# Financial Parameters and Listing Day's Performance of the Initial Public Offering (IPO): An Empirical Study of the Select Pharmaceutical Company during Covid Period in India

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## Abstract

An initial public offering (IPO) is the listing of the stock in the recognized stock exchange for trading in secondary market. Logical investors should consider the fundamentals of the company before investing in a stock. An attempt has been made in this paper to check whether the financial parameters affect the IPO performance or not. For this study, we have selected 7 IPOs that belong to the pharmaceutical sector and all the selected IPOs are launched after the covid outbreak. The financial parameters such as ROCE, RONW, ROGNS, and EPS have been used as financial parameters in this study. Three dependent variables such as issue price, listing gain, and closing price on day of listing are used in the study. No significant statistical relationship is found among the IPO performance in terms of the issue price, listing gain, the closing price of the day of listing, and the fundamentals of the company. It implies that investors are not always rational while investing in IPO.

***Keywords:*** IPO, ROCE. RONW, EPS, Issue Price, Listing Gain

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## Introduction

The primary market is the gateway of raising funds from the public issue where the companies enter into the capital market through recognized stock exchange with the motive of collecting funds from the public. When a company first time enters the market through the stock exchange for raising money is termed an IPO. Initial public offerings (IPO) ranked first among the various sources of gathering capital for the new ventures or the expansion of the existing businesses.

Investors enter the market with the motive of earning short-term and long-term capital gain. In the recent past, the rate of interest in fixed interest-bearing securities is decreasing continuously. The facility of mobile Apps in stock market investing attracts traditional investors in the stock market.

The participation of the investors in the stock market has been significantly increased during the covid period. The stock market activities among the investors and traders have also been increased. The liquidity in the market during this pandemic has been increased. To take the advantage of the liquidity of the market during the pandemic period, lots of companies have entered the stock market through IPO. In this paper, researcher tried to assess the impact of the financial result on the issue price and listing gain.

### *Statement of the Problem*

The investors in the stock market invest to earn sha ort-term and long-term capital gain. The price of the stock depends on several factors like the liquidity of the market, economic performance, the performance of the other sectors, the future expectation of investors on the company, risk-free rate of return, and fundamentals of the company. Investors should know how the financial results has an impact on price of the company.

## Review of Literature

***Shenoy and Srinivasan (2018)*** have tried to establish a relationship between listing gain, issue price, and pricing parameters. For this, they have used 313 IPOs listed from 2003 to 2013. From the regression analysis, they found that 58% of IPOs were underpriced and the variables used in the study i.e., P/E ratio, RONW, NAV, and IPE were significant indicators of the issue price. On the other hand, pricing parameters were not found significant predictor of Market adjusted abnormal return.

***Agrawal (2013)*** conducted an empirical study to analyze the pricing mechanism used by the different IPOs that were listed in the stock exchange from 2020 till 2011. For this study, the researcher selected 480 IPOs that were listed in BSE. The study reveals that many cases of underprizing were found in both the book building method and fixed price method but no such case was found for the auction pricing method.

***Banerjee (2015)*** explored the relationship between the financial parameters and the extent of underpricing of the initial public offering. To fulfill the above-mentioned objective, the author selected all the IPOs launched between the period from 2007-2013 and calculated four financial parameters for two preceding years. From the panel data regression, it was revealed that all the four parameters i.e., current ratio, debt to equity ratio, return on asset, and return on equity affect underpricing level in the IPOs.

***Shah and Mehta (2015)*** researched about listing day performance of 113 IPOs launched between 2010-2014 and also tracked the performance for some time. The study revealed that almost all the selected IPOs performed better on a listing day and earned a positive return. Further, the researchers run a regression model to analyze the relation between underpricing and issue price, issue size, oversubscription, and market index return. The result showed that there was no notable relationship found among the degree of underpricing and different explanatory variables.

***Bansal and Khanna (2012***) tried to found if there is any difference between the degree of underpricing in the book building method or the fixed price method. The study revealed that the price through the book building method was more underpriced than the price fixed by the fixed price method.

***Jotwani and Singh (2011)*** in their study revealed that the subscription rate of any IPO plays a very important role in the performance of IPOs but it is significant only for a short period. The subscription rate has little significance in the long run thus the investors should analyze the demand and supply situation of IPO before investing.

***Zhou and Lao (2012)*** presented the characteristics of underpricing of the IPOs listed in ChiNext. The researcher has taken 65 IPOs as a sample and by regression analysis revealed that some financial factors do affect the IPO underpricing and a remarkable difference is found between the small and medium IPOs with ChiNext.

***Ghosh (2004)*** broadly studied two variables, IPO volume, and initial return, and then made the interrelationship between both variables. The study revealed that there is no such influence of industry affiliates on the IPOs during the boom period. Besides this, he also concluded that more established firms have more chances of getting listed to raise large amounts and more underpricing during the slump period.

***Das (2012)*** in his article "Comparative analysis of listing performance of minor IPOs issued during the boom and recession period" studied a sample of 20 minor firms to check whether the performance of these firms is affected by the boom or recession or not. The study revealed that no significant result was found in listing performance of minor IPOs during the boom and recession period and also the extent of abnormality in adjusted return was moderate.

***Research Gap***

After an extensive review of literature, it is found that a lot of studies have been done concerning underpricing and pricing methods but very little literature was found in which the impact of financial parameters was considered in determining the price for the IPOs. This gap encouraged the researcher to probe in this area.

## Objectives of the Study

1) To find out the relationship between financial results and the issue price of the IPO.

2) To find out the relationship between financial results and listing gain.

3) To analyze the relationship between the financial result and closing price on the listing day (CPLD).

## Hypothesis of the Study

Based on the above-stated objectives following hypotheses have been formulated

**$H(1)_0$:** There is no significant relationship between ROCE, RONW, EPS, ROG-net sales and issue price of IPO.

**$H(1)_1$:** There is a significant relationship between ROCE, RONW, EPS, ROG-net sales, and issue price

**$H(2)_0$:** There is no significant relationship between ROCE, RONW, EPS, ROG-net sales, and listing gain of IPO.

**$H(2)_1$:** There is significant relationship between ROCE, RONW, EPS, ROG-net sales and listing gain IPO.

**$H(3)_0$:** There is no significant relationship between ROCE, RONW, EPS, ROG-net sales and closing price on listing day (CPLD)

**$H(3)_1$:** There is significant relationship between ROCE, RONW, EPS, ROG-net sales and closing price on listing day (CPLD).

## Research Methodology

Empirical and descriptive studies have been conducted considering listing gain, issue price, ROCE, RONW, EPS, and ROG-net sales of the selected IPOs.

***Sample of the Study:*** Purposive sampling technique is used to select the samples for the study. 7 IPOs belonging to the pharmaceutical sector which were launched after the covid outbreak are selected for the study.

***Study period:*** IPOs listed on or after January 30, 2020, are the sample of the study. Financial data of selected companies are collected for the last 5 financial years.

***Source of Data:*** Our study is purely based on secondary data. Issue price and listing gain are collected from www.bseindia.com, www.nceindia.com, www.moneycontrol.com, and www.chittorgarh.com. Further data related to financial parameters were collected from www.capitaline.com and the annual report of the respected company.

***Tools and Techniques:*** To test the hypothesis both descriptive and inferential statistics are used. Descriptive statistics such as mean, variance, SD, and correlation are used and inferential statistics such as regression analysis have been used in the study.

***Dependent Variables:*** Three dependent variables are used in the study which are issue price, listing gain, and closing price on listing day.

***Independent Variables***: In the study, four independent variables such as ROCE, RONW, EPS, and ROG-net sales are used. The average value of five years of all the independent variables are taken in the study.

***Listing Gain (LG):*** *Listing Gain is the difference between the Opening price and allotment price of the IPO.*

$$(LG)=(OP-AP)\,X100/AP \quad \text{----------(1)}$$

*OP-Opening Price, AP-Allotment Price*

***Rate of Growth on Net Sales (ROG-NS)***: $(S_t-S_{t-1})\,x100/S_{t-1}$ ----------(2)

*S=Sales at day t*

$S_{t-1}$=*sales at day t-1*

**Return on Capital Employed (ROCE)=** (EBIT/CE) x100----------(3)

EBIT=(Revenue-Cost of Goods Sold-Operating Expenses)

CE=Capital Employed

**Earnings per share (EPS)=**(EBIT-I-TAX)/NS----------(4)

I-Interest Cost

T-Tax

NS-No of equity shares

***Model Specification:*** we have chosen to run the least square regression model to measure the effect of the financial parameters on the issue price, listing gain, and the closing price on listing day. Since there are three dependent variables used in the study, we have constructed three regression equations. With all the selected variables following least square regression equations has been constructed.

$IP_{It} = B1_i + B2*ROCE_{it} + B3*RONW_{it} + B3*ROG\text{-}NS_{it} + B4*EPS_{it} + \mu_{it}$ ……. (5)

$LG_{It} = B1_i + B2*ROCE_{it} + B3*RONW_{it} + B3*ROG\text{-}NS_{it} + B4*EPS_{it} + \mu_{it}$ ……. (6)

$CPLD_{It} = B1_i + B2*ROCE_{it} + B3*RONW_{it} + B3*ROG\text{-}NS_{it} + B4*EPS_{it} + \mu_{it}$ ……. (7)

Where,

$\mu_{it}$ = error term

i = 1,2,3----------7

t = 1,2,3----------5

## Results and Discussion

Investors may be two types. Short-term and long-run investors. All types of logical investors should invest in IPO considering the company's fundamental performance. Long term investors must use fundamental performance of the company before investing in IPO. Financial result is one of the important components of fundamental analysis.

**Table 1. Descriptive Statistics**

| | Mean | Std. Deviation | Skewness | Kurtosis |
|---|---|---|---|---|
| **ROCE** | 44.34485714 | 52.77639443 | 2.457532625 | 6.284814487 |
| **RONW** | 39.14828571 | 41.44763788 | 2.062227066 | 4.778443733 |
| **RONS** | 10142.16543 | 26797.33768 | 2.645750742 | 6.999997708 |
| **EPS** | 124.8437143 | 200.6662519 | 2.261065597 | 5.189658445 |
| **IP** | 539.7142857 | 486.0221923 | 1.427311436 | 2.408472264 |
| **LG** | 52.98 | 91.10939212 | 2.304970161 | 5.564479911 |
| **CPLD** | 707.9642857 | 566.2304115 | 1.343688519 | 2.491557424 |
| **LP** | 44.34485714 | 52.77639443 | 2.457532625 | 6.284814487 |

Source: Author's computation

Table 1 shows the average, standard deviation, skewness, and kurtosis of different variables selected in the study. The mean value of all the selected variables is moderate except RONS and the same kind of result is found for standard deviation also. Skewness which is a measure of symmetry indicates that all the selected variables have positive skewness and are skewed towards

the right. The peakeness and flatness of distribution are measured statistically with kurtosis. All the selected variables except issue price having kurtosis value more than 3 shows leptokurtic which means distribution is more peaked relative to normal distribution.

**Table 2. Correlation Matrix**

| | ROCE | RONW | RONS | EPS | IP | LG | CPLD |
|---|---|---|---|---|---|---|---|
| **ROCE** | 1 | | | | | | |
| **RONW** | 0.985783 | 1 | | | | | |
| **RONS** | 0.983257 | 0.944904 | 1 | | | | |
| **EPS** | 0.955892 | 0.902088 | 0.959059 | 1 | | | |
| **IP** | 0.20106 | 0.138631 | 0.163718 | 0.427168 | 1 | | |
| **LG** | -0.13476 | -0.04471 | -0.23534 | -0.27216 | -0.34845 | 1 | |
| **CPLD** | 0.112506 | 0.082715 | 0.031548 | 0.304069 | 0.944677 | -0.05418 | 1 |

Source: Author's calculation

Table 2 depicts the degree of relationship between selected variables. All the variables that show the financial figures share a strong and positive bond while all the dependent variables show a weak relation with the independent variables except CPLD which shows a strong bond with IP. All the selected variables in the study share a positive relationship with other variables except listing gain which shows a negative relation with the other variables.

**Testing of Hypothesis:**

**Hypothesis 1: $H(1)_1$:** There is no significant relationship between ROCE, RONW, EPS, ROG-net sales and Issue price.

**Table 3. Summary Result of Least Square Regression Model**

| **Dependent variable** | | **Issue price** |
|---|---|---|
| **Method** | | **Least Square** |
| **Variable** | **Coefficient** | **Probability** |
| **C** | 394.6850 | 0.4781 |
| **ROCE** | -55.03472 | 0.5458 |
| **RONW** | 37.35233 | 0.5502 |
| **ROG NET SALES** | -0.023196 | 0.6670 |
| **EPS** | 10.88170 | 0.1135 |
| **R-squared** | | 0.949820 |
| **F-statistic** | | 9.464082 |
| **Probability of F-stat** | | 0.097842 |

| | |
|---|---|
| **Durbin-Watson stat** | 1.409736 |

Source: Author's computation with EViews

Table 3 depicts the coefficient of ROCE is -55.03 which indicates with a 1% increase in ROCE, the issue price will decrease by 55%. RONW and EPS also have positive coefficients indicating that an increase in these two variables will increase issue price also while a small and negative change will be found in issue price due to ROGNS. Although all the variables are not significant even at a 10% level of significance. The value of r square is 0.949820 indicating that 95% variation is found in the dependent variable due to the independent variable. The probability of F-stat is 0.09 which means the model used in the study is moderate. The value of the D-W test is also near 1.5 indicating no autocorrelation between the selected variables. Finally, we can conclude that we accept the null hypothesis as the p-value for all the variables exceeds 0.05 which means no statistically significant relationship is found between ROCE, RONW, EPS, ROG-net sales and Issue price.

**Testing of Second Hypothesis:**

**$H(2)_0$:** There is no significant relationship between ROCE, RONW, EPS, ROG-net sales and Listing gain.

**Table 4. Summary Result of Least Square Regression Model**

| **Dependent variable** | | **Listing gain** |
|---|---|---|
| **Method** | | **Least Square** |
| **Variable** | **Coefficient** | **Probability** |
| **C** | -278.1809 | 0.3437 |
| **ROCE** | 47.75416 | 0.3343 |
| **RONW** | -29.01334 | 0.3806 |
| **ROG NET SALES** | -0.032271 | 0.2961 |
| **EPS** | -2.590241 | 0.3231 |
| **R-squared** | | 0.648944 |
| **F-statistic** | | 0.924275 |
| **Probability of F-stat** | | 0.578871 |
| **Durbin-Watson stat** | | 2.846406 |

Source: Author's computation with EViews

From the result of table 4, it is seen that with a 1% increase in the ROCE, listing gain will increase by 47% on the other hand a negative relationship is found between ROCE, ROGNS, EPS, and listing gain. The value of R-square is 0.648944 indicating that the 64% variation which is taking place in the

dependent variable is due to independent variables. The D-W test's value also shows negative serial autocorrelation between the selected variables. As the value of probability is more than 0.05 which means no significant relation is found between the variables.

**Testing of Third Hypothesis**

**$H(3)_0$:** There is no significant relationship between ROCE, RONW, EPS, ROG-net sales and closing price on listing day (CPLD)

**Table 5. Summary Result of Least Square Regression Model**

| **Dependent variable** | | **CPLD** |
|---|---|---|
| **Method** | | **Least Square** |
| **Variable** | **Coefficient** | **Probability** |
| **C** | -261.5154 | 0.4731 |
| **ROCE** | 45.12059 | 0.4615 |
| **RONW** | -22.25785 | 0.5830 |
| **ROG NET SALES** | -0.107962 | 0.070 |
| **EPS** | 7.488910 | 0.1042 |
| **R-squared** | | 0.984186 |
| **F-statistic** | | 31.11805 |
| **Probability of F-stat** | | 0.031377 |
| **Durbin-Watson stat** | | 1.239187 |

Source: Author's computation with EViews

Table 5 depicts how selected variables are affecting the closing price on listing day. The table shows that EPS and ROCE both are positively affecting the CPLD while other variables are negatively affecting the selected dependent variable. The model chosen for the study is not appropriate as the probability of F-statistics is above 0.05 and the model also explains 98% of dependent variables as R-square is 0.984186. Besides this, there is positive serial autocorrelation between the selected variables. Finally, the null hypothesis set for the study is accepted and no relationship is found between the selected variables.

## Summary and Conclusion

The existing companies launch their IPO with the perspective of gathering money for various purposes and also to establish themselves in the market. Many investors take IPOs as a game of gambling but many investors take the investing very seriously and also do fundamental analysis before investing in an IPO. To know whether the financial parameters affect the IPO pricing, we have set three hypotheses. Although we failed to reject all three hypotheses

which indicate that no such relationship is found between selected dependent variables i.e., issue price, listing gain, the closing price on listing day, and independent variables i.e., ROCE, RONW, EPS, ROGNS. So, during the Covid period, the investors of IPOs invest in IPO in pharmaceutical companies in India without analyzing the financial parameters of the company.

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