

# Liquidity and profitability tradeoff - a study of idea cellular limited

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**Abstract - In the present era, liquidity and profitability trade off have become a very important and crucial issue among any organisation. It is all about managing your current assets and current liabilities in such a way that profitability of the organisation will be optimum. Every organisation desires to have more and more current assets and least current liabilities, the profitability of the organisation adversely affected. In this research paper, along with our theoretical background, tries to evaluate the liquidity and profitability trade off in Idea Cellular Limited, one of India's most promising telecommunication service providers. This paper is based on secondary data available from 2010-11 to 2015-16.**

**Key Words - Liquidity, Profitability, Trade-Off, Current Assets, Current Liabilities.**

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## INTRODUCTION

**Liquidity** - To meet your daily financial obligations, you have to sufficient money in the form of Cash. Alternatively, assets which can be easily converted into cash.

**Profitability**- Ability of a company to use its resources to generate revenues in excess of its expenses. In other words, there is a company's ability of generating profits from its operations.

**Liquidity Vs Profitability**- Liquidity and Profitability are the two corners of a straight line. If you are on the line and move towards one, you have to move away from the other. In other words, there is a trade-off between liquidity and profitability.

## COMPANY PROFILE

**Idea Cellular** (commonly referred to as simply **Idea**, and stylised as *Idea*) is an Indian mobile network operator based in Mumbai, Maharashtra. Idea is a pan-India integrated GSM operator offering 2G, 3G and 4G mobile services. Idea is India's third largest mobile operator by subscriber base. Idea has 191 million subscribers as of 31 December 2016.

Idea Cellular Infrastructure Services is a wholly owned subsidiary of Idea Cellular which maintains the tower assets and network infrastructures.

During its inception in 1995, Aditya Birla Group, Tata Group and AT&T Wireless each held one-third equity in the company. Following AT&T Wireless' merger with Cingular Wireless in 2004, Cingular decided to sell its 32.9% stake in Idea. This stake was bought by the remaining two stakeholders equally. Tata forayed into the cellular market with its own subsidiary, Tata Indicom, a CDMA -based mobile provider and in April 2006, Aditya Birla Group announced the acquisition of the 48.18% stake held by Tata Group at INR 40.51 a share amounting to INR 44.06 billion with 15% of the stake acquired by Aditya Birla Nuvo and the remaining by Birla TMT holdings Private Ltd. both A V Birla family owned companies. Malaysia based Axiata bought a 19.96% stake in the company in 2009.

Idea competes with other major mobile operators including Airtel, Vodafone, BSNL, Reliance Communications, Aircel, Telenor and Tata DoCoMo. While Idea competed very closely with the then smaller operators like Reliance Communications, BSNL, Tata, Aircel in circa 2006-07, as of 31 Dec 2015, Idea has gone far ahead of the rest of these competitors clocking a Revenue Market Share of over 18.5% while the rest remain below 9%. Over the last 3 years, Idea has cornered an incremental Revenue Market Share of 33% giving tough competition to market leaders Airtel and Vodafone by earning 1/3rd of the incremental market - way above its fair share of the market.

On 19 May 2010, in the 3G spectrum auction Idea paid ₹57.68 billion (US\$860 million) for spectrum in 11 circles. Idea launched its first 3G services in 2011. As of 31 Mar 2016, Idea Cellular offers 3G services on its own spectrum in 13 telecom service areas—the latest being Delhi (NCR) and Kolkata. Idea has now launched its own 4G LTE services in over 350 towns across 10 telecom service areas including its leadership service areas like Maharashtra, Kerala, MP&CG, AP&T, Punjab and Haryana. It now provides 4G services in the service areas of Karnataka and Tamil Nadu covering large metros and mini metros of Chennai and Bengaluru.

Idea strengthened its customer base after the launch of MNP in India. As per information available in the public domain, Idea leads the net port ins and is ahead of both Airtel and Vodafone in gaining from Mobile Number Portability.

## Merger with Vodafone India

On 20 March 2017, Idea and Vodafone India announced that their respective boards had approved a merger of the two companies. The merger will not include Vodafone's 42% stake in Indus Towers Ltd. The merger will create the largest telecom company in India by subscribers and by revenue. Under the terms of the deal, the Vodafone will hold a 45.1% stake in the combined entity, the Aditya Birla Group will hold 26% and the remaining shares will be held by the public. The merger is expected to be completed by March 2019, and the newly merged entity will named at a later date.

## REVIEW OF LITERATURE

**Agarwal, J.D. (1988)** formulated the working capital decision as a goal programming problem, giving primary importance to liquidity, by targeting the current ratio and quick ratio. The model included three liquidity goals/constraints, two profitability goals/constraints, and, at a lower priority level, four current asset sub-goals and a current liability sub-goal (for each component of working capital). In particular, the profitability constraints were designed to capture the opportunity cost of excess liquidity (in terms of reduced profitability).

**Chakraborty (2008)** evaluated the relationship between working capital and profitability of Indian pharmaceutical companies. He pointed out that there were two distinct schools of thought on this issue: according to one school of thought, working capital is not a factor of improving profitability and there may be a negative relationship between them, while according to the other school of thought, investment in working capital plays a vital role to improve corporate profitability, and unless there is a minimum level of investment of working capital, output and sales cannot be maintained - in fact, the inadequacy of working capital would keep fixed asset inoperative.

**Singh (2008)** found that the size of inventory directly affects working capital and its management. He suggested that inventory was the major component of working capital, and needed to be carefully controlled.

**Coskun et al (2008)** studied integrative methods for improving business processes. Their approach involved determining and analyzing the weak points and reducing the weakness degrees. They suggested a four-phase business process improvement framework: start-up, self analysis, defining improvement strategy for making changes, feedback, and continuous improvement. They found that decision problems in process improvement could be structured to provide input data suitable for multi-criteria decision making techniques.

**Lee and Kang (2008)** developed a model for inventory management for multiple periods, considering not only the usual parameters, but also price/ quantity discounts, and storage and batch size constraints. The model is formulated as a mixed binary integer programming problem minimizing the total cost of materials in the system, and the optimal solution determines an appropriate inventory level for each period and the optimal purchase amount in each period.

**Garcia-Teruel and Martinez-Solano (2007)** studied the effects of working capital management on the profitability of a sample of small and medium-sized Spanish firms. They found that managers can create value by reducing their inventories and the number of days for which their accounts are outstanding. Moreover, shortening the cash conversion cycle also improves the firm's profitability.

**Cote and Latham (1999)** explored the limitations of the traditional measures of working capital management and presented alternative measures based on earlier work in the finance literature. They also proposed a new ratio, the —merchandising ratio, which measured the net effect of a firm's working capital management strategy.

**Rifai (1996)** discussed the limitations of linear programming in decision-making, and suggested the use of goal to handle problems with multiple objectives. He advocated caution in using the goal programming, since an improper structure of a goal programming model can induce misleading results.

**Rafuse (1996)** argued that attempts to improve working capital by delaying payment to creditors are counter-productive, and that altering debtor and creditor levels for individual tiers within a value system will rarely produce any net benefit. He proposed that stock reduction generates system-wide financial improvements and other important benefits, and suggested that, to achieve this, companies should focus on stock management strategies based on —lean supply-chain techniques.

## RESEARCH METHODOLOGY

For the purpose of this study we have taken the last six year data. With the help of this data, we will try to evaluate the relationship between profitability and liquidity.

**NULL HYPOTHESIS-** There is a negative relationship between profitability and liquidity.

**ALTERNATIVE HYPOTHESIS-** It will be opposite to null hypothesis. It means that there is not negative relationship between profitability and liquidity.

**Position of Liquidity in Idea Cellular Limited**

Year	Current Assets (CA) in Cr.	Current Liabilities (CL) in Cr.	Current Ratio (CR)	Working Capital In Cr.
2010-11	29470.3	80807.23	0.36	-51336.93
2011-12	23883.13	82937.49	0.29	-59054.36
2012-13	30051.03	77807.01	0.39	-47755.98

2013-14	21136.82	81150.97	0.26	-60014.15
2014-15	149452.13	167131.78	0.89	-17679.65
2015-16	37780.76	127694.3	0.30	-89913.54

The ideal ratio among current assets and current liabilities is said to be 2:1, but in Idea Cellular the current ratio is quite poor. It means that company is more concerned about profitability rather than liquidity.

#### Profitability Analysis

Year	Current Assets (CA) in Cr.	Fixed Assets (FA) in Cr.	Total Assets (TA) in Cr.	Current Liabilities (CL) in Cr	Capital Employed (CE=TA-CL) In Cr.	EBIT (Earnings Before Interest & Tax in Cr.	ROEC (EBIT/ROEC)
2010-11	29470.3	2,27,256.75	2,56,727.05	80807.23	1,75,919.82	11,551.00	6.57
2011-12	23883.13	243765.3	2,67,648.43	82937.49	1,84,710.94	17501	9.47
2012-13	30051.03	267819.71	2,97,870.74	77807.01	2,20,063.73	21021	9.55
2013-14	21136.82	374042.38	3,95,179.20	81150.97	3,14,028.23	32301	10.29
2014-15	149452.13	371933.52	5,21,385.65	167131.78	3,54,253.87	52707	14.88
2015-16	37780.76	709501.44	7,47,282.20	127694.3	6,19,587.90	58082	9.37

#### Relationship between liquidity and profitability (Spearsman's Rank Correlation Method)

Year	Current Ratio (CR)	Rank	ROEC	Rank	D (Rank Difference)	D square
2010-11	0.36	3	6.57	6	-3	9
2011-12	0.29	5	9.47	4	1	1
2012-13	0.39	2	9.55	3	-1	1
2013-14	0.26	6	10.29	2	4	16
2014-15	0.89	1	14.88	1	0	0
2015-16	0.30	4	9.37	5	-1	1
					Total	28

$$\begin{aligned}
 r &= 1 - 6\sum D^2 / n^3 - n \\
 &= 1 - 6 \times 28 / 6^3 - 6 \\
 &= 1 - 168 / 210 \\
 &= 1 - 0.80 \\
 &= 0.20
 \end{aligned}$$

#### T test analysis

$$\begin{aligned}
 r &= r \sqrt{n-2} / \sqrt{1-r^2} \\
 &= 0.20 \times \sqrt{6-2} / \sqrt{1-(0.20)^2} \\
 &= 0.20 \times \sqrt{4} / \sqrt{1-0.04} \\
 &= 0.20 \times 2 / 0.96 \\
 &= 0.4167
 \end{aligned}$$

Value of  $t$  at 5% level of significance of  $(n-2) = (6-2) = 2.776$ . Our computed value is less than the table value which means null hypothesis is accepted. It means that there is a negative relationship between profitability and liquidity.

### CONCLUSION

In present era, liquidity and profitability trade off has become very important issue in any organisation. If the firm decreases its liquidity, the profitability of the firm would be high. So the result shows that there is a negative relationship between profitability and liquidity of the firm. So in other words we can say that there is essential to maintain the balance between liquidity and profitability of the firm.

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