# The Pricing Behaviour on Buying-back IT Companies' shares in India

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#### **Abstract**

The paper attempts to examine the reaction of the market on four durations of the announcement of buy-back of shares with the comparative study of TCS and Infosys. On analyzing the share price behaviour of the two companies on India's Bombay Stock Exchange (BSE), the study found that the Premium offered on Pre-Buy-back mean price of both the companies TCS and Infosys followed a similar path of attracting existing shareholders with premium offered in the range of 15-15.9%. On the close of buy-back offer, two offerors commanded identical price range of discount on offer price on TCS share10.6% and Infosys 10.7%. The standard deviation of post-buy-back share price of TCS (98.505) is higher than the standard deviation of post-buy-back share price of Infosys (68.858). The study concludes that despite having identical responses for an entire four durations, TCS witnessed larger price fluctuation and higher risk than Infosys. Thus, Infosys devised buy-back offer price more prudently than TCS. The study findings may have important implications for all the market participants. The companies that may be proceeding for buy-back may feel confident by seeking identical responses of buy-back from the shareholders.

**Keywords**: Regulation on buy-back, buy-back of shares by IT Companies, offer Price on Premium, Pre-During and Post Buyback BSE share Pricing behavior.

#### I. INTRODUCTION

In the ever-changing global business environment, over-capitalized undercapitalized firms may need financial restructuring to ensure optimum utilization of shareholders' funds, and to keep the value of their stock high. Stock repurchase offers a way for corporations to return surplus cash to shareholders without increasing periodical dividend payouts. In effect, a stock repurchase is an investment by any company in its own stock by way of going back to its shareholders and offering to repurchase shares they hold. The stock repurchase is a way for corporations to

return surplus cash reserve to shareholders without increasing periodical dividend payouts

Buy-back of shares is a process wherein a company of buys back a certain percentage of its own shares from existing shareholders, thereby reducing the number of equity shares outstanding in the secondary market. It is used as an alternative method to distribution of cash dividends. Under the share buy-back offer, a company distributes its idle surplus cash among the shareholders, normally on a premium.

A company's choice of investing in its own shares via the buy-back option depends on the cash availability and financial health of the company. If a company's stock is perceived to be under-valued, when the company holds large cash reserves and is unable to identify profitable alternatives for further investment, buy-back of shares enables it to pay-off some of the surplus cash, and also bolster the stock price at the same time.

#### 2. Literature review:

Several empirical studies on the subject have reported that buy-back announcements have made a significant positive impact on market reaction to stock prices (Farooq, 2016; Gupta, 2016; Danda & Kaur, 2014; Harikrishna & Ramana, 2014; Nohel & Tarhan, 1998). At the same time, a few studies report an insignificant impact of the buy-back announcement on the market (Chatterjee & Mukherjee, 2015; Hyderabad, 2009). Reviewed literature indicates varying findings of researchers on the impact of buy-back of shares on stock prices.

In the USA, there is a lower announcement return in case of open market repurchases, than in tender offer repurchases, for a period of time. Accelerated share repurchase did not signal share undervaluation (Michel et.al.). Share buyback activity indicates an upward structural shift after the adoption of share buy-back (Grullon and Michley, 2004). Evans & Evans (2001) found that repurchasing firms failed to significantly improve the return in the post-announcement period. (Chazi et. al. 2018) found that in USA, frequent repurchases by an individual firm witnessed an upward trend with some periodical fluctuations.

Punwasi and Brijlal (2016) found a positive abnormal return in association with the buyback announcement. Stock buy-backs are beneficial for the corporations as they not only boost prices in the short run, but also the value of a corporation for the future investment (Edmans, 2017). In Sweden, a buy-back announcement is more favorable and there is a significant positive stock performance for companies making infrequent repurchases, as opposed to those making frequent repurchases (Ridder & Rasbrant, 2014).

In China, stock repurchase announcements have made a positive significant market effect in the entire event window that sends out positive signals to investors, (Gan et.al.). On empirically examining the stock price behavior in Japan, a

significant positive increase in response to the announcement is found. This analysis supported undervaluation as the motive of stock repurchases (Hatakeda & Isagava, 2004).

Indian offers on buy-backs witnessed a positive impact on stock returns. Abnormal Return (AR) and Cumulative Abnormal Return (CAR) were positive on event day and statistically insignificant at 5% level. It was also observed that after the announcement, there has been a negative impact on stock price returns (Danda & Kaur, 2014). (Pradhan and Kashilingam, 2015) found positive stock return in the long as well as the short run. Paired sample t-test found that share prices were influenced by the announcement where ANOVA proves that the announcement could not make any remarkable impact on the share price of the companies.

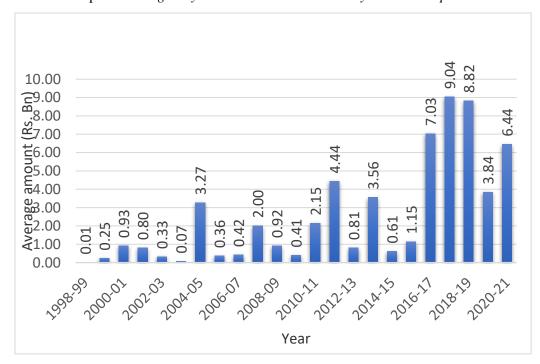
(Chakrobarty, 2008) concluded that the full impact of corporate announcements could extend over several years. Isa, Ghani & lee, (2015) found that firm made their repurchase after a period of consecutive price decline. Their study supports the existence of signalling effect with the undervaluation hypothesis. Gupta et.al., (2014) found that market had not given any scope for earning abnormal return. They found that there is no association with the announcement of buy-back in the Indian capital market. Seal and Matharu, (2018) have found that event firms are not showing overperformance. They concluded that it is possibly due to the reason that the firms in the same industry and that too of similar size tend to move together. The standard deviations of the returns of the event firms and the matched firms are calculated and found to be very similar.

#### 3. Background of Study:

Section 77 of the Companies Act, 1956 had laid the restriction on repurchase activity by a company in India. New provision 77A, 77AA and 77B has been added by an amendment in the Act, which permitted buy-back of shares by a company in India. At the same time Securities Exchange Board of India had notified the Securities Exchange Board of India (Buy-back of Securities) Regulations, 1998. Indian companies Act, 2013 with section 68, 69 and 70 and SEBI (Buy-back of Securities) Regulations, 1998 apply to regulate buy-back of shares or specified securities.

During FY 2016-17, the average buy-back offer had been Rs 7.03 billion (aggregate amount: Rs 344.68 billion of 49 companies), the highest in 19 years. Though, only one IT major Wipro offered a buy-back of Rs. 25.00 billion in June 2016. During FY 2017-18 in India, the average buy-back offer surged to Rs 9.03 billion (aggregate amount: Rs 533.07 billion in 59 companies), and out of it, IT Companies been 88.9% with a contribution of Rs 473.60 billion.

The trend continued during FY 2018-19, average buy-back offer been of Rs. 8.82 billion (aggregate amount: Rs. 555.86 billion by 63 companies) and out of it, IT Companies had a 75% contribution of Rs 416.98 billion. By FY 2019-20 average buy-back offer declined to Rs. 3.84 billion (aggregate amount: Rs. 199.72 billion by 52 companies) and, IT Companies had made 62.3% of the contribution of Rs 124.56 billion. Refer graph 1



Graph: 1 Average Buy-back Amount Announced by Indian Companies

Source: https://www.primedatabase.com/buy\_demo.asp accessed on24/09/2021

In the above context during FY 2016-17 to FY 2019-20, buy-back offers by Indian IT Companies had been Rs. 25 billion, Rs. 470.63 billion; Rs. 416.98 and Rs.124.56 billion respectively. Historically, FY 2017-18 has remained a landmark towards analyzing the Pricing behavior of Buying-back IT Companies' shares in India. In FY 2017-18, TCS made the highest buy-back offer (Rs. 160 billion) followed up with Infosys (Rs. 130 billion). Thus the two companies were taken to study the effect associated with the event of buy-back.

#### 4. Objective

Two Research Objectives are laid out, in the context of analyzing Buyback offers of Two Indian IT Companies TCS and Infosys, both the listed shares on BSE, India: -

- 1. To determine the pattern of 'Premium on buy-back offer Price' on shares and Investors' response there upon; and
- 2. To Analyze the pattern of share market price behavior of TCS and Infosys in four durations (i) Pre-Buy-back announcement (ii) post-Buy-back announcement (iii) During buy-back and (iv) post-Buy-back.

#### 5. Research Methodology:

Relevant data from secondary sources has been collected for exploratory and empirical analysis from Letter of Offer of Companies, share price of TCS and Infosys on BSE, CMIE Prowess database, and various research articles. A comparative study of mean share price and histograms has been made, to process and

analyze the available data to reach logical findings, interpretations, and conclusions.

## 6. Buy-back offers of TCS and Infosys:

6.1 Tata Consultancy Services (TCS):

Leading Indian IT Company TCS, listed on BSE is the highest Buy-back offerer Company since inception of Buy-back in India. The Board of Directors of TCS in its meeting held on April 17, 2017, approved a proposal to buy-back shares, and an announcement to this effect was made on April 19, 2017. The amount of Buy-back offer was 21.89 % of aggregate of fully paid-up equity share capital and free reserves

The buy-back offer of TCS included a few of the ingredients mentioned as under-

- i. For up to 5,61,40,351 Equity shares with a nominal price of Rupee One each, fully paid;
- ii. From all existing shareholders / beneficial owners of equity shares of the Company;
- iii. For an aggregate amount not exceeding Rs. 160 billion;
- iv. As on Record Date (May 08, 2017), on a proportionate basis;
- v. Via the 'Tender Offer' process;
- vi. At Rs. 2,850 (Rupees two thousand eight hundred and fifty only) per equity share.

The Registrar to the Offer considered 1, 20,421 valid applications for 12,47,49,486 equity shares in response to the buy-back by TCS, resulting in the receipt of subscriptions up to 2.22 times (approximately).

#### 6.2. Infosys Limited:

The Board of Directors of Infosys in its meeting held on August 16, 2017, approved a proposal to

buy-back shares, and an announcement to this effect was made on August 19, 2017. The Offer Size is 20.51% of total fully paid-up share capital and free reserves of the Company.

The buy-back offer of Infosys included a few of the ingredients mentioned as under-

- i. For up to 11,30,43,478 fully paid-up equity shares of face value Rs. 5 each
- ii. From all the existing shareholders / beneficial owners of equity shares of the Company
- iii. For an aggregate amount not exceeding Rs. 130 billion;
- iv. As on Record Date (November 1, 2017), on a proportionate basis,
- v. Via the 'Tender Offer' process,
- vi. At Rs. 1150 per equity share."

The Registrar to the Offer considered 14,36,046 valid applications for 56,50,95,837 Equity shares to be bought back, in response to the buyback by Infosys resulting in the receipt of the subscriptions up to 4.99 times (approximately).

#### 7. Analysis and Findings:

For analysis price behaviour of TCS (between March 31 to June 1, 2017) and Infosys (between August 3 to January 2, 2017) has been divided into four durations, as under

- (i) pre- buy-back announcement, spanning a trading period of 10 days and 11 days;
- (ii) post- buy-back announcement, spanning a trading period of 11 days and 11 days; and
- (iii) during buy-back spanning a trading period of 11 days and 11 days; and
- (iv) Post buy-back spanning a trading period of 11 days and 11 days.

		Tata Consultancy Services			offer Price: Rs. 2850/-			
(a)	(b)	(c)	(d)	(e)	( <b>f</b> )	(g)	(h)	
re-buy-back Mean Price,	Post Announcement mean Price	During buy- back mean Price	Post-Buy- back mean Price	(b-a)/a *100	(c-b)/b *100	(d-c)/c *10	0 (d-a)/a* 100	
Trading days 10: March 31-April 17, 2017)	Trading days 10: (April 19- May 3, 2017).	0 ,	Trading days 10: (June 1 - 14, 2017).					
Rs 2395.89	Rs 2309.5	Rs 2551.52	Rs 2547.03	-3.60 %	10.47 %	-0.17 %	6.30 %	
Ç	% Change of mear	n share price and o	ffer Price [(Mean	Price-Offer	price/Offer p	price) * 100]		
-15.9	-18.9	-10.4	-10.6					
	1	Infosys India Lim	ited	of	fer Price: Rs.	1150/-		
(a)	<b>(b)</b>	(c)	(d)	(e)	( <b>f</b> )	(g)	(h)	
re-buy-back mean Price,	Post Announceme nt mean Price	During buy- back mean Price	Post-Buy- back mean Price	(b-a)/a *100	(c-b)/b *100	(d-c)/c *100	(d-a)/a* 100	
Trading days 11: Aug 3-18, 2017)	Trading days11: (Aug 19- Sept 5, 2017).	Trading days11: (Nov 30 - Dec 14, 2017).	Trading Days 11: (Dec 15 - Jan 2, 2018).					
	<b>(b)</b>	(c)	( <b>d</b> )	(e)	<b>(f)</b>	(g)	<b>(h)</b>	

-10.7

Table 1: Comparative analysis of Mean share Price of TCS and Infosys

On comparing the Mean share Price Behaviour of TCS and Infosys, found that: -

-13.6

-21.02

-15.0

- I) Pre-Buy-back announcement(s) mean share price of TCS was 15.9% less than buy-back offer price of Rs. 2850, and Infosys also, very close to 15% less than the offer price of Rs. 1150. It can be noticed that both the Companies offered a premium in a close range of 15-15.9% on Pre- offer mean market price of respective shares:
- II) Post-Buy-back Announcement mean of the share market price of TCS was 18.9% less than the offer price Rs. 2850, and of Infosys, 21.02% less than the offer price Rs. 1150, again in a close range of each other;
- III) During buy-back offer, the mean share market price of TCS was 10.4% less than the offer price Rs. 2850, whereas of Infosys, 13.6%

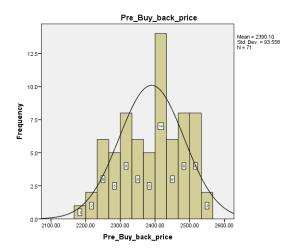
- less than the offer price Rs. 1150. That to, Infosys suffered from a lower price discovery ratio than TCS, during the period, whereas the premium on offer price was in the similar range of 15-15.9%.TCS attracted only 2.22 times offer applications to buy-back whereas, Infosys received much more 4.99 times on suffering from a deeper discount;
- IV) Post-Buy-back means the market share price of TCS was 10.6% less than the offer price Rs. 2850, and Infosys also very close, 10.7% less than the offer price Rs. 1150. That, both the Companies stayed in an identical range of market response to Post- buy-back pricing behaviour.

#### 8. Histogram Analysis

#### 8.1 Pre buy-back Announcement Analysis

### 8.1.1 Pre-Buy-back Announcement share Price of TCS

#### [Graph 2 (a)]



#### Analysis:

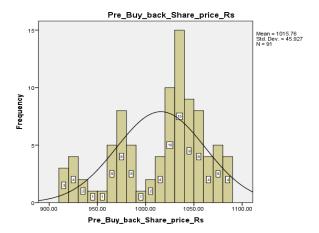
In above graph2 (a): Pre buy-back market share price of TCS listed on BSE, the horizontal axis represents share price interval with the range between >Rs2100 and < Rs2600; the vertical axis represents the observations of share price stood on the number of days (shown within Bar). Observations on the vertical axis represent one closing price of each 71 days in prebuy-back duration i.e. aggregate numbers of observations have been 71. Area of Rectangular Bar represents the observations associated with the corresponding interval of the prevailing price.

Pre buy-back TCS highest share price reached its highest to Rs 2566, and the highest observations (14), range of share price were Rs 2400-2433. The mean share price of 71 days Pre buy-back period was Rs 2390.10.

Range of price with varied observation(s)is found to be lower than ultimate offer buy-back price of Rs 2850 announced, indicating that premium offer on buy-back of share to 71 days mean price Rs 2390.10 commanded a premium of 19.24%.

### 8.1.2 Pre-Buy-back Announcement share Price of Infosys

#### [Graph 2 (b)]



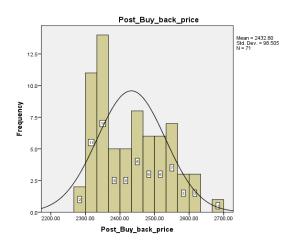
#### Analysis:

In above graph 2 (b): Pre buy-back market share price of Infosys listed on BSE, the horizontal axis represents share price interval with the range between >Rs900 and < Rs1100; the vertical axis represents the observations of share price stood on the number of days (shown within Bar). Observations on the vertical axis represent one closing price of each 91 days in pre-Buyback duration i.e. aggregate number of frequencies been 91. Area of Rectangular Bar represents observations associated with the corresponding interval of the prevailing price.

Out of 91 observation(s) recorded, 42 observations(s) indicate that the closing share price reached within the range of Rs 1020 to Rs1060. The highest observations (15 days) stood in the range of Rs 1030-1040 and the highest price in the range of Rs 1080-1090 was shown on observations of 4 days. Range of price with varied observation(s) is found to be lower than ultimate offer buy-back price of Rs 1150 announced, indicating that buy-back of shares to 91 days mean price Rs 1015.06 commanded a premium of 13.3%.

- 8.2 Post buy-back Announcement Analysis
- 8.2.1 Post-Buy-back Announcement share Price of TCS

#### [Graph 3 (a)]



#### Analysis:

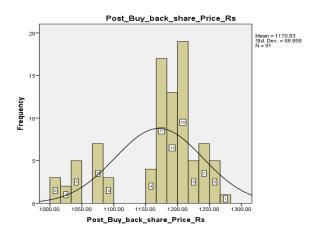
In graph 3 (a), the horizontal axis represents post-Buy-back closing share price of TCS listed on BSE, with price interval within the range between>Rs2200 and < Rs 2700; the vertical axis represents the observations of share price stood on the number of days (shown within Bar). Observations on the vertical axis represents one closing price of each 71 days in post-Buy-back duration i.e. aggregate number of observations(s) to be 71.

The area of the rectangular Bar represents the observations associated with the corresponding interval of the prevailing price. Post-Buy-back TCS highest share price reached Rs 2700 with the highest observations 14, keeping a range of share price Rs 2366-2400. The mean share price of 71 days Post buy-back period is found to be Rs 2432.80.

That, post-Buy-back share price range of Rs 2366-2400 had witnessed highest observations (14 days); followed up with Rs. 2300-2333(11 days); Rs 2433-2466 (8 days), respectively. The range of price with varied observations (s) is found to be lower than the ultimate offer buy-back price of Rs 2850 announced, indicating the fact that buy-back of share to 71 days mean price between Rs 2432.80 commanded a premium of 17.14%.

8.2.2 Post-Buy-back Announcement share Price of Infosys

#### [Graph 3 (b)]



#### Analysis:

In graph 3 (b), the horizontal axis represents the post-Buy-back closing share price of Infosys listed on BSE, with price interval within the range between >Rs1000 and < Rs1290; the vertical axis represents the observations of share price stood on the number of days (shown within Bar). Observations on the vertical axis represents one closing price of each 91 days in post-Buy-back duration i.e. aggregate number of observations(s) to be 91.

The area of the rectangular Bar represents the observations associated with the corresponding interval of the prevailing price. Post-Buy-back Infosys share price has been in the range of Rs 1200-1217, that witnessed the highest observations (19 days); second Rs 1167-1183(17 days); third Rs 1183-1200 (13 days) and fourth in second slot Rs 1233-1250 (7 days).

That, 56/91 (61.5 %) observation(s) were in the narrow share price range of Rs 1160 to Rs 1250 out of Rs 1000 to Rs 1290 (29.4%), forma cluster. Observations of 61.5% of days concentrated more in a narrow range of 29.4% of the share price.

#### 9. Discussions:

The premium offered on Pre-buy-back mean price of both the companies TCS and Infosys followed a similar path of attracting existing shareholders with a premium offered in a range of 15-15.9%. The shareholders during the entire mechanism from Pre to during, and Post issue of Buy-back offer looked for a gain over on Buying-back of shares at a higher price than the future probable one. Infosys suffered a deeper

discount during the offer period than TCS that led to influence existing shareholders to subscribe larger than TCS. On the close of buyback offer, two offerers commanded identical price range of discount on offer price on TCS share 10.6% and Infosys 10.7%. In both cases, shareholders should have been satisfied, that in the entire exercise of buy-back(s) they generated identical value(s) on disinvestment(s). On drawing the correlation matrix between TCS to Infosys, share(s) prices were found to be in a high degree(s) of correlation in all four durations of 0.90.

On histogram analysis of the Pre-Buy-back announcement of both the companies, it is found that the market was reinventing itself in a narrow price band for Infosys than TCS. It might have helped Infosys to gauge the intent of the market behavior, beforehand in determining a premium offer Price for buy-back of shares at Rs 1150, to reward the existing loyal shareholders to bid for, in a larger number i.e. 4.99 times. During the post-buy-back announcement period of 91 days, the closing share price crossed up to Rs 1290 than the offer buy-back price of Rs 1150. Reflecting the fact that the market was enthusiastic about buy-back offer in the hope for a future surge in EPS and share price due to the shorter- supply of floating shares in the secondary market.

The standard deviation of post-buy-back share price of TCS is found to be 98.505, higher than the pre-buy-back share price 93.558. The standard deviation of post-buy-back share price of Infosys has been 68.858, largely higher than the pre-buy-back share price 45.927. It shows that TCS influenced a higher risk than Infosys.

#### 10. Conclusion:

Both TCS and Infosys offered a premium within a zone of 15-15.9% on Pre- offer Mean Market Price. Post-buy-back announcement mean share market price of TCS was 18.9% less than the offer price, and of Infosys, 21.02% less than the offer price, very close to each other. Infosys attracted a lower price discovery ratio than TCS during the period. TCS attracted 2.22 times offer applications to buy-back whereas, Infosys received 4.99 times on putting deeper discount. Post-buy-back mean market share price of TCS was 10.6% less than the offer price and Infosys also very close, 10.7% less than the offer price.

That, TCS and Infosys, received an identical market response to Post-buy-back BSE share(S) Pricing behaviour and disinvesting investors might be feeling happier on the net gain in opting for buy-back offer(s). For an entire four durations, TCS witnessed larger Price Fluctuation, suffered high risk, than Infosys. Infosys devised buy-back offer price more prudently than TCS.

#### 11. Scope of the study:

The study findings may have important implications for all the market participants. The companies that may be proceeding for buy-back may feel confident by seeking identical responses of buy-back from the shareholders. The study has further scope for researchers to understand the reason for an identical response from the investors by exploring the study on different dimensions as firm size, shareholding pattern, repurchase size, capital structure, stock liquidity, tax efficiency, etc.

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