Wipro's Acquisition of Promax Application Group

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On 30th April 2012, Wipro announced acquisition of Promax Application Group (PAG) based out in Australia. The deal value was pegged at AUD 35 million (Australian dollar). Given the Promax's significant penetration in the growing analytics space, the deal was expected to give Wipro a major headwind in this space dominated by few players. An acquisition of this nature is certainly expected by the management to contribute positively by boosting both top-line as well as bottom-line over several years.

The present case seeks to critically look at the acquisition undertaken by a major player in the Information Technology (IT) sector like Wipro Ltd., from the perspective of strategy as well as financial synergy. This would necessarily enable the participants to remain sensitive to the broader issues encountered while undertaking acquisitions.

It is also not uncommon to find companies flush with cash engaging in buyouts to justify judicious employment of cash that seeks to maximize the interests of shareholders. Otherwise, it is common for firms flush with cash resorting to distributing cash dividends or engaging in buyback programs to reward the shareholders.

From the financial synergy point of view, it will be interesting to observe the impact of acquisition announcement made by Wipro Ltd., on April 30th, 2012 on the wealth status of shareholders. The overarching question that needs to be addressed is whether this acquisition announcement led to the maximization of returns for the

shareholders. In either case, the reasons can be traced to the core IT operations of the enterprise to draw meaningful inferences.

In order to establish the impact of the above acquisition on the wealth status of shareholders, the popular technique of Event-study methodology is employed. Event-study is employed by computing the Cumulative Abnormal Returns (CAR) over a given event-window to determine whether the acquisition announcement turned out to be wealth accretive or decretive.

Observe that application of Event-study involves the following steps:-

1. The first step involves tracing the announcement day to capture the impact of the 'event' on share prices. The greater the caution exercised in choosing the announcement date, the more robust are the results likely to be.

2. The second step involves tracing the returns on stock and returns on market over a clean-window (normally defined as an event-window period unaffected by the impact of the event). Also, clean-window essentially bears the attribute of series of stock returns with least-possible 'statistical noise'.

3. The third step involves regressing return on stock prices (being the dependent variable) over the return on market index (being the independent variable) over a 'clean-window'.

The same is expressed in the form of equation given below

$$\mathbf{R_i = \alpha + \beta(R_{mt})} \qquad \text{Eq. (1)}$$

where

R_i = Return on stock observed over a clean-window

α = Intercept of the regression equation

β = Slope of the regression equation

R_{mt} = Return on market index observed over a clean-window

4. The fourth step involves computation of 'Abnormal Return' over a define event-window period. An event-window period is characterized by series of stock returns observed over the announcement day (defined as day '0'). Using the observed value of stock returns over different event-windows, it is possible to decipher the impact of a corporate event (like Mergers & Acquisitions) on the wealth status of shareholders.

$$\textbf{AR = Actual Return – Expected Return} \qquad \text{Eq. (2)}$$

given that....

$$\textbf{Actual Return} = \frac{(P_1 - P_0)}{P_0}$$

P_1 = Price of the security on day 1

P_0 = Price of the security on day 0

$$\textbf{Expected Return} = \alpha + \beta(Rmt)$$

α = Intercept value observed from the regression function performed over the clean-window (as given in Eq. 1)

β = Slope value observed from the regression function performed over the clean-window (as given in Eq. 1)

R_{mt} = Return on market index computed over an event-window

5. The fifth step involves summing the abnormal returns computed over the clean window to arrive at the Cumulative Abnormal Return (CAR). CAR is calculated as depicted below-

$$\textbf{CAR} = \sum_{t=-20}^{+20} \textbf{AR} \qquad \text{Eq. (3)}$$

where

AR = Abnormal Return computed over an event-window (say from -20 to +20 days surrounding the announcement day)

6. The last step entails identifying the statistical significance of the observed CAR value using t-test. This enables to identify whether an acquisition announcement resulted in any of the following:

a) Positive impact on the wealth status of shareholders

b) No impact on the wealth status of shareholders

c) Negative impact on the wealth status of shareholders

The t-statistic is computed using the following parameter

$$t-stat = \frac{CAR}{(\sigma_{AR}) * \sqrt{N}}$$

Eq. (4)

where

t-statistic = Computed t-statistic value

CAR = Cumulative Abnormal Return computed over the event-window (-20,+20) days

N = Number of days in the event-window (Example – -20,+20 involves 41 days)

σ_{AR} = Standard deviation of abnormal returns observed over clean window

In keeping with the objective of ascertaining the realization of financial synergy for the shareholders of Wipro Ltd subsequent to the acquisition announcement of Promax Analytics, the above delineated process was applied on the stock prices of Wipro.

The table below summarizes the results below which is followed by discussion of the same.

Table 1: CAR values observed for Wipro Ltd over different event-windows

Parameters	(-20,+20)	(-10,+10)	(0,+10)	(0,+20)
1. CAR	-0.04067 or -4.07%	-0.0045 or -0.45%	+0.032 or +3.2%	+0.0366 or +3.66%
2. Est SD	0.014694	0.014694	0.014694	0.014694
3. N	41	21	11	21
4. t-stat	-0.4324	-0.0671	0.6567	0.5437
5. Inference	Insignificant	Insignificant	Insignificant	Insignificant

It may be noted that the sign associated with a CAR value (+/-) is indicative of either the process of acquisition being either being wealth accretive or decretive for the shareholders. However, there must be caution in interpreting the same as the CAR value irrespective of the 'sign' might yield a 'zero value' owing to statistical insignificance.

Here, the management of Wipro Ltd may observe that observed CAR values over all the event-windows point to statistical insignificance at 5%. In the light of this observation, attaching any interpretation to CAR values will not be meaningful. What could be the reasons for attributable for such an observance?

a) Do the statistical insignificance of CAR values point out to the indifference of shareholders towards an acquisition of this nature (Given the war chest of cash reserves available with Wipro Ltd, an acquisition of the magnitude of 35 AUD probably doesn't capture the attention of the shareholders leading to their earning 0% on such deals).

It has been observed that statistical insignificance of CAR is not uncommon in acquisitions involving a smaller deal size.

b) Could the observance of insignificant CAR values highlight to the inherent weakness of the event-study methodology itself?

The management of Wipro is well poised to seek answers to the questions raised above. After all, the management is aware that out of every 3 mergers, 2 end up being failure eroding the wealth of shareholders of acquiring firm!

Exhibit I:

Stock Prices of Wipro (BSE) and Market Index (SENSEX) observed over different event-windows

Day	Wipro Ltd.	SENSEX
-20	439	17404.2
-19	441.65	17478.15
-18	445.05	17597.42
-17	442.7	17486.02
-16	437.6	17222.14
-15	444	17243.84
-14	444.6	17199.4
-13	438.95	17332.62
-12	420.95	17094.51
-11	420.95	17150.95
-10	421.1	17357.94
-9	427	17392.39
-8	421.25	17503.71
-7	424.4	17373.84
-6	423.7	17096.68

-5	442.4	17207.29
-4	410.15	17151.29
-3	403.75	17130.67
-2	405.8	17134.25
-1	406.4	17187.34
0	405.1	17318.81
1	404.5	17301.91
2	412.3	17151.19
3	414.9	16831.08
4	411.95	16912.71
5	404.15	16546.18
6	406.7	16479.58
7	407.45	16420.05
8	400.8	16292.98
9	402.5	16215.84
10	404.3	16328.25
11	391.1	16030.09
12	390.25	16070.48
13	390.8	16152.75
14	382.15	16183.26
15	381.5	16026.41
16	384.2	15948.1
17	392	16222.3
18	393.55	16217.82
19	398.85	16416.84
20	409.35	16438.58

Bibliography

http://articles.economictimes.indiatimes.com/2012-05-02/news/ 31538545_1_wipro-brokerage-firm-analytics, N Shivapriya, ET Bureau May 2, 2012

http://www.business-standard.com/india/news/wipro%60s-acquisition-strategy-paying-off/231106/ Raghuvir Badrinath Bangalore December 22, 2005

http://www.businessweek.com/it100/2006/57.htm IT 100 Special Report 2006

Berkovitch, E., & Narayanan, M. P. (1993). Motive for Takeovers: An Empirical Investigation. Journal of Financial & Quantitative Analysis , 28 (3), 347-362.

Gitman, L. J. (2007). Motives for Merging. In Principles of Managerial Finance (pp. 750-752). Pearson Education.