279 which are higher than F-table value 2.86608, so the null hypothesis is rejected which indicates that there is significant difference in the Asset Turnover Ratios (%) of the selected Auto Ancillaries Companies of India during the study.

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Figure: 4 Asset Turnover Ratios (%)
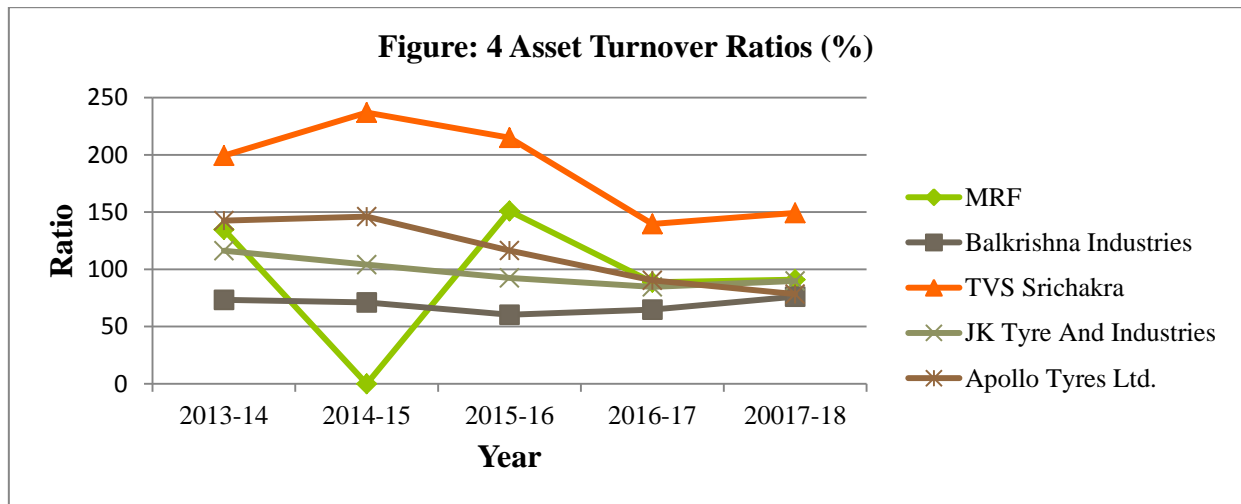
The above figure demonstrates trends of Asset Turnover Ratios (%). Initially TVS Srichakra shows bell shape trend and at last it becomes constant. MRF is having zigzag trend initially and lastly it becomes constant. Throughout these five years all other companies have almost constant trend.

| Table: 5 Current Ratio (X) | | | | | | |
|---|---|---|---|---|---|---|
| **Auto Ancillaries Companies** | **Year** | | | | | **Average** |
| | **2013-14** | **2014-15** | **2015-16** | **2016-17** | **2017-18** | |
| MRF | 2.04 | 0 | 1.55 | 1.61 | 1.69 | 1.378 |
| Balkrishna Industries | 1.28 | 1.38 | 1.06 | 1.07 | 1.42 | 1.242 |
| TVS Srichakra | 1.03 | 1.01 | 1.1 | 1.02 | 1.01 | 1.034 |
| JK Tyre And Industries | 0.95 | 0.91 | 0.96 | 0.98 | 0.83 | 0.926 |
| Apollo Tyres Ltd. | 0.9 | 0.97 | 1.16 | 1.11 | 1.59 | 1.146 |
| Average | 1.24 | 0.854 | 1.166 | 1.158 | 1.308 | 1.1452 |
| **F Calculate Value** | 1.05328 | | | | | |
| **F Table Value** | 2.86608 | | | | | |
| **P Value** | 0.40508 | | | | | |

Here, F-calculated value is 1.05328 which is lower than F-table value 2.86608, so the null hypothesis is accepted which indicates that there is no significant difference in the Current Ratio (X) of the selected Auto Ancillaries Companies of India during the study.

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Figure: 5 Current Ratio (X)
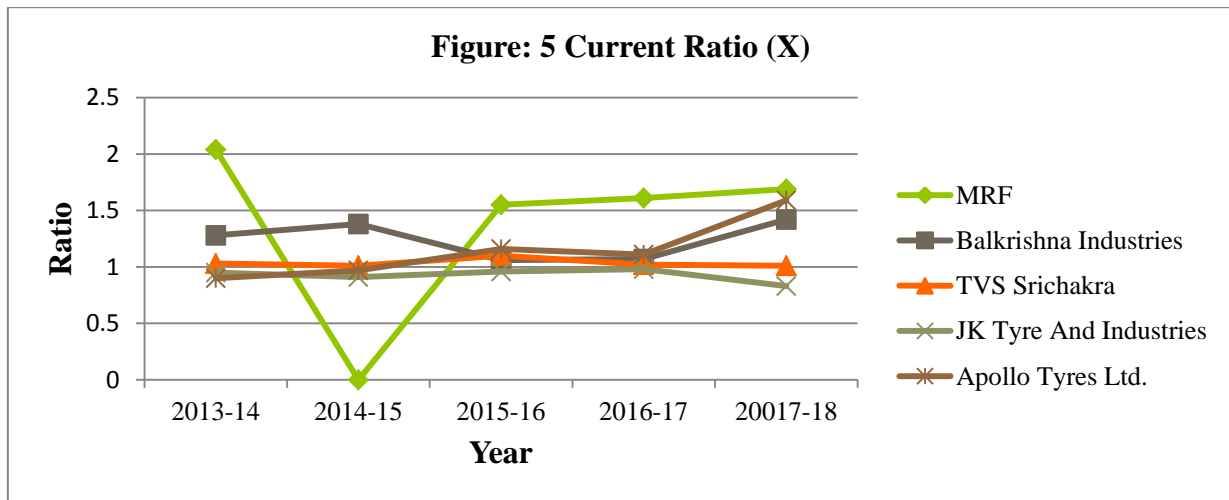
The above figure demonstrates trends of Current Ratio (X). In initial year Current Ratio of MRF at very high rate decreases and suddenly increases then it becomes constant. Almost all other companies exhibits constant trend.

| Auto Ancillaries Companies | Year | | | | | Average |
|---|---|---|---|---|---|---|
| | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | |
| MRF | 7.33 | 0 | 10.58 | 5.54 | 6.82 | 6.054 |
| Balkrishna Industries | 6.76 | 9.64 | 11.32 | 8.11 | 7.48 | 8.662 |
| TVS Srichakra | 8.09 | 9.04 | 9.91 | 4.76 | 6.49 | 7.658 |
| JK Tyre And Industries | 7.77 | 8.26 | 7.95 | 6.42 | 6.29 | 7.338 |
| Apollo Tyres Ltd. | 6.79 | 7.54 | 8.59 | 5.17 | 5.98 | 6.814 |
| Average | 7.348 | 6.896 | 9.67 | 6 | 6.612 | 7.3052 |
| **F Calculate Value** | 0.94031 | | | | | |
| **F Table Value** | 2.86608 | | | | | |
| **P Value** | 0.46102 | | | | | |

Table: 6 Inventory Turnover Ratio (X)

Here, F-calculated value is 0.94031 which are lower than F-table value 2.86608, so the null hypothesis is accepted which indicates that there is no significant difference in the Inventory Turnover Ratio (X) of the selected Auto Ancillaries Companies of India during the study.

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**Figure: 6 Inventory Turnover Ratio (X)**
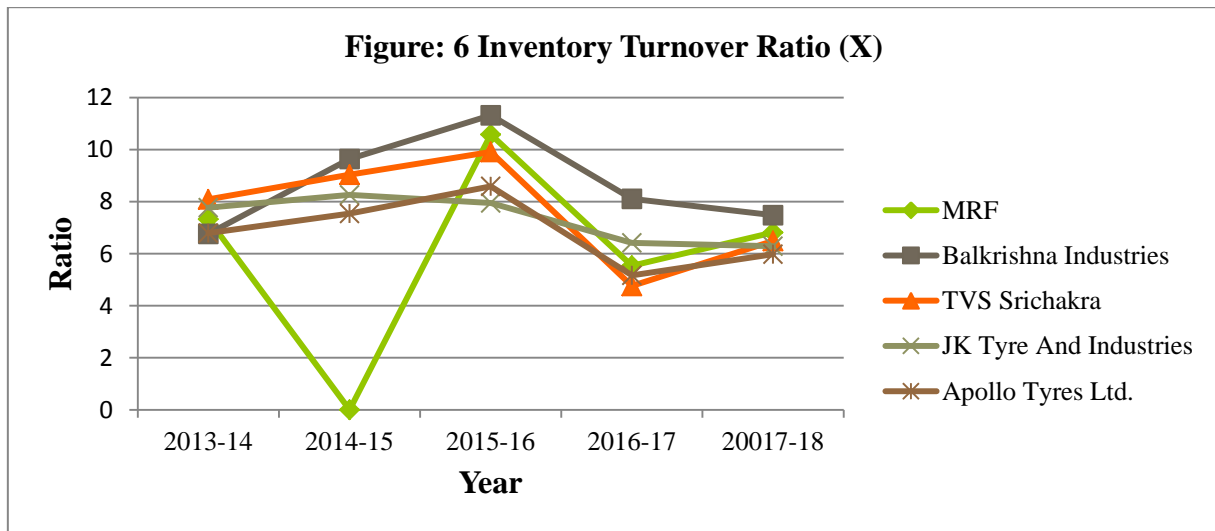


The above figure demonstrates trends of Inventory Turnover Ratio (X). Throughout these five years overall Inventory Turnover Ratio (X) of all companies shows zigzag trend, of which MRF shows very high rate of changes as compared to others.

| Auto Ancillaries Companies | Year | | | | | Average |
|---|---|---|---|---|---|---|
| | **2013-14** | **2014-15** | **2015-16** | **2016-17** | **2017-18** | |
| MRF | 1.35 | 0 | 1.08 | 1.07 | 1.21 | 0.942 |
| Balkrishna Industries | 0.81 | 1.12 | 0.87 | 0.78 | 0.99 | 0.914 |
| TVS Srichakra | 0.61 | 0.5 | 0.57 | 0.41 | 0.49 | 0.516 |
| JK Tyre And Industries | 0.65 | 0.64 | 0.68 | 0.68 | 0.53 | 0.636 |
| Apollo Tyres Ltd. | 0.33 | 0.4 | 0.67 | 0.51 | 1.03 | 0.588 |
| Average | 0.75 | 0.532 | 0.774 | 0.69 | 0.85 | 0.7192 |
| **F Calculate Value** | 2.40689 | | | | | |
| **F Table Value** | 2.86608 | | | | | |
| **P Value** | 0.08349 | | | | | |

Table: 7 Quick Ratio (%)

Here, F-calculated value is 2.40689 which are lower than F-table value 2.86608, so the null hypothesis is accepted which indicates that there is no significant difference in the Quick Ratio (%) of the selected Auto Ancillaries Companies of India during the study.

Figure: 7 Quick Ratio (%)
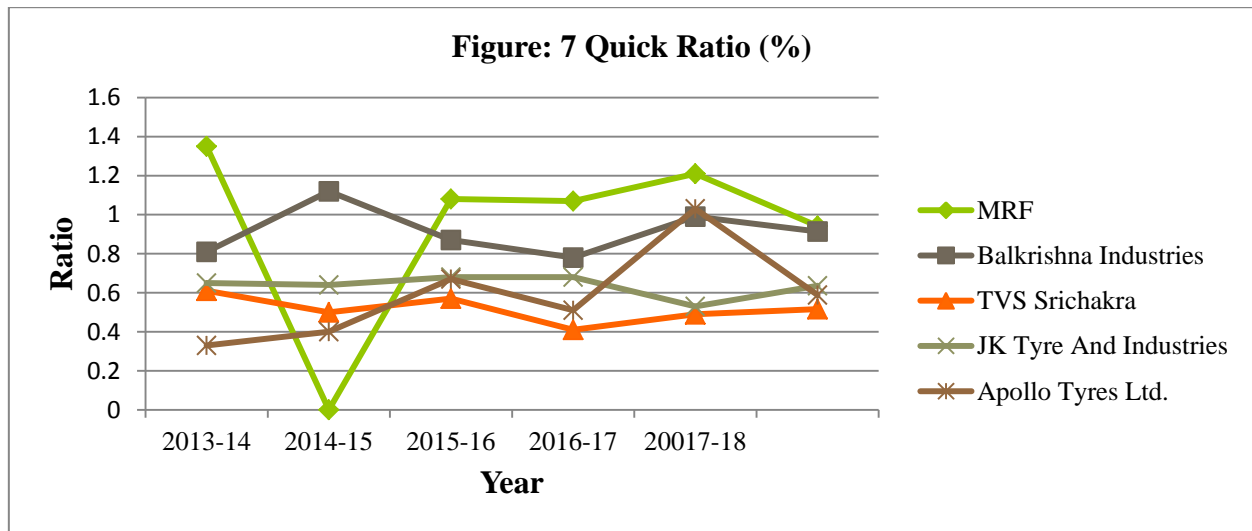
The above figure demonstrates trends of Quick Ratio (%). In initial year trend of MRF is decreasing and increasing at very high rate then it becomes almost constant and higher as compared to others. Trend of JK Tyre & Industries, TVS Srichakra, Apollo Tyres Ltd and Balkrishna Industries are almost constant throughout all years.
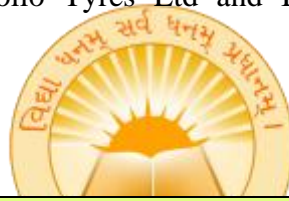
**FINDINGS OF THE STUDY:**

| Table: 7 Findings of The Study | | | | | |
|---|---|---|---|---|---|
| **Variables** | **F-Calculated Value** | **P- Value** | **F – Critical Value** | **Significance** | **Ho Accepted / rejected** |
| Net Profit Margin (%) | 15.022 | 8.01999 | 2.86608 | Yes | Rejected |
| Return on Capital Employed (%) | 5.6091 | 0.00339 | 2.86608 | Yes | Rejected |
| Return on Assets (%) | 2.5366 | 0.07210 | 2.86608 | No | Accepted |
| Asset Turnover Ratio (%) | 8.08027 | 0.000478 | 2.86608 | Yes | Rejected |
| Current Ratio (X) | 1.05328 | 0.40508 | 2.86608 | No | Accepted |
| Inventory Turnover Ratio (X) | 0.94031 | 0.461021 | 2.86608 | No | Accepted |
| Quick Ratio (%). | 2.40689 | 0.08349 | 2.86608 | No | Accepted |

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## CONCLUSION:

In view of the fact, that with the help of profitability analysis, companies ability of generating profit as well as with the help of liquidity analysis, companies' ability of meeting its liability promptly can be identified.

As much as the profitability and liquidity increase it leads to an ideal position where a company would be competent enough to yield highest profit, correspondingly company would intelligently fulfill its liability towards third party.

Accordingly here researcher evaluated that overall profitability and liquidity position of Balkrishna Industries; TVS Srichakra & MRF is brilliant and of Apollo Tyres Ltd. is standard while that of JK Tyre & Industries is not so good. This research would be helpful to all the stakeholders of Auto Ancillary Industry and would give useful lead to those researchers who want to conduct additional research.

## REFERENCES:

Nilesh P. M. (2015). A Study on Capital Structure Analysis and Profitability of Indian Tyres Industry. *Pacific Business Review International*, 8, 78-82.

Sunil M. Kantesha S. (2014). A Study on Financial Performance: A Comparative Analysis of JK Tyres Industries Ltd And Selected Tyre Companies In India. *International Journal of Business Economics & Management Research,* 4, 21-30.

Nisha R. (2013). An Overview of The Financial Performance Of Indian Tyre Industry – Comparison Among Leading Tyre Companies. *Innovative Journal of Business and Management*, 2, 128-130.

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