

# Working Capital Position in Leading Indian Companies: A Comparison Vis-a-Vis Profitability

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## Abstract

*It is widely recognized that working capital constitutes an important aspect of corporate financial management with considerable bearing on shareholder value creation. However, the practices of leading companies do not always suggest that they concentrate on optimizing the key parameters of working capital as against looking at growth parameters. On the contrary, strategically, a number of companies have allowed their working capital positions to suffer in compensation for growth. The study looks at the broad general parameters of Indian companies as regards their working capital and seeks to establish relationship, if any, with these companies' profitability. Predictably, such an overall relationship does not seem to exist.*

**Key words:** Working capital, profitability, Nifty, Market capitalization

## Introduction

Working Capital Management is an important part of a company's financial competence. While emphasizing the importance of long-term capital planning and growth, companies are discovering that an efficient management of their short-term funds would result in higher profitability and consequent shareholder value addition.

It is always difficult to draw generalized principles on good practices in working capital management. This is because some industries suffer from a greater requirement of working capital as compared to certain other industries. Also, the inherent practices within a set of industries are sometimes so strong that no new company within that sector can afford to change the style. Also, high growth companies do not have the problem of resources crunch which on occasions cripples the smaller players.

## The study

In this study we look at the working capital performance and its relationship with

profitability in respect of leading Indian companies. The sample consists of all the companies which come within the NIFTY<sup>1</sup> category. The National Stock Exchange has certain well-defined parameters for selection of companies into the NIFTY category and the index represents by and large the most highly market capitalized companies in the country. Since Market Capitalization is often symbolic with growth, we can deduce that the NIFTY companies represent the high-growth segment in the country.

The sample consists of all the companies in NIFTY, except those with no particular working capital emphasis. Thus, banking companies, financial institutions and similar companies totaling 14 have been excluded and the remaining 36 are taken as the sample for the study.

Data relating to these companies have been gathered by using the PROWESS<sup>2</sup> database, where the ratios have been computed using their own standardized procedure. The data chosen for analysis is Profit After Taxes, Current Ratio (defined as the ratio of the

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<sup>1</sup> CNX S&P NIFTY is the popular share prices index managed by the National Stock Exchange.

Current Assets upon Current Liabilities), Quick Ratio (defined as the ratio of Current Assets minus Inventories upon Current Liabilities), Days Sales Outstanding (defined as the Accounts Receivable divided by the average daily sales and the Gross Working Capital Cycle (giving the picture of the operating cycle of working capital in days).

The study focuses on the relationship of working capital management to overall Profit After Tax. The emphasis is on looking at the correlation between individual parameters of working capital listed above and the Profit After Tax. Further, a separate analysis is made in respect of those companies in the sample which have a current ratio equal to or exceeding 1. Tests performed to test linear regression. The statistical analysis includes a look at the basic parameters like the average value, standard deviation and the highest and lowest values.

So the question arises as what is the optimum level of working capital for a company and as to whether a model can be developed which will take into account all the parameters and arrive at this figure. While a firm answer to the above would depend on the peculiar circumstances of each company, it is quite possible for us to aid our decision-making by analyzing various components of working capital and the impact that they might have on overall profitability. The discussion hereunder seeks to touch upon these measures from the strategic perspective.

Beffs and Timothy(2005)<sup>3</sup> have shown that thorough revenue reengineering can dramatically improve hospital profits. While

the model is primarily applicable to hospitals in the study, there is no reason why the principles cannot be taken up by other companies as well. As the authors say in the abstract "Even more surprising are the number of CEOs who feel they do not need to tune up their revenue cycle because their organizations are currently profitable. The dollars that are not realized as a result of an incomplete reengineering effort will, in all probability, be forever lost."

Van Horne (2002)<sup>4</sup> asserts that credit and collection policies, which are importance components of working capital management, are dependent on practices in other firms. He concludes that such practices are relating to the pricing of the product or services and must be viewed as a part of the entire competitive process. He summarizes the trade-off in practices by saying that the firm hopes to gain additionally by increased sales in compromising on the quality requirements in accounts and the consequent bad debts position.

Philosophio and Philosophio (1999)<sup>5</sup> develop a probabilistic model to the issue of optimizing capital structure. Although the paper primarily looks at the leverage levels, it also considers working capital aspects. A quantitative assessment of the optimal debt to equity ratio is made and the probability of bankruptcy in the future as a function of the time interval remaining till bankruptcy is measured. The study finds that the optimal debt/equity ratio appears to be dependent on current corporate profitability, liquidity and other fundamental factors. Factors of macro-

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<sup>2</sup> PROWESS is the registered database of the Center for Monitoring Indian Economy.

<sup>3</sup> Beffs Peter and Timothy J, Redesigning the Revenue Cycle, Healthcare Executive, July, 2005

<sup>4</sup> Van Horne James, Financial Management and Policy, 12th edition, Pearson

<sup>5</sup> Philosophos Lonid and Philosophos Vladimir (1999), Optimization of Corporate Capital Structure – a probabilistic Bayesian approach, International Review of Financial Analysts, 8.3, 1999

economic environment also seem to be relevant. Using Altman's type of bankruptcy analysis, the authors find that the optimal Total Debt/Equity ratio depends not only on corporate profitability, but also on its activity ratio and the relative amounts of working capital and retained earnings.

## Results

A study of the correlation between Profit After Tax and the key parameters of working capital yielded the following results:

Year	PAT with Current Ratio	PAT with	PAT with Quick Ratio Debtors	PAT with Average Working Capital Cycle
2002	5.5%	2.7%	-12.9%	28.2%
2003	-8.2%	-11.2%	-12.9%	40.1%
2004	-24.1%	-25.2	-15.5%	44.9%

The correlation is not significant with any single parameter for any of the years. In fact it has been so low that one has to conclude that the working capital parameters do not have a relationship with the profitability of the sample companies. This need not suggest that these companies ignore working capital totally, but only that individual parameters do not have a significant relationship with profitability in a generalized manner

There is no improvement in the results even when only companies having a current ratio of greater than 1. The key results of a regression analysis with Profits After Tax as the dependent variable and the Current Ratio as the independent variable gives the following results:

Year	Correlation	R <sup>2</sup>	Significance F
2002	-11.5%	.013	.551
2003	8%	.007	.636
2004	24.1%	.058	.157

The individual parameters have been analyzed for their key statistical properties and the results are shown below:

Year ->	2002	2003	2004
Mean Current Ratio	1.66	1.56	1.47
Largest Current Ratio	3.99	3.65	2.92
Smallest Current Ratio	0.61	0.66	0.61
Average Quick Ratio	0.74	0.75	0.74
Largest Quick Ratio	2.79	2.64	2.36
Smallest Quick Ratio	0.1	0.08	0.17
Average of Average Debtors (days)	46.17	43.36	39.46
Largest Average Debtors (days)	209.2	202.02	176.24
Smallest Average Debtors (days)	5.41	5.52	5.68
Average Working Capital cycle	175.99	152.20	152.20
Largest working capital cycle	563.55	450.51	450.51
Smallest working capital cycle	27.91	28.1	28.1

The above analysis shows that the basic parameters of working capital have remained uniform throughout the 3-year horizon under study.

## Observations and Conclusions

- Working Capital practices across industry parameters are more difficult to generalize than the intra-industry phenomenon. Even then, the study attempts to throw light on relative emphasis that leading firms give on working capital matters.
- Individual parameters of working capital are seen to be not having any correlation with Profits after Tax. This suggests that on an average, the improvement in working capital performance does not directly result in greater profits. The reason for this could be strategic. Firms might find that growth can be achieved only along a path that might result in working capital being at a non-optimal level, but resulting in greater incremental benefits
- Even when the study is restricted to companies in the sample having a current ratio of greater than or equal to 1, the position does not improve. This again

goes to suggest that firms do not, in a general plane, consider working capital optimization as a necessary prelude to profitability.

- Some of the observations suggest that working capital levels get decided based on compulsions of strategy of growth. The industry average of working capital is often decided this way. Although a reduction in the working capital level will result in an increase in profitability, this will be offset by the lost growth opportunities. In fact the figures from 2002 to 2004 of the leading high-growth companies would suggest that they may have sacrificed working capital efficiency for achieving higher levels of growth
- The study cannot give a ready pointer to the actual policy relating to components of working capital. Firstly, the role of inventory has been relegated in the study because inventory as a principal component will not be present in all industries. Secondly, some new industries have had to content with international competition and the first sacrifice in such circumstances is made in respect of working capital efficiency.
- To conclude, the fact that no relationship has been discovered in respect of working capital and profitability is counter-intuitive, but can be explained by the fact that the sample companies, which are high-growth oriented, would have had compensatory gains for the shortcomings here.

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PROWESS database of Centre for Monitoring Indian Economy

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