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RESEARCH ARTICLE

EFFECT OF WORKING CAPITAL ON FIRM'S PROFITABILITY: A PRAGMATIC STUDY WITH REFERENCE TO PHARMACEUTICAL COMPANIES IN INDIA.

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Abstract

Working capital Management assumes a significance part in the success of business organizations, as a result of its impact on profitability of organizations. The reason for this examination is looking at the relationship between working capital management practices and profitability of listed pharmaceutical firms in India. In this investigation utilized secondary data collected from all the 10 listed pharmaceutical firms in India covering the period from 2011-2016. Working capital of a firm includes on current assets. Current Assets are cash and equivalents, accounts receivable, and inventory items of a firm. Working capital Management is applying investment and financing decision to current assets. The greater part of the researchers discovered positive effect of working capital management choices on profitability of organizations. It specifically influences the liquidity and profitability of firm. In this paper 12 research articles of various researchers have been studied and compared. The outcomes showed impact of working capital on profitability and supported the suggestions.

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Introduction:-

Working Capital Management (WCM) is an imperative issue in cash related fundamental initiative since it is a bit of enthusiasm for asset and it particularly impacts the liquidity and productivity of the association. In any case, working capital reliably is expelled in cash related fundamental initiative since it incorporates theory and financing in without a moment's hesitation period. Further, it moreover goes about as a breaking point in money related execution, since it doesn't include returning esteem.

Firms may have perfect level of working capital that expands their regard. Huge stock and a liberal trade credit system may prompt high deals. Bigger stock diminishes the danger of a stock-out. Trade credit may animate deals since it enables clients to evaluate item quality before paying. Another segment of working capital is Accounts payable. Deferring installments to providers enables a firm to survey the nature of purchased items, and can be a reasonable and adaptable well spring of financing for the firm. Then again, late installment of solicitations can be exorbitant if the firm is offered a markdown for early installment. A renowned measure of Working Capital Management (WCM) is the Cash Conversion Cycle, i.e. the time slack between the consumption for the buys of crude materials and the gathering of offers of finished stock. The more extended this time slack, the bigger the interest in working capital. A more drawn out cash conversion cycle may expand benefit since it prompts higher

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deals. Regardless, corporate productivity may likewise diminish with the cash conversion cycle, if the expenses of higher interest in working capital ascent speedier than the advantages of holding more inventories as well as allowing more exchange credit to customers.

Literature Review:-

The fruitful and smooth operation of a firm WCM is considered as vital and additionally most important variable. That is the reason from many trains in various conditions numerous analysts have led consider on it by performing different examinations. In particular, this area concentrates on concentrate the connection of WCM with firms' execution; related accessible writing to this review part into hypothetical and experimental audit of writing would be displayed in the dialog to come. Already, WCM has been dissected from various measures in current writing. Study done by Mehmet and Eda, (2009) on the significant relationship between working capital management of the firm efficiency level evidenced the efficient used of WC by improving the management of total assets in which positively affect the firm profitability.

Similar to Chisti, (2012) studied the effect of efficiency and profitability for the 16 company in India and found that the are inverse relationship between the inventory, account receivable and cash conversion cycle, but in contrast the accounts payables show the positive relationship.

Whereas, Ganesan (2007) analyze the efficiency of the working capital management for the telecommunication equipment industry and used day's sales outstanding, days inventory outstanding, day payable outstanding, day's working capital, and current ratio to represent the working capital management efficiency. Meanwhile, cash conversion efficiency and current ratio are used to measure the liquidity and income to total assets and income to sales used to measure the profitability. Results of the empirical analysis show that liquidity and profitability are negative relationship towards the working capital management.

Study done by Alipour, (2011) on the relationship between working capital management and profitability found that there is significant relationship and from the empirical results show that the working capital management play a big roles in the profitability in Tehran stock exchange and the study suggest that to decrease the receivables accounts and inventory in order to increases the shareholders values.

Similarly to the study done by, Richard et.al (2013) to examine the effects on working capital management on profitability in manufacturing firms in Ghana and found that components in working capital management must be managed properly to avoid problem on liquidity crisis and the short-term liabilities since it's also play a big role in companies. For this research, he used account receivable days, account payable days, cash conversion cycle, current assets ratio, size and current asset turnover as an independent variables and return on assets as present for profitability for the dependent variables.

Corazon L. Magpayo (2011), highlighted the importance of working capital management and financial leverage on the firms' financial performance is emphasized in this study to bring attention of business leaders to the obvious but is often neglected. The next step is to look into the best practices of top performing companies. What working capital management strategies may be implemented to minimize investment in current assets, at the same time maximize use of financial leverage at the firm's acceptable financial risk appetite and concluded that aggressive working capital management policy reflected in low investments in current asset influences net income positively.

Nobanee et al. (2011) performed analysis on 2123 Japanese non-financial companies the key findings of their study advocated that managers can boost the FP of firms by decreasing cash conversion cycle (CCC).

According to Brealey et al. (2002), Fathi and Tavakkoli (2009) WCM is known as the management of CA of the firm. It handles the different CA and CL as well as involves in decisions regarding finance of the CA through debt and equity. Conclusively, WCM covers the major portion of capital in small and large organizations and is also important in managing the elements of supply chain.

The latest study conducted by Chashmsayadan, AghajanNashtaei, (2014) in order to explore the impact of WCM on the firms performance listed in Tehran stock exchange in perspective of Iran, on an emerging small firms from 2007 to 2011, the researchers also performed conceptual and empirical analysis in this regard, CCC and its elements acted as a key measure of WCM abilities of firms, two performance measures were taken into consideration in this study,

i.e., market as well as accounting measures, this study advocated that there is positive significant association of WCM with firms profitability, additionally, they also suggested that the more lucrative companies are that not as much forced toward their WCM.

Another study performed by Gulia (2014) to find out the impact of WCM on the profitability of the pharmaceutical sector by choosing sample of 60 firms from this sector, the analysis were made by using correlation and multiple regression analysis the findings clearly revealed that the WCM have positive significant impact on firms performance on the leading pharmaceuticals firms.

Afza, T. and MS Nasir (2007) found no significant relationship between working capital management policy and financial performance among the 208 public limited companies listed in the Karachi Stock Exchange. They measured aggressive working capital investment policy in terms of low level of investment in current assets as percentage of total assets. On the other side of the spectrum are companies with high investments in current assets vis-à-vis total assets, which they classified as advocating conservative working capital management policy.

Almazari (2013) investigated the relationship between the working capital management (WCM) and the firms' profitability for the Saudi cement manufacturing companies. The sample included 8 Saudi cement manufacturing companies listed in the Saudi Stock Exchange for the period of 5 years from 2008-2012. Pearson Bivariate correlation and regression analysis were used. The study results showed that Saudi cement industry's current ratio was the most important liquidity measure which effected profitability, therefore, the cement firms must set a trade-off between these two objectives so that, neither the liquidity nor profitability suffers. It was also found, as the size of a firm increases, profitability increased. Besides, when the debt financing increased, profitability declined. Linear regression tests confirmed a high degree of association between the working capital management and profitability

Akoto, Awunyo-Vitor and Angmor (2013) analyzed the relationship between working capital management practices and profitability of listed manufacturing firms in Ghana. The study used data collected from annual reports of all the 13 listed manufacturing firms in Ghana covering the period from 2005-2009. Using panel data methodology and regression analysis, the study found a significant negative relationship between Profitability and Accounts Receivable Days. However, the firms' Cash Conversion Cycle, Current Asset Ratio, Size, and Current Asset Turnover significantly positively influence profitability. The study suggests that managers can create value for their shareholders by creating incentives to reduce their accounts receivable to 30 days. It is further recommended that, enactments of local laws that protect indigenous firms and restrict the activities of importers are eminent to promote increase demand for locally manufactured goods both in the short and long runs in Ghana.

Research Objectives:-

- ❖ To discover the effect of working capital on profitability of firm
- ❖ To discover the effect of return on asset on profitability of firm
- ❖ To discover the effect of working capital on return on asset

Hypothesis:-

H1: There is positive effect of working capital management on profitability of firm.

H2: There is positive effect of return on asset on profitability of firm.

Data Methodology and Analysis:-

In this methodology permits a few information focuses to be pooled on every variable, which increases the degrees of flexibility fundamental in acknowledging more hearty financial evaluations. This investigation utilized information on all the 10 pharmaceutical organizations recorded on the Bombay Stock Exchange covering the period from 2011 to 2016. Data which were the audited financial reports were collected from the annual reports of Bombay Stock Exchange and the web portals of the organizations. Analyze the impacts of WCM on profitability of listed pharmaceutical organizations in India. Regression analysis applied by utilizing SPSS and results expressed in following three models are observed.

Model-I

$$Q = \alpha + \beta X + \varepsilon$$

Q = Profitability

X = Working Capital

Y = Return on Assets

ε = Error

Table 1:- Model is estimated using Ordinary Least Square technique assuming linearity and got the following results

Q = 3.462 + 0.562X,		R2 = 0.812
Std. Error	78.109	0.536
t-stat	0.468	15.279
P-Value	0.986	0.000

Results said in display I above indicating positive impact of working capital on profitability of firms. Efficient management and adequate measure of working capital increased the profitability of the organizations

Model-II

$$Q = \alpha + \beta Y + \varepsilon$$

Table 2:- Model-II is estimated using Ordinary Least Square technique assuming linearity and got the following results.

Q = -172.187 + 0.462Y,		R2 = 0.772
Std. Error	82.237	0.032
t-stat	-1.231	16.106
P-Value	0.078	0.000

Results mentioned in Model-II above showing positive impact of Return on Assets on profitability of the companies. Return on Assets measure relies on assets to generate profit and it is also measure of how much the company measures how effectively assets are being used for generating profit.

Model-III

$$Y = \alpha + \beta X + \varepsilon$$

Table 3:-Model-III is estimated using Ordinary Least Square technique assuming linearity and got the following results.

Q = 377.214 + 0.988Y,		R2 = 0.891
Std. Error	73.237	0.067
t-stat	7.849	30.024
P-Value	0.001	0.000

Results said in Model-III above indicating positive impact of working capital on Return on Assets of the organizations. Organizations with adequate measure of working capital have enough on return on assets. The organizations having better working capital have enough profit for assets which influences the increase in profitability of organizations.

In addition, these results indicated that long-term asset changes would increase production and bring benefits to capacity because such investment would be followed by profitability power and finally it will increase the total value of a company. The changes in fixed assets reflect the organizations' & business units' basic guidelines, particularly of the productive units and have a significant effect on their economic successes in the long run.

Conclusion:-

The study showed a positive effect of working capital management on profitability, working capital on return on assets and impact of return on assets on profitability of 10 different pharmaceutical companies in India. Considering the outcomes it is obvious that effective management of working capital can lead the firm towards profitability. The organizations should be enhancing their receivables and stock components for adequate working capital. Efficient management of inventories improves the profitability of organizations. It is concluded that organizations with higher working capital have higher proportion of profitability. What's more, firms with higher ratio of return on assets have higher proportion of profitability. The organizations having adequate working capital also have enough return on assets. So it is watched that organizations having adequate extent of working capital have positive effect on return on asset and profitability of the organizations.

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