**ANALYSIS OF ROA AND ROE IN SELECT INDIAN AUTOMOBILE INDUSTRY**

**Author: Dr.P.GOVINDASAMY**, Associate Professor and Research Supervisor,

*Vel Tech Rangarajan Dr.Sagunthala R & D Institute of Sciencce and Technology (Deemed to be University), Chennai,* Email: [apgswamy1972@gmail.com](mailto:apgswamy1972@gmail.com)

**ABSTRACT**

The stock exchange shows a dynamic part in the evolution of the economy of a country. Indian stock market comprises of a huge number of corporates of various sectors which contribute in the development of the economy. And one such sector which has a massive share in the economic development of our country is Automobile sector. India’s Automobile market has become 3 rd largest in the world in the year 2018. It also covers 7.1% share of our country GDP. The Automobile sector contributes around 22% of country’s manufacturing GDP. The empirical literature available shows that the past researches were merely focused on automobile sector contribution in the economy and there growth prospects in the future, while some aspects were not being raised in the past researches. Hence the researcher feels the need to find some new aspects 7 related to automobile sector and stock market (e.g. various legal provisions related to Indian stock market, relation between stock price, market index and automobile sector index, stakeholder perception regarding investment in automobile sector, volatility of return on shares of selected automobile companies) and researcher will also examine different factors affecting stock markets and automobile sector.

Keywords: Return on Assets, Return on Equity, Standard Deviation, Variance, Covariance, Beta

**INTRODUCTION**

As Indian auto manufacturing sector stocks are more honorable and steady exchanged stocks and wares the benchmark of Bombay stock trade, these stocks are arising as one of the predominant areas in the capital market. The exploration information acquired from the period first April 2016 to 31st March 2021 as long haul execution of auto versatile industry. Furthermore, the transient exhibition from second feb to 28th May 2022. The exploration research has assessed the gathered information by the factual devices like Descriptive measurable, Correlation, Regression and exponential moving normal. The investigation discovered that presence of ordinariness of chosen factors and furthermore Correlation result uncovered BSE Indices and chose organizations in car ventures are corresponded and in this manner advancement of one can be anticipated by the improvement of other. This demonstrates that monetary patterns and advancement of the nation are straightforwardly related by the presentation of auto area and its return in the Stock market. It recommends the financial backers who liking to put their interest in the auto organization to get the exceptional yield where the gamble is high. Stock Exchange is where stock specialists and brokers can trade stocks, bonds and different investment protections. Stock Exchanges may likewise give offices to issue and reclamation of protections and other monetary instruments and capital opportunities including the installment of pay and profits. Protections exchanged on a stock trade incorporate stock gave by recorded organizations, unit trusts, subsidiaries, pooled speculation items and securities. Stock trades frequently capability as ceaseless sale markets with purchasers and dealers fulfilling at a focal area like the floor of the trade. Risk is an idea that signifies a possible adverse consequence to a resource or some quality of significant worth that might emerge from some current cycle or future occasion. Value markets across the world are unpredictable, yet India has a more significant level of instability. Financial exchange risk is the propensity of stock costs to diminish because of the adjustment of worth of the market risk factors. The market worth of those speculations will go all over relying upon the monetary exhibition of the backers and general financial, political, duty, and economic situations. Standard market risk factors are stock costs, loan fees, unfamiliar trade rates, and item costs.

**OBJECTIVES OF THE STUDY**

* To analyses the average returns of selected companies’ securities in the automobile industry.
* To analyses the relationship between risk and return for the selected companies.
* To examine the risk and return for the selected companies.

**REVIEW OF LITERATURE**

This exploration paper "Contagion Effect of Automobile Company’s stock returns of Indian Stock market" uncovers the impression of campaign of costs and its varieties in the BSE Sensex returns and BSE Auto returns by the organization's profits of auto manufacturers and furthermore the causal connection between them.

Kusum Dhaka (2020) - Risk and return examination assume a most significant part while pursuing any venture decisions. Every reasonable financial backer, analysis of risk and return and the expected return prior to putting resources into any stock or security is a measuring yard for materialising the process of investment. The speculation cycle should be viewed as regarding both risk and return. It is for the most part trusted that to acquire better yield then he should face more challenge for procuring better yield, to face higher challenge then he can't procure better yield. Along these lines, better yield proportionate with higher risk. Nonetheless, loads of examinations had been directed to investigation hazard and return, barely any examinations expressed that higher risk is comparable with better yield while different examinations scrutinizes it and expressed that higher risk don't commonly similar with better yield. The motivation behind this paper is to audit the previous writing accessible on hazard and return to illuminate the connection between them.

L. N. Hindu College Rohtak, India (2020) - Risk and return analysis assume a most significant part while pursuing any venture investment avenues. Each judicious financial backer analyse the risk and return prior to putting resources into any stock or security. The speculation cycle should be viewed as concerning both risk and return. It is for the most part trusted that to acquire better yield then he should face more challenge for procuring better yield, to face higher challenge then he can't procure better yield. Thus, better yield equivalent with higher risk. In any case, bunches of studies had been directed to dissect hazard and return, barely any examinations expressed that higher risk is comparable with better yield while different examinations censures it and expressed that higher risk don't commonly equivalent with better yield. The motivation behind this paper is to survey the previous writing accessible on hazard and return to illuminate the connection between them.

S.Baranidharan1 N. Dhivya (2019) - As Indian Automobile Sector stocks are more outstanding and reliably exchanged stocks and items the benchmark of Bombay stock trade, these stocks are arising as one of the prevailing sectors in the capital market. The exploration information acquired from the period First January 2009 to 31st December 2019. The exploration research has assessed the gathered information by utilizing measurable instruments like Descriptive insights (Normality), Correlation (level of relationship), Regression (group effect) and Granger Causal test (causal impacts). The investigation discovered that presence of ordinariness of chosen factors and furthermore Correlation result uncovered BSE Indices and chose organizations in vehicle businesses are corresponded and in this way advancement of one can be anticipated by the improvement of other. This demonstrates that monetary patterns and improvement of the nation are straightforwardly related by the presentation of auto area and its return in the Stock market. It recommends the financial backers who liking to put their interest in the vehicle organization to get the exceptional yield where the gamble is high. On the connection between stock costs and trade paces of long haul and present moment.

James E. Smith(2018) - In this article, we foster a two-factor model of commodity costs that permits mean inversion in momentary costs and vulnerability in the momentum level to which costs revert. Albeit these two elements are not straightforwardly detectable, they might be assessed from spot and futures costs. Naturally, developments in costs for long-maturity futures contracts give data about the symmetry price level, and contrasts between the costs for the short-and long haul contracts give data about transient varieties in costs. That's what we show, albeit this model doesn't unequivocally consider changes in that frame of mind after some time, this present moment/long haul model is comparable to the stochastic accommodation yield model created in Gibson and Schwartz (2018). We gauge the boundaries of the model involving costs for oil fates contracts and apply the model to some speculative oil-connected resources for exhibit its utilization and a portion of its benefits over the Gibson-Schwartz mod.

Sathyanarayana K (2018) - Investors' venture movement normally spins around high-development enterprises to exploit development in particular industry. Anticipated Return, Expected Risk, Coefficient of Variation (CV) and Beta of stock have been determined and area wise relative examination of the multitude of above boundaries have been made to investigation and present the exhibition of supplies of 35 organizations across seven areas. This would assist financial backers with recognizing the normal return and chance related with the stock according to the securities exchange and backing financial backers to settle on suitable venture choices. From the examination it is found that a gamble disinclined financial backer can consider putting resources into Godrej Properties and HDFC Bank in light of the fact that both these stocks have higher expected return, lower expected hazard and low CV and Beta worth of under 1. Next class of the stock that financial backer can consider putting resources into will be the loads of TCS and PVR in light of the fact that both these stocks have higher expected return, lower CV and Beta worth of under 1. However, with regards to anticipated risk, both of these stocks have higher anticipated risk.

Akarsh P. K,Etal (2017) - Every individual generally wishes to get a good profit from his/her speculations since financial backers make the venture from their well-deserved investment funds. Among the different plans of venture, the value market is viewed as quite possibly of the most remunerating road despite the fact that it implies more gamble. Since the gamble is exceptionally high in value speculation, the financial backers need to make a value examination that assists them with realizing about the gamble return attributes of those value offers and those businesses in which he/she wishes to stop the reserve funds. In this viewpoint a review has been embraced to break down the value portions of organizations in the auto business of Indian financial exchange. Indian vehicle industry is one of the biggest on the planet and viewed as perhaps of the quickest developing area. To keep up with the developing interest numerous car producers have begun to put resources into this industry. So the concentrate on value examination of this industry will help the possible financial backers in taking educated and judicious venture choice. This study is directed for a time of 5 years, covering from 2012 to 2017.

Sujata saha(2015) - While changes in stock costs are said to influence trade rates, conversion standard changes are additionally said to influence stock costs. The reason for this paper is triple. To start with, the creators survey all experimental writing by separating them into two gatherings of univariate and multivariate investigations. Second, a table which sums up the fundamental elements of each study is given to assist future scientists with having simple admittance to the rundown of each review. At last, another course for future exploration is proposed. This new course depends upon a nonlinear ARDL approach and tells the best way to research symmetric versus deviated impacts of conversion scale changes on stock costs.

Julian Villanueva(2014) - Companies can gain clients through exorbitant yet effective promoting speculations or through more slow however less expensive informal exchange processes. Their drawn out progress relies basically upon the commitment of each gained client to in general client value. The creators propose and test an observational model that catches these drawn out impacts. An application to a Web facilitating organization uncovers that promoting instigated clients add all the more transient worth, yet informal exchange clients add almost two times as much long haul worth to the firm. The creators outline their discoveries for certain powerful reproductions of the drawn out effect of various asset portions for procurement showcasing.

Koen Pauwels(2013) - Many years, chiefs endeavor to work on monetary execution and firm worth through advertising activities like new item presentations and limited time motivating forces. This study explores the short-and long haul effect of such advertising activities on monetary measurements, including top-line, main concern, and financial exchange execution. The creators apply multivariate time-series models to the auto business, in which both new item presentations and special motivations are viewed as significant execution drivers. Prominently, while both showcasing activities increment top-line firm execution, their drawn out impacts unequivocally contrast for the reality. To start with, new item presentations increment long haul monetary execution and firm worth, however advancements don't. Second, financial backer response to new item presentation develops over the long run, showing that helpful data unfurls in the initial two months after item send off. Third, item passage in another market yields the most elevated top-line, primary concern, and financial exchange benefits. Supervisors might utilize these outcomes to legitimize new item endeavors and to weigh short-and long haul results of special motivators.

Vijay Bhasker (2013) - says that Indian Automobile Industry is worldwide quite possibly of the biggest business and a critical area of the Economy and that with the rising number of unfamiliar organizations in the Indian market, how much work have and will keep on expanding essentially. It has endeavored to concentrate on the FDI in this area and how the public authority ought to attempt to expand this areas proficiency.

Kevin vinod (2012) - This paper reports the long-run stock value execution of firms with compelling Total Quality Management (TQM) programs. The triumphant of value grants is utilized as an intermediary for viable TQM execution. We look at stock value execution of grant champs against different matched control bunches for a five-year execution period and a five-year post implementation period. During the execution time frame there is no distinction in the stock cost execution, yet during the post implementation time frame grant victors fundamentally beat firms in the different benchmark groups. Contingent upon the benchmark group utilized, the mean outperformance goes from 38% to 46%. Our outcomes plainly demonstrate that viable execution of TQM standards and ways of thinking prompts critical abundance creation. Moreover, our outcomes ought to lighten a considerable lot of the worries in regards to the worth of value grant frameworks. By and large, these frameworks are important as far as perceiving TQM firms and advancing mindfulness.

Shinde(2011)- The vehicle area is a fascinating piece of the economy and its review could give us a few incredible experiences for the impending situation of the business. This is thinking about the incredible arrangement of monetary strength and furthermore after the examination of the past patterns of the auto business. The reviews that are being attempted will likewise chip away at similar notes and attempt to certify the cases of the other explores.

**DATA ANALYSIS AND INTERPRETATION**

**Regression analysis to find out impact on risk and return: Dependent variable - ROA**

**Null Hypothesis**

**Ho1:** There is no significant impact of current ratio on ROA

**Ho2:** There is no significant impact of cash conversion ratio on ROA

**Ho3:** There is no significant impact of debt equity ratio on ROA

**Ho4:** There is no significant impact of current asset turnover on ROA

**Ho5:** There is no significant impact of total current asset on ROA

**Ho6:** There is no significant impact of total current liability on ROA

**Ho7:** There is no significant impact of NATLOGTA on ROA

**Ho8:** There is no significant impact of inventory turnover ratio on ROA

**ROA = β1CR+ β2CCR+ β3DET + β4CAT + β5TCA+ β6TCL+ β7NATLOGTA+ β8INV+ c**

**Where**

ROA =RETURN ON ASSETS

CR =CURRENT RATIO

CCR = CASH CONVERSION RATIO

DET =DEBT EQUITY RATIO

CAT =CURRENT ASSET TURNOVER

TCA =TOTAL CURRENT ASSET

TCL =TOTAL CURRENT LIABILITY

NATLOGTA = NATURAL LOG OF TOTAL ASSETS

INV =INVENTORY TURNOVER RATIO

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Model Summary b** | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | .956a | .913 | .879 | 2.889330 | 1.952 |
| a. Predictors: (Constant), INVTURN, NATLOGTA, CCR, CR, det, TCA, cat, TCL | | | | | |
| b. Dependent Variable: ROA | | | | | |

It was found from the above table that all the independent variables together impact dependent variable with 91.3%.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ANOVA a** | | | | | | |
| Model | | Sum of Squares | DF | Mean Square | F | Sig. |
| 1 | Regression | 1762.472 | 8 | 220.309 | 26.390 | .000b |
| Residual | 166.965 | 20 | 8.348 |  |  |
| Total | 1929.437 | 28 |  |  |  |
| a. Dependent Variable: ROA | | | | | | |
|  | | | | | | |
| b. Predictors: (Constant), INVTURN, NATLOGTA, CCR, CR, det, TCA, cat, TCL | | | | | | |

It was found that P value in the ANOVA table was less than 5% (0.05) which shows that the model is fit.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Coefficients a** | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | 43.306 | 31.312 |  | 1.383 | .182 |
| CR | -.464 | 4.591 | -.037 | -.101 | .921 |
| CCR | -.519 | .703 | -.053 | -.738 | .469 |
| Det | -1.507 | 1.758 | -.100 | -.857 | .402 |
| Cat | .076 | .040 | .411 | 1.909 | .071 |
| TCA | 5.032 | 19.678 | .067 | .256 | .801 |
| TCL | -52.587 | 18.454 | -.704 | -2.850 | .010 |
| NATLOGTA | -3.033 | 2.209 | -.280 | -1.373 | .185 |
| INVTURN | .162 | .129 | .176 | 1.250 | .226 |
| 1. Dependent Variable: ROA | | | | | | |

**ROA =** **-0.464CR-0.519CCR -1.507DET + 0.076CAT + 5.032TCA -52.587TCL-3.033 NATLOGTA+ 0.162INV+ 43.306**

* + Since P value for current ratio was greater than 0.05, null hypothesis is accepted. There is no significant impact of current ratio on ROA.
  + Since P value for cash conversion ratio is greater than 0.05, null hypothesis is accepted. There is no significant impact of cash conversion ratio on ROA.
  + Since P value for debt equity ratio is greater than 0.05, null hypothesis is accepted. There is no significant impact of debt equity ratio on ROA.
  + Since P value for current asset turnover is greater than 0.05, null hypothesis is accepted. There is no significant impact of current asset turnover on ROA.
  + Since P value for total current asset is greater than 0.05, null hypothesis is accepted. There is no significant impact of total current asset on ROA.
  + Since P value for total current liability is less than 0.05, alternate hypothesis is accepted. There is significant impact of total current liability on ROA.
  + Since P value for NATLOGTA is greater than 0.05, null hypothesis is accepted. There is no significant impact of NATLOGTA on ROA.
  + Since P value for inventory turnover ratio is greater than 0.05, null hypothesis is accepted. There is no significant impact of inventory turnover ratio on ROA.

**Regression analysis to find out impact on risk and return: Dependent variable – ROE**

**Null Hypothesis**

**Ho1:** There is no significant impact of current ratio on ROE

**Ho2:** There is no significant impact of cash conversion ratio on ROE

**Ho3:** There is no significant impact of debt equity ratio on ROE

**Ho4:** There is no significant impact of current asset turnover on ROE

**Ho5:** There is no significant impact of total current asset on ROE

**Ho6:** There is no significant impact of total current liability on ROE

**Ho7:** There is no significant impact of NATLOGTA on ROE

**Ho8:** There is no significant impact of inventory turnover ratio on ROE

**ROE = β1CR+ β2CCR+ β3DET + β4CAT + β5TCA+ β6TCL+ β7NATLOGTA+ β8INV+ c**

**Where**

ROE =RETURN ON EQUITY

CR =CURRENT RATIO

CCR = CASH CONVERSION RATIO

DET =DEBT EQUITY RATIO

CAT =CURRENT ASSET TURNOVER

TCA =TOTAL CURRENT ASSET

TCL =TOTAL CURRENT LIABILITY

NATLOGTA = NATURAL LOG OF TOTAL ASSETS

INV =INVENTORY TURNOVER RATIO

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Model Summary b** | | | | | |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | .905a | .818 | .746 | 7.489331 | 2.417 |
| a. Predictors: (Constant), INVTURN, NATLOGTA, CCR, CR, det, TCA, cat, TCL | | | | | |
| 1. Dependent Variable: ROE | | | | | |

It was found from the above table that all the independent variables together impact dependent variable with 81.8 %.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ANOVA a** | | | | | | |
| Model | | Sum of Squares | DF | Mean Square | F | Sig. |
| 1 | Regression | 5051.014 | 8 | 631.377 | 11.256 | .000b |
| Residual | 1121.802 | 20 | 56.090 |  |  |
| Total | 6172.815 | 28 |  |  |  |
| a. Dependent Variable: ROE | | | | | | |
| b. Predictors: (Constant), INVTURN, NATLOGTA, CCR, CR, det, TCA, cat, TCL | | | | | | |

It was found that P value in the ANOVA table was less than 5% (0.05) which shows that the model is fit.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Coefficients a** | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | 88.402 | 81.162 |  | 1.089 | .289 |
| CR | -2.779 | 11.901 | -.124 | -.233 | .818 |
| CCR | .049 | 1.823 | .003 | .027 | .979 |
| Det | -.791 | 4.558 | -.029 | -.174 | .864 |
| Cat | .246 | .103 | .744 | 2.387 | .027 |
| TCA | 8.896 | 51.006 | .067 | .174 | .863 |
| TCL | -116.876 | 47.833 | -.874 | -2.443 | .024 |
| NATLOGTA | -6.544 | 5.726 | -.338 | -1.143 | .267 |
| INVTURN | -.194 | .336 | -.118 | -.578 | .570 |
| a. Dependent Variable: ROE | | | | | | |

**ROE = -2.779CR+0.049CCR -.791DET + 0.246CAT + 8.896TCA-116.876TCL-6.544NATLOGTA-0.194INV+88.402**

* + Since P value for current ratio was greater than 0.05, null hypothesis is accepted. There is no significant impact of current ratio on ROE.
  + Since P value for cash conversion ratio is greater than 0.05, null hypothesis is accepted. There is no significant impact of cash conversion ratio on ROE.
  + Since P value for debt equity ratio is greater than 0.05, null hypothesis is accepted. There is no significant impact of debt equity ratio on ROE.
  + Since P value for current asset turnover is less than 0.05, alternate hypothesis is accepted. There is significant impact of current asset turnover on ROE.
  + Since P value for total current asset is greater than 0.05, null hypothesis is accepted. There is no significant impact of total current asset on ROE.
  + Since P value for total current liability is less than 0.05, alternate hypothesis is accepted. There is significant impact of total current liability on ROE.
  + Since P value for NATLOGTA is greater than 0.05, null hypothesis is accepted. There is no significant impact of NATLOGTA on ROE.
  + There is no significant impact of inventory turnover ratio on ROE.

# **Correlation-relationship between selected study variable**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table No:4.1.8 Correlations** | | | | | | | | | |
|  | | ROA | Sales | WC | Cl | Ca | INV | ACCREC | Cr |
| ROA | Pearson Correlation | 1 | -.239 | **.674\*\*** | **-.782\*\*** | **-.420\*** | -.631 | .570 | **.671\*\*** |
| Sig. (2-tailed) |  | .203 | **.000** | **.000** | **.021** | .369 | .614 | **.000** |
| N | 30 | 30 | 30 | 30 | 30 | 4 | 3 | 30 |
| Sales | Pearson Correlation | -.239 | 1 | **-.432\*** | **.675\*\*** | **.532\*\*** | -.442 | -.526 | **-.409\*** |
| Sig. (2-tailed) | .203 |  | **.017** | **.000** | **.002** | .558 | .647 | **.025** |
| N | 30 | 30 | 30 | 30 | 30 | 4 | 3 | 30 |
| WC | Pearson Correlation | **.674\*\*** | **-.432\*** | 1 | **-.751\*\*** | -.003 | -.589 | .786 | **.821\*\*** |
| Sig. (2-tailed) | **.000** | **.017** |  | **.000** | .986 | .411 | .424 | .**000** |
| N | 30 | 30 | 30 | 30 | 30 | 4 | 3 | 30 |
| Cl | Pearson Correlation | **-.782\*\*** | **.675\*\*** | **-.751\*\*** | 1 | **.663\*\*** | .014 | -.602 | **-.581\*\*** |
| Sig. (2-tailed) | **.000** | **.000** | **.000** |  | **.000** | .986 | .589 | **.001** |
| N | 30 | 30 | 30 | 30 | 30 | 4 | 3 | 30 |
| Ca | Pearson Correlation | **-.420\*** | **.532\*\*** | -.003 | **.663\*\*** | 1 | -.523 | -.501 | .051 |
| Sig. (2-tailed) | **.021** | **.002** | .986 | **.000** |  | .477 | .666 | .788 |
| N | 30 | 30 | 30 | 30 | 30 | 4 | 3 | 30 |
| INV | Pearson Correlation | -.631 | -.442 | -.589 | .014 | -.523 | 1 | .c | -.683 |
| Sig. (2-tailed) | .369 | .558 | .411 | .986 | .477 |  | . | .317 |
| N | 4 | 4 | 4 | 4 | 4 | 4 | 1 | 4 |
| ACCREC | Pearson Correlation | .570 | -.526 | .786 | -.602 | -.501 | .c | 1 | .972 |
| Sig. (2-tailed) | .614 | .647 | .424 | .589 | .666 | . |  | .152 |
| N | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 |
| Cr | Pearson Correlation | **.671\*\*** | **-.409\*** | **.821\*\*** | **-.581\*\*** | .051 | -.683 | .972 | 1 |
| Sig. (2-tailed) | **.000** | **.025** | **.000** | **.001** | .788 | .317 | .152 |  |
| N | 30 | 30 | 30 | 30 | 30 | 4 | 3 | 30 |
| **CORRELATION**   * Correlation is significant at the 0.01 level (2-tailed). | | | | | | | | | |
| * Correlation is significant at the 0.05 level (2-tailed). | | | | | | | | | |
| * Cannot be computed because at least one of the variables is constant. | | | | | | | | | |

**INTERPRETATION:**

From the above table, there is a significant positive relationship between Return on Assets and Working capital, there is significant negative relationship between Return on Assets and current liability, there is significant negative relationship between Return on Assets and current asset, there is significant positive relationship between Return on Assets and current ratio, there is significant negative relationship between sales and working capital, there is significant positive relationship between sales and current liability, there is a significant positive relationship between sales and current asset, there is significant negative relationship between sales and current ratio, there is significant positive relationship between working capital and Return on Assets, there is significant negative relationship between working capital and sales, there is significant negative relationship between working capital and current liability, there is significant positive relationship between working capital and current ratio, there is significant negative relationship between current liability and Return on Assets, there is significant positive relationship between current liability and Sales, there is significant negative relationship between, current liability and working capital, there is significant positive relationship between age and current liability and current asset, there is significant negative relationship between current asset and Return on Assets, there is significant positive relationship between current asset and sales, there is significant positive relationship between current asset and current liability, there is significant positive relationship between current ratio and Return on Assets, there is significant negative relationship between current ratio and sales, there is significant positive relationship between current ratio and working capital, there is significant negative relationship between current ratio and current liability.

**CONCLUSION**

This study on “Risk and Return Indian automobile industry” as major objectives like – to find out the relationship between profitability, liquidity and Firm value, to investigate the working capital on profitability, find the impact of working capital and firm value. To separately analysis the effects of different components of working capital on profitability and to examine the working capital policies of the selected companies, leads to find out the different working capital approach on the selected companies & to find out the impact of market price on profitability. The study used five years data, five automobile Company such as TATA Motors, HERO Motors, MARUTHI Suzuki, TVS Motors and Robert Bosch Gmbh. Tools used for analysis are – Return on Assets and Return on Equity, As per dependent variable - ROA, it was found that TCL, there is significant impact on profitability. There is significant difference between ROI of the selected companies. There is significant different between ROE of the selected companies. In correlation there is significant positive relation between ROA and Working capital, ROA and current ratio, working capital and ROA. In correlation there is significant positive relation between sales and current liability, sales and current asset, working capital and current ratio, current liability and current asset, current asset and sale, current asset and current liability, current ratio and working capital.

**REFERENCES**

1. Abbasali Pouraghajan, Milad Emamgholipourarchi, 2012, Impact of LIQUIDITY Management on Profitability and Market Evaluation: Evidence from Tehran Stock Exchange (Vol. 3 No. 10)
2. Abdual RMN (2007). Working Capital Management and Profitability – Case Of. Int. Rev. Bus. Res. Papers, pp. 279-300.
3. Abdul RTA (2010). Working Capital Management and Corporate Performance of Manufacturing Sector in Pakistan. Int. Res. J. Finan. Econ., 47: 152.
4. Amit, K. Mallik, Sur, Debashish and Rakshit, Debdas. (2005). ―Working Capital and Profitability: A Study on their Relationship with Reference to Selected Companies in Indian Pharmaceutical Industry‖. GITAM Journal of Management, Vol. 3, 51–62. 102
5. Buchmann P, Jung U (2008). Best-practice working capital management: Techniques for optimizing inventories, receivables, and payables. Q. Financ., pp. 1-7.
6. Christopher, S. Benjamin and Kamalavalli, A. L., (January, 22 2009). ―Sensitivity of Profitability to Working Capital Management in Indian Corporate Hospitals‖.
7. Deloof M (2002). Does Working Capital Management Affect Profitability of Belgian Firms? nvestopedia.com. (2010). Working capital: definations; negative working capital, positive working capital. Retrieved October 10, 2010, from
8. Deloof, Marc. (2003). ―Does Working Capital Management Affect Profitability of Belgian Firms? Journal of Business, Finance and Accounting, Vol. 30, 573-88. 3 101
9. Dr. Sarbapriya Ray,2011, Evaluating the Impact of Working Capital Management Components on Corporate Profitability: Evidence from Indian Manufacturing Firms, International Journal of Economic Practices and Theories (IJEPT) ISSN: 2247 – 7225.
10. Ganesan, V. (2007). “An Analysis of Working Capital Management Efficiency in Telecommunication Equipment Industry”, Rivier Academic Journal, Vol. 3, No. 2, pp 13.
11. García-Teruel. Pedro Juan, Martínez-Solano, Pedro. (2007). ―Effects of Working Capital Management on SME Profitability‖. International Journal of Managerial Finance, Vol. 3, Issue 2, 164-177.
12. Ghosh, S.K. and Maji, S.G. (May 2004). ―Working Capital Management Efficiency: A Study on the Indian Cement Industry‖. The Management Accountant, 363–72.
13. Govind Rao, D. and Rao, P.M. (1999). ―Impact of Working Capital on Profitability in Cement Industry—A Correlation Analysis‖. Working Capital Management. (Deep & Deep Publications Pvt. Ltd., New Delhi), 239–59.
14. Kulkanya Napompech , 2012, Effects of Working Capital Management on the Profitability of Thai Listed Firms, International Journal of Trade, Economics and Finance, Vol. 3, No. 3.
15. Lazaridis, Ioannis & Tryfonidis, Dimitrios., (January-June 2006). ―The relationship between working capital management and profitability of listed companies in the Athens Stock Exchange‖. Journal of Financial Management and Analysis, Vol. 19. No. 1, 26 – 35.
16. Mohammad Morshedur Rahman, 2011, Working Capital Management and Profitability: A Study on Textiles Industry, ASA University Review, Vol. 5 No. 1.
17. Mukhopadhyay, D. (2004). ―Working Capital Management in Heavy Engineering Firms—A Case Study‖.
18. Nazir S, Afza T (2009). Impact of Aggressive Working Capital Management Policy on Firms’ Profitability. J. Applied Manage.
19. Nobanee, Haitham and Al Hajjar, Maryam. (July 13, 2009). ―A Note on Working Capital Management and Corporate Profitability of Japanese Firms‖.
20. Ramachandran, Azhagaiah & Janakiraman, Muralidharan., (2009). “The Relationship between Working Capital Management Efficiency and EBIT”. Managing Global Transitions. University of Primorska, Faculty of Management Koper. Vol. 7. Issue. 1, 61-74.
21. Rehman, Abdul & Nasr, Mohamed., (March 2007). ―Working Capital Management and Profitability – Case of Pakistani Firms‖. International Review of Business Research Papers, Vol. 3. No.1, 279 – 300.
22. P.Govindasamy, et.al.,“Covid-19 And Global Financial Markets With Special Focus To Gdp Growth Projection, Capital Mobilization And Performance Of Stock Market” Volume XI, Issue VII, 2020, PP No. 1-9
23. Mr.R. Ravimohan,et.al., "Modeling of dividend payout, retention, yield, capital gains and irrelevance and its impact on value of the firm". Journal of Contemporary Issues in Business and Government, 27, 2, 2021, 5166-5178. doi: 10.47750/cibg.2021.27.02.528.
24. Dr.P.Govindasamy, et.al. (2019). Contemporary Contemplation on Integrated Global Financial Climate. International Journal of Recent Technology and Engineering, 8, 186-188. https://www.ijrte.org/wpcontent/uploads/papers/v8i3S2/C10341083S219.pdf
25. Dr.P.Govindasamy, et.al. (2019). Economic Environment and Investment Climatic Conditions – an empirical study. International Journal of Research in Engineering IT & Social Sciences, 9, 2, pp.9-16. http://indusedu.org/pdfs/IJREISS/IJREISS\_2657\_93946.pdf
26. P.Govindasamy., et.al. (2018). Price volatility of the gold commodity using technical analysis with reference to Rayalaseema Bullion Commtrade Pvt Ltd, Chennai City – An analytical Study. International Journal of Mechanical and Production Engineering and Research and Development, pp.423-440. http://www.tjprc.org/downloadcoference\_files.php?fname=9e3cfc48eccf81a0d57663e129aef3cb
27. Premraj,H., (2020), “CASE ANALYSIS ON CONSTRUCTING AND ADMONISHING FINANCIAL PORTFOLIOS AND INVESTMENT STRATEGIES”, Adalya Journal ISSN: 1301-2746. Vol: 9, Issue: 4, April-2020, pp.699-706. https://drive.google.com/file/d/17uQLQAsoKLPD5kkzB9-ybBCIVdAs5w88/view
28. Dr.P.Govindasamy, et.al., (2020). Exhilarating Challenges of Rural Credit and Microfinance Modeling. Mukt Shabd Journal. Vol.IX, Issue.IV., pp.211-218. http://shabdbooks.com/gallery/22.pdf
29. Premraj, (2020). Au courant Households Investments Planning And Execution Modeling. WAFFEN-UND KOSTUMKUNDE JOURNAL. ISSN:0042-9945, Vol:XI, Issue: IV, pp.267-272, April-2020, http://www.druckhaus-hofmann.de/gallery/29-wjapril-2209.pdf
30. Dr.P.Govindasamy (2019). A Descriptive Study on the recent developments in Indian Commodity Derivatives Market. Research Chronicler Review International Journal of Multidisciplinary, Vol: VII,Issue:I., 90-97.
31. Dr.H.Premraj, (2020). Vital Accounting Policies, Crucial Accounting Estimates and Judgements Adopted in MCX – An Empirical Analysis. TEST ENGINEERING AND MANAGEMENT, ISSN: 0193-4120, Vol:83, April 2020, pp.14713-14718. http://www.testmagzine.biz/index.php/testmagzine/article/view/6364/4959
32. Dr.P.Govindasamy, et.al. (2019). An Empirical Analysis of Investors Behaviour Decision Styles and Share Market Outcomes. International Journal of Research in Engineering IT & Social Sciences, ,2, pp.345-349. http://indusedu.org/pdfs/IJREISS/IJREISS\_2702\_12624.pdf
33. Viswanathan,E. (2015). Study on Investors Attitude towards Mutual Fund with Special Reference to Sharekhan Ltd, Chennai. HCTL Open International Journal of Technology Innovations and Research, e-ISSN:2321-1814, pp.1-11. July-2015. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.695.5283&rep=rep1&type=pdf
34. Salauddin, D. A. (2001). “Profitability of Pharmaceutical Companies of Bangladesh” The Chittagong University Journal of Commerce, Vol.16, pp. 54.
35. Shin, H. H. and Soenen, L. (1998). “Efficiency of Working Capital and Corporate Profitability”, Financial Practice and Education, Vol. 8, No. 2, pp. 37-45.
36. Sur, D., Biswas J. and Ganguly P. (June 2001). ―Liquidity Management in Indian Private Sector Enterprises: A Case Study of Indian Primary Aluminium Producing Industry‖. Indian Journal of Accounting, 8–14.
37. Vijaykumar, A. and Venkatachalam, A. (June 1995). ―Working Capital and Profitability—An Empirical Analysis‖. The Management Accountant. ICWAI, Kolkata, 748–50.
38. Vishnani, Sushma & Shah, Bhupesh Kr. (2007). ―Impact of Working Capital Management Policies on Corporate Performance --- An Empirical Study‖. Global Business Review, Vol. 8, 267.
39. Zariyawati, M. A., Annuar, M. N. & Rahim, A.S. Abdul., ―Effect of Working Capital Management on Profitability of Firms in Malaysia‖.