

# Analyzing the Fundamental and Behavioral Aspects of IPO Valuations by Comparing Merchant Bankers' and Market Valuations

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## ABSTRACT

Initial Public Offer (IPO) is one of the most preferred strategies for companies to go public and now a days we can see a lot of people just applying for the listing gains sometimes without even knowing the name of the company. So, the purpose of this study was to critically analyze whether the valuations given by merchant bankers or the price band set by them is justified or there is a significant difference between price set by them and that perceived by market forces. Descriptive research with secondary data and primary was carried out, correlational, multiple regression and hypothesis testing was used on data for the last 3-year IPO's in the Indian stock market.

IPO price band is compared with the listing price and price after few months to judge the fairness of valuations given by merchant bankers and analyze whether there was an overreaction, under reaction or an optimal reaction on the price given by the merchant bankers. Further analysis has been done to know whether there is a difference in the way the market reacts to companies doing traditional business and technology or new age companies.

**KEYWORDS:** *IPO, Valuations, Merchant bankers, Behavioural, Fundamental, Hypotheses, New age companies, Regression, Listing gains, Listed price, Issue price*

## INTRODUCTION

While initial public offerings (IPOs) have gained popularity in recent years, they are not a recent concept. Indeed, having your shares purposefully under-priced—on the surface, this appears to be a tactic to entice public market investors to back a company with no prior history of public trading—is quite often a tactic to entice public market investors to back a company with no prior history of public trading. "With an IPO, you are initially going to the public and the market. From their side, there is the risk of the unknown," Martin Steinbach, global IPO leader at EY remarks, "It's kind of a risk discount or incentive to buy because you are a newcomer." On top of this, going public puts a company in a shop window with several potential other investments and asset classes. And while it may have been the apple of venture backers' eye, for public investors, it's just another item on the shelf. And factoring in press

releases, rumours, speculations, will make it stand out.

Here, the significance of valuations comes in. How different would the merchant banker's valuation, that is, the listing price, be different from investor's willingness to pay to be a part owner of the company? There can be greater demand, leading to the stock being overpriced, or it can be under-priced in lieu of a weak demand.

IPOs are often the single most important event in a company's lifetime, with valid reason. It is a huge opportunity for the company to expand its operations and come in the public eye. It is a chance for the company to take a substantial step towards truly establishing itself. Therefore, it is important to identify, understand and analyse the reasons that cause a deviation in the valuations set by the public

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and the merchant bankers. That is what this paper, by and large, aims to do.

Are there any patterns in respect of the time of the year the IPO is launched? What effect does the current market situation has on the listing gains or losses?

Does the sector the company is in affect the perceptions of the investors?

These, and many more questions need to be explored with respect to analysing investors' overreaction and underreaction.

Moreover, does the listing price signal or guarantee long term success? For this, we need to look at past IPOs and their stock price data to check whether their shares are slowly dwindling over time, or are stable over time, or are gradually rising with time. This, depends on aligning interests across the board when the company is going public, particularly focusing on the medium to long term, and conveying these to the public in the Red Herring Prospectus.

VC investors may sometimes be unhappy on opening day, leaving cash on the table, but they are in lock - up agreements that keep them in for a set period of time. This ensures that the listed company's long-term success is tied to their personal returns. Hence, Incoming investors seek a risk-adjusted return, but they also expect long-term performance unless they are selling.

There is a market, and the corporation is a participant in it. If the market falls, it must realise this and change performance measures. A firm cannot affect the market as a single agency; they are only a component of it.

Apple is a fantastic illustration of this, having revolutionised its fortunes by putting appealing design at the forefront of its products; with the launch of the iconic iPhone, transforming the mobile phone space globally.

Hence, it can be rewarding to be viewed as trendy or fashionable- it can push a company's share price up dramatically. However, it is important to remember that fashion trends and fads are exactly that- a fad. A short-lived obsession. Hence, at the end of the fad, or even with a launch of a competitor's new, impressive product can see the share prices of the rising company stock fall suddenly.

There is also speculation leading up to the company's earnings report or shareholder meeting. During this period, traders will often speculate about what will be revealed. If a positive announcement is expected, they might buy the company's share hereby, rising the share price of the company.

Once, the announcement is made, the share price will again react to the news, depending on whether it is better than traders expected- up, same as expectations- flat, and down if it is worse than the expectations.

Similarly, press coverage has an impact on a company's share price, depending on whether the publicity is good or negative. The IPO of a firm can also put pressure on or boost the share prices of other companies in the same industry or on the same index.

Furthermore, assessing your competition is key when judging IPO success. If you think about your peer group, you need to be 'better' than it both in positive times and negative times. So, if the peers are down by 10% and you're only down by 5%, that's a positive. It depends and should be viewed case by case."

People will be paying more attention to the public markets—and to opening day success—than ever before, regardless of how success is defined. Given the number of blockbuster IPOs in the pipeline, remember to consider why it was priced that way and where it was listed when observing trade on opening day before judging the impending flurry of IPOs a success or failure.

## LITERATURE REVIEW

Thiripalraju (1997) in their research paper have analysed the Indian IPO market for the short-term as well as long-term underpricing as compared to the price given by merchant bankers. They took a sample of 1922 companies which were listed on Bombay Stock Exchange (BSE) from 1992-1995. The author's study has provided significant data that states that the amount raised by the companies or the size of the IPO is negatively related with its listing day performance. The research also states that the performance of IPO's without firm allotment to mutual funds have performed better than that of IPO's with firm allotment on the listing day but there has been no significant difference between both of them except for the returns of one year period. This can be because the larger portion for retail sector larger effect of herding behaviour while applying for IPO's. One of the major findings of the research is that General market conditions appear to be the most important variable explaining the performance of new issues. This paper also suggests book building is a better way instead of fixing the prices because it can reduce the mispricing of IPO's.

Sanningammanavara & R. (2014) aim to determine the impact of various behavioural factors that influence investment decisions of investors based out of the city of Mysore. For their analysis, the authors have collected primary data from 36 individual

investors. The authors rightly question the assumption of traditional finance which expects humans to make rational decisions but fails to account for the emotions that one undergoes while making such investment decisions. Hence the paper focuses its attention towards concepts like volatility in Indian capital market, variety of investment options, global level of economic changes and the impact on investment behaviour of investors. The research highlights the importance of education as a factor taking an integral part in the investment in capital markets. The research concludes that psychological biases, such as Representativeness, Anchoring, Information Heuristics, are playing significant role in determining individual investor behaviour in India. The findings from the survey of Indian individual investors show that behavioural biases do influence their investment decision making processes.

Jain & Thakur (2012) in their research mention that with the growing capital markets in India, the overall investment scene in the country is improving with investors becoming more active, dynamic and competitive. The authors have collected primary data from 100 investors based out of Udaipur in Rajasthan, to understand their investment objectives, preferences and awareness. It was found in the survey that over half the respondents were investing in equities while only 4% were investing in the debt markets. Another key takeaway from their research is that majority of the Indian investors are long term investors i.e. hold the securities for a period of over 1 year, highlighting that they want to get the highest monetary return for their investments. The research also highlighted the shift in investment preference with age, with investors shifting from equity to mutual fund as they turn 50. The same was further supported by the risk bearing capacity analysis, as investors above 50 wanted very low to no risk on their investments. Hence, the study reveals the increasing popularity of equity and Mutual funds as an investment option among individual investors and about 3/4<sup>th</sup> of the investors invest in the markets to generate higher returns while some were investing primarily to gamble.

Swamynathan (2017) in her research claims that most of the financial decisions such as spending, investing, saving and borrowing money are not logical and rational but are made on the basis of emotions and the state of mind of the person when such decisions are made. The author had undertaken a primary research of 55 retail investors based out of Hyderabad, and various statistical analysis has been performed on the data hence collected. Through her analysis, the author claims that the most important objective of an investor while investing was to get a stable rate of

return followed by a safety of investment. The authors study provides relevant information about the Indian investor as about 60% of the respondents were above graduates, clearly highlighting that the equity markets are dominated by the educated mass in the country. The author also proves her hypotheses correct as the data confirms that there is no significant difference in the investment objective with gender, age or occupation.

Rock (1986) There are number of explanations for IPO under-pricing, one of the most plausible one is the Rock's model which says that the informed investor only tries to get good IPO's which are under-priced issues thus uninformed investors end up subscribing or getting allotted the overpriced ones, thus, to make sure that they or the small investors don't end up making losses new issues have to be under-priced. BARON (1982) One of the other reasons that why investment banks do under-price of securities is because they want to take advantage of their superior knowledge about the markets and they want to benefit their regular clients by doing so.

Dr. B. Ramesh (2019) aim to determine underpricing or overpricing existing in Indian markets, and factors that are responsible for the same, for the study they have taken a sample of 290 IPO's listed between the period of 2007-2017 on NSE and BSE. The study has found that underpricing is quite evident with respect to Indian capital markets, on an average 17.9% of underpricing has been found in the IPO's. The study indicates that the large issues are more underpriced in comparison to the smaller ones. Subscription ratio is also an important indicator for underpricing which tells us that investors can take decisions based on bids of other investors. Further the study has done sectoral analysis of IPO's and stated that automobile, banking and financial services, Infrastructure, IT and some other sectors have provided significant returns.

V. Vijay Kumar (2014) their paper aims to study the impact of the liquidity, under-pricing and ownership on the short term and long-term performance of the Initial Public Offer (IPO) in the equity markets of India. For the purpose of research, the author has taken data from 2000-2010 from NSE on IPO's listed in the Indian stock market. The research has found that the overpriced IPO's have underperformed across all time period and the magnitude of negative return has increased over time. It is found that the under-priced IPO's generally have positive return over a one year period but when a three year period is taken into consideration they have negative return. It was found that the pre analyst rating for the IPO is one the reasons for over subscription of IPO's but this is not the reason for underpricing of IPO's. It has been



found that liquidity has the most impact on the long term performance of an IPO.

Byrne, A., & Brooks (2008) This piece by The Research Foundation of CFA Institute on behavioural finance focuses on practitioners of investment management, corporate finance or personal financial planning and wealth management and said the rate at which this field is growing, the review is essentially selective. It is understood that traditional finance uses models and framework in which the most basic information about the aggregate stock market, the cross section of average returns and individual trading behaviour is not very easily comprehended by the investors. Behavioural finance states that a certain section of investors is subject to behavioural biases like overconfidence and overoptimism, representativeness, conservatism, availability bias, frame dependence and anchoring, mental accounting and regret aversion which makes their decisions less pragmatic and not fully rational. Arbitrage's limitations before moving on to behavioural asset pricing theory, behavioural corporate finance, evidence of individual investor behaviour, and behavioural portfolio theory are also discussed along with risk psychology, ethics, and the new discipline of neuroeconomics briefly.

Pande, A., & Vaidyanathan, R. (2007). India's first fully demutualized stock exchange is the National Stock Exchange (NSE). In terms of volume in both the stock and derivatives categories, it is also India's largest exchange. Previous research on India's Initial Public Offerings (IPOs) has mostly focused on the Bombay Stock Exchange (BSE). The pricing of IPOs on the NSE is the subject of this research. It aims to objectively explain first-day under-pricing in terms of demand produced during the issue's book building, the listing delay between the closing of the book building and the issue's first-day listing, and the money spent by the companies on IPO marketing. With reference to past studies, it also aims to understand any developing patterns in the Indian IPO market. Furthermore, it aims to locate the NSE's post-IPO returns for a month. The findings imply that demand generated during book building and the listing delay have a beneficial impact on first-day under-pricing, but the impact of money spent on IPO marketing is negligible. We also discover that, in line with previous research, the enterprises under study have a negative post-IPO performance one month following their initial public offering.

Baker, M., & Wurgler, J. (2007) This paper explains how to approach behavioural finance and the stock market from the beginning to the end. We consider the source of investor sentiment to be exogenous,

focusing instead on its empirical impacts. We show that measuring investor sentiment is possible, and that waves of sentiment have visible, significant, and predictable consequences on individual enterprises and the stock market as a whole. Stocks that are difficult to arbitrage or value are especially susceptible to emotion. Characterizing and assessing uninformed demand or investor sentiment; comprehending the foundations and variance in investor sentiment over time; and deciding whether stocks attract speculators or have minimal arbitrage possibilities are key issues that the investor sentiment methodology encounters. There's still a lot of work to be done in terms of defining this framework, but the benefits of having a better knowledge of investor sentiment are huge.

Singhal, J. (2016). Using a sample of Indian IPOs that reached the primary market between 2001 and 2011, this research evaluates the impact of overpriced IPOs. It examines the price behaviour of some of the equities listed on the NSE and BSE after they have been listed. The goal of this study was to determine the rates and trends of returns, both short and long term, on a sample of overpriced IPOs registered on India's top stock exchanges, the National Stock Exchanges and the Bombay Stock Exchange. The study of the Indian IPO market for the last eight years of after-market pricing performance on the listing day as well as in the long run, i.e. up to 36 months from the listing day, was undertaken because research on the long-term stock performance of IPOs issued in the Indian market has remained a largely untapped area.

Benveniste and Spindt (1989) find that under writers try to resolve the information asymmetry problem between the firm and the investors by providing an incentive to the investors to reveal their private information about the firm.

Kim and Ritter (1999) in their study of 190 firms find that under writers forecast the next years earnings numbers and multiply them with PE ratios of comparable firms in the industry to get the approximate price of the IPO. They argue that since most of the firms going public are young firms, it is difficult to adopt the Discounted Cash Flow techniques for valuing these firms as the future cash flows as well as discount rates to be adopted are uncertain. However they also found that PE ratios using historical earnings numbers do not give accurate results whereas when forecasted earnings numbers are used then the valuation is much more accurate.

Purnanandam and Swaminathan (2002) say that IPOs are priced 50% higher than industry peers. Also they find that more the IPO is overpriced with respect to

its peers, worse is its long term performance. Theories explaining under-pricing: There have been a number of theories to explain Under-pricing. The most prominent ones are discussed below.

1. Leland and Pyle's model (1976) - Leland and Pyle's model says that the information asymmetry between issuers of IPOs and the investors can be reduced by observing the signal of the equity retained by the issuers. Moreover they were the first ones to suggest that financial intermediaries are required to resolve information asymmetry.
2. Baron's model (1982) - Baron's (1982) model is for the contracting mechanism when the Investment Banker has better information than the issuer about the IPO market. Since the issuer cannot monitor the Investment Banker, without cost, in order to incentivize the investment banker, the issuer lets the investment banker underprice the issue (optimal delegation). Baron uses the term "delegation contracting" to model the situation in which an issuer not only needs the services of the Investment Banker for distribution of the IPO but also needs his advice for setting the offer price.

## RESEARCH OBJECTIVES

1. Understanding reasons behind the merchant bankers' valuations and analyzing the undervaluation or overvaluation.
2. Comparing the Merchant Bankers' valuation to the valuation given by the market forces and finding if there is any significant difference between the two on the listing day.
3. We tend to find if there is any overreaction or underreaction by the market or the price given by the market, stabilizes over the time or there was a valuation difference by the merchant bankers.
4. Finding some of the reasons that can affect the listing price of company.
5. Finding if there is a difference in the way the market reacts to the new-gen or the tech companies like Zomato, Nykaa to the way the market reacts to the traditional manufacturing companies.

## RESEARCH METHODOLOGY

Data on all issues have been divided in two groups that is the ones that were listed above their issue price and the ones that have been listed below their issue price. For further research the same data has been divided in two groups considering whether the company is in traditional business or whether the company is in IT industry or the Newgen companies like (Zomato, Paytm, Nykaa).

In order to realize the objects of the study several empirical test that are incorporated includes various

statistical tools, techniques, and models widely documented and proposed by experts for through analysis of data are as follows-

H1: There exist no evidence of under-pricing in IPOs on the day of listing.

H2: There exist no significant difference between the initial returns of IPOs and the market returns.

## Paired t-test

The paired sample *t*-test, sometimes called the dependent sample *t*-test, is a statistical procedure used to determine whether the mean difference between two sets of observations is zero. In a paired sample *t*-test, each subject or entity is measured twice, resulting in *pairs* of observations. Common applications of the paired sample *t*-test include case-control studies or repeated-measures designs.

Like many statistical procedures, the paired sample *t*-test has two competing hypotheses, the null hypothesis and the alternative hypothesis. The null hypothesis assumes that the true mean difference between the paired samples is zero. Under this model, all observable differences are explained by random variation. Conversely, the alternative hypothesis assumes that the true mean difference between the paired samples is not equal to zero. The alternative hypothesis can take one of several forms depending on the expected outcome. If the direction of the difference does not matter, a two-tailed hypothesis is used. Otherwise, an upper-tailed or lower-tailed hypothesis can be used to increase the power of the test. The null hypothesis remains the same for each type of alternative hypothesis.

As a parametric procedure (a procedure which estimates unknown parameters), the paired sample *t*-test makes several assumptions. Although *t*-tests are quite robust, it is good practice to evaluate the degree of deviation from these assumptions in order to assess the quality of the results. In a paired sample *t*-test, the observations are defined as the differences between two sets of values, and each assumption refers to these differences, not the original data values. The paired sample *t*-test has four main assumptions:

- The dependent variable must be continuous (interval/ratio).
- The observations are independent of one another.
- The dependent variable should be approximately normally distributed.
- The dependent variable should not contain any outliers.

There are two types of significance to consider when interpreting the results of a paired sample *t*-test, statistical significance and practical significance.

Statistical significance is determined by looking at the p-value. The p-value gives the probability of observing the test results under the null hypothesis. The lower the p-value, the lower the probability of obtaining a result like the one that was observed if the null hypothesis was true. Thus, a low p-value indicates decreased support for the null hypothesis. However, the possibility that the null hypothesis is true and that we simply obtained a very rare result can never be ruled out completely. The cut-off value for determining statistical significance is ultimately decided on by the researcher, but usually a value of .05 or less is chosen. This corresponds to a 5% (or less) chance of obtaining a result like the one that was observed if the null hypothesis was true.

Practical significance depends on the subject matter. It is not uncommon, especially with large sample sizes, to observe a result that is statistically significant but not practically significant. In most cases, both types of significance are required in order to draw meaningful conclusions.

### Multiple Linear Regression

Multiple linear regression (MLR), also known simply as multiple regression, is a statistical technique that uses several explanatory variables to predict the outcome of a response variable. The goal of multiple linear regression is to model the linear relationship between the explanatory (independent) variables and response (dependent) variables. In essence, multiple regression is the extension of ordinary least-squares (OLS) regression because it involves more than one explanatory variable.

MLR is used extensively in econometrics and financial inference.

The multiple regression model is based on the following assumptions:

- There is a linear relationship between the dependent variables and the independent variables
- The independent variables are not too highly correlated with each other
- $y_i$  observations are selected independently and randomly from the population
- Residuals should be normally distributed with a mean of 0 and variance  $\sigma$

The coefficient of determination (R-squared) is a statistical metric that is used to measure how much of the variation in outcome can be explained by the variation in the independent variables.  $R^2$  always increases as more predictors are added to the MLR model, even though the predictors may not be related to the outcome variable.

$R^2$  by itself can't thus be used to identify which predictors should be included in a model and which

should be excluded.  $R^2$  can only be between 0 and 1, where 0 indicates that the outcome cannot be predicted by any of the independent variables and 1 indicates that the outcome can be predicted without error from the independent variables.

When interpreting the results of multiple regression, beta coefficients are valid while holding all other variables constant ("all else equal"). The output from a multiple regression can be displayed horizontally as an equation, or vertically in table form.

### Heteroscedasticity

The assumption of homoscedasticity states that the variance of the regression errors is constant. When this assumption is violated, we say that the errors are heteroskedastic, a condition known as heteroscedasticity. When the errors are heteroscedastic, the OLS estimator remains unbiased but becomes inefficient.

More importantly, the usual procedure for hypothesis testing is no longer appropriate. Given that heteroscedasticity is common in cross-sectional data, the methods that correct for the same are essential for prudent data analysis. Heteroscedasticity can take various forms and magnitudes. When the form and magnitude of heteroscedasticity is known, using weights to correct for the same is very simple using generalized least squares. In many cases however the form is unknown which makes the weighting approach impractical.

One of the better ways to test heteroscedasticity of this sort is using the Heteroscedasticity consistent covariance matrix (HCCM). In easier words, HCCM theoretically allows a researcher to easily avoid the adverse effects of heteroscedasticity even when nothing is known about the form of heteroscedasticity. For the choice of the HCCM we have used HC3. Apart from the reason that it is an easy estimator to add to the statistical analysis, it also statistically works the best when  $N < 250$ . In our research, we have taken approximately 20 years' quarterly data which makes the number of observations less than 250. To correct for heteroscedasticity, we have used the HC3 option on real stats in excel.

### Correlation

Correlation is a statistical measure that expresses the extent to which two variables are linearly related (meaning they change together at a constant rate). It's a common tool for describing simple relationships without making a statement about cause and effect.

### RESEARCH QUESTIONS

1. Is there a significant difference between issue price and listing price of IPO'S?



2. Is there an overreaction, underreaction or an optimal reaction of the market on IPO's?
3. Does the market behave differently for traditional business and technology or new age companies?

## DATA COLLECTION

For the purpose of analysis data on 123 IPO's has been collected that have got listed from 2017 to Feb 2022, the data has been collected on various aspects of the IPO such as Issue size, subscription under

various categories (HNI, QIB, RII), these two are particularly selected to know whether there is a correlation of these variables on the listing gains or not. Further data has been collected on issue price (the price given by merchant bankers), stock performance on the listing day (listing day gains) and then the data on a particular date has been collected so that appropriate comparison can be done after the share price has been stabilized.

## DATA ANALYSIS

### Primary Data Analysis

As part of collecting credible data and analyzing more relevant data points for the purpose of our project, we created a questionnaire (attached in the Annexure) and circulated it amongst friends, family and other social circles. This resulted in about 80 responses, where we have looked at questions individually and in relation to each other, to give a comprehensive analysis that gives us perspective from all angles.

### 1. What do you see before applying for IPOs?

Analysts say one needs to **look at the past 3-5 years of revenue growth, margins, balance sheet strength, working capital, cash flows and other related financial parameters**. But in markets in India also function on certain unsaid factors due to the asymmetry of information.

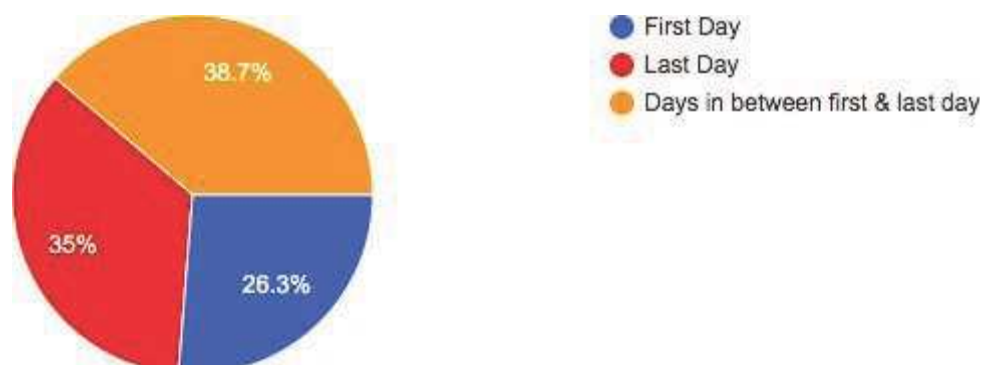
In our research, although many people went for company fundamentals as their answer, other factors also had a significant percentage of responses. Grey market premium got 42.50% of the responses indicating the significance of this factor. Although there exists no guarantee when it comes to the accuracy of GMP, investors still seem to trust this factor.

Other factors include the number of times subscribed (31.30%) and anchor investors (25%).



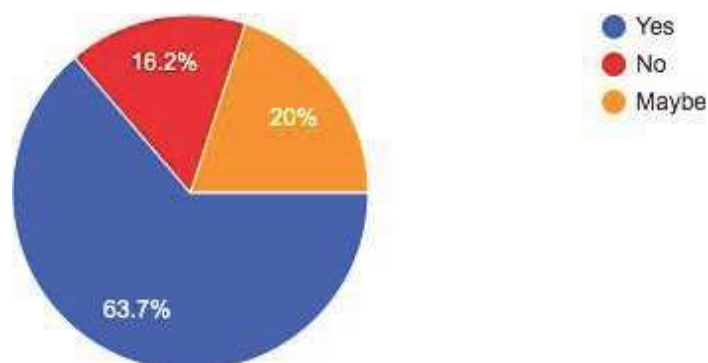
### 2. When do you generally apply for an IPO?

We saw the majority go for last day or days between last day and first day. Most retail investors prefer to wait for a few days to pass by to assess the response the IPO is getting in the market, especially HNI and QIB investors. Since the allotment of an IPO isn't based on when you apply, assessing and judging the market reaction seems to be a good idea.



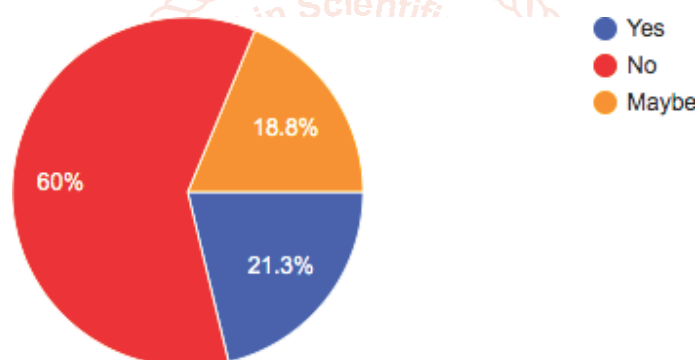
### 3. Does current market sentiment affect your decision of applying?

63.70% people responded with a yes to the above question, further proving the theory in Q2 regarding the importance of market sentiment and reaction to an IPO. Fundamentals of a company, especially when it comes to an IPO have taken a backseat. People tend to go for IPOs based on market sentiment even if it is just for listing gains.



### 4. Do you just subscribe in IPOs because someone you trust applies?

A good 60% people said no to the above question. This shows that even though the Indian stock market is affected by the asymmetry of information and market sentiment towards a company etc. People would not go the extent of applying for an IPO, which is for most people a significant investment, just because someone they trust has applied for it. This shows us that investors are still largely taking their own decisions based on how they feel about a company, over how someone else does or tips.

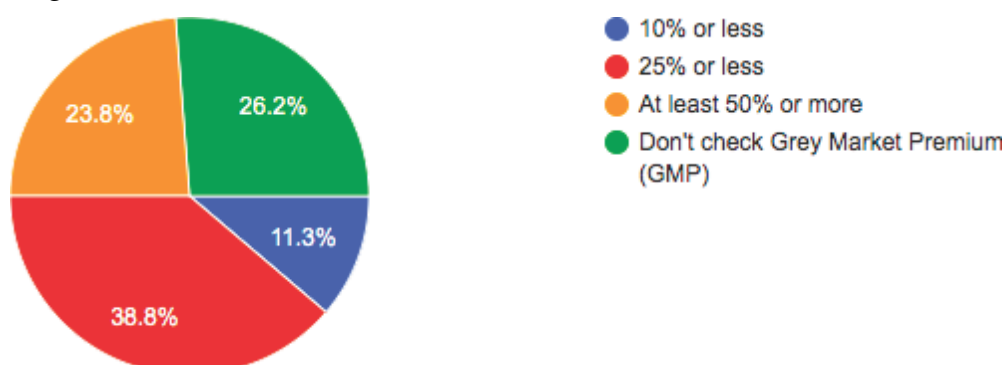


### 5. What is the minimum grey market premium (GMP) which gives you confirmation before applying?

Since, we have established in the above questions that GMP is an important factor, this question will further tell us, how much GMP is required to sway an investor in the direction of applying for an IPO.

25% or less was the majority answer, while others went for 10% or less (11.30%), at least 50% or more (23.8%) and 'don't check GMP' (26.20%).

This shows us that 10% or less premium will not sway an investor while closer to 25% or more has a good probability of doing so.



### 6. For what purpose do you primarily invest in IPOs?

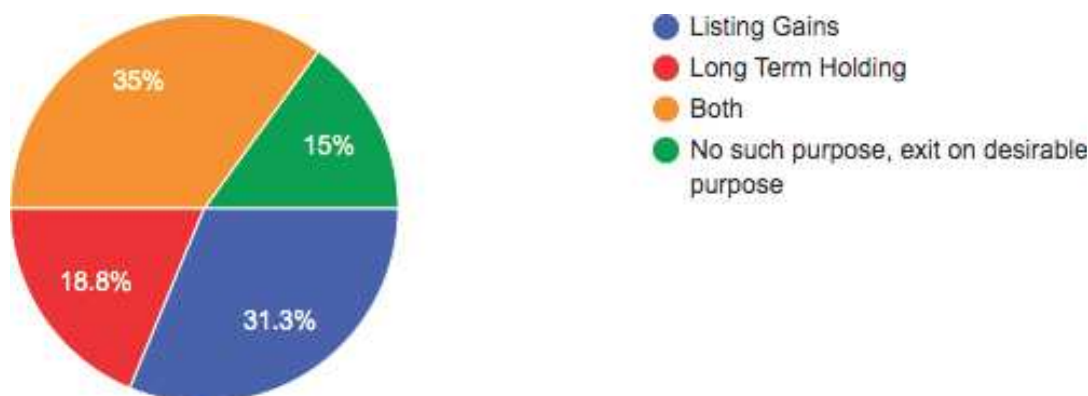
Understanding why people primarily invest in IPOs is necessary to further understand the different factors they're considering before doing so.

35% people invest in IPOs for listing gains as well as long-term holding, these investors generally consider factors like company fundamentals, anchor investors etc.



31.3% people only invest in IPOs only for listing gains, these investors generally give preference to market sentiment over company fundamentals because they're not looking at holding the stock.

15% people don't enter the IPO with a specific purpose and exit the stock when the time is right according to them.



#### 7. Do you feel the price band set by the merchant bankers is justified for the companies valuation?

This question resulted in a very dispersed response spread. Taking into consideration that such a question needs to be answered by a person well aware of the finance field, that is the various valuation techniques and factors that go behind it; our questionnaire was circulated amongst people from all walks of life. That could perhaps explain the close percentages of Yes, No and Maybe's.

Still, analyzing the responses, we can see that the highest percentage of people answered 'No', and following close is 'Maybe'.

This could be indicative of the **retail investors' general distrust of merchant bankers and the market sentiments in the current scenario**. This can be further explained by the following question linked to this.

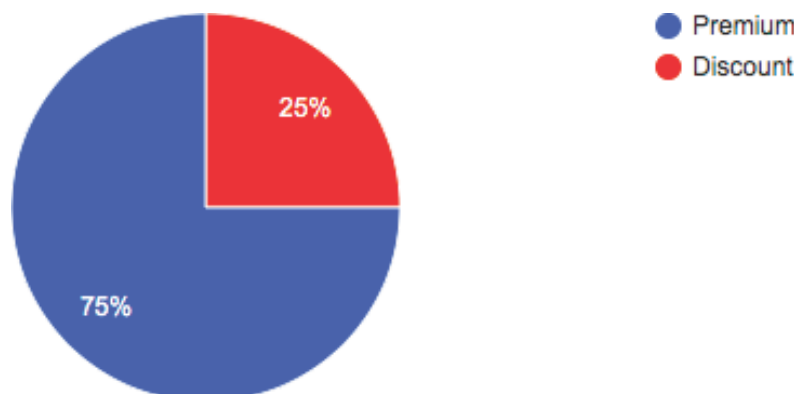
#### 8. If the above question is answered as "No", then:

##### What do you think are these valuations in comparison to the price band?

A majority of the people as seen from the chart below, answered with 'Premium' and almost a fourth of the responses indicating that they think IPOs are valued at a discount.

Continuing from the analysis of the previous question, the markets in the last year, that is 2021, was 'The Year Of IPOs', according to Bloomberg, Quint India. There was a deluge of Initial public offerings from several neo and technology sectors. "The year saw more than one IPO per week with 65 mainboard IPOs. This number doubles if we include the 60 Small and Medium Enterprise (SME) IPOs that got listed on the NSE and BSE SME exchanges," a quote from an article from The Outlook.

This indicates **that market sentiments were generally high, that could also be the rationale behind investors' thinking merchant bankers were overvaluing the IPOs, taking advantage of the euphoria**.



#### 9. Which IPOs did you recently apply to?

The list of IPOs mentioned in the questionnaire mostly featured known companies and brands. It can be observed that most respondents opted for Nykaa, with Zomato coming up in the second place, and Metro Brands being the least favoured IPO in the list, and AGS Transact following it. Let's analyse the reason why investors chose to invest in some IPOs more than others and how the respective companies performed over time.

## Nykaa

Nykaa has given negative returns from the listing date, about 36.4% (as on 20<sup>th</sup> March, 2022). However, it had given a 78% listing gain to investors. That is a very strong market debut helped by huge interest from institutional investors. It was a long term buy recommended by many brokerages, having achieved profitability, unusual for most start-ups.

### Why has it then fallen from such a high?

Initially, investors likely looked at good company fundamentals and betted on the company to make higher profits in a growing beauty and wellness sector in India, especially as things returned to normalcy post Covid-19.

But the company reported losses in the December quarter (2021) because of higher spending and an increase in marketing expenses to ensure stronger organic growth. This led to the stock price falling.

This is contradictory to the plans Nykaa originally had from its proceeds- for setting up retail stores and warehouses, to pay off some debt, leading to higher profitability.

Hence, we can notice one of the several reason that valuations differ from the stock price as it steadies over time, is a **mismatch in the use of funds from the IPO as mentioned in the RHP and what the company uses it for, leading to a variance in the financial performance from what was expected, ultimately affecting the scrip price.**

## Metro Brands

Metro brands has given an all-time return of ~21.7% (as on 20<sup>th</sup> March, 2022). However, it listed at a discount of 13% to its IPO price of Rs. 500 per share. The stock was quoting at a discount of Rs. 60-70 in the Grey Market one day before its listing. There were concerns about its valuations amongst analysts as well, with a price to earnings of almost 91 on a one-year trailing basis. All these could have been reasons why the company listed at a discount.

### How did it manage to give a positive return of 21 % over the course of 3 months then?

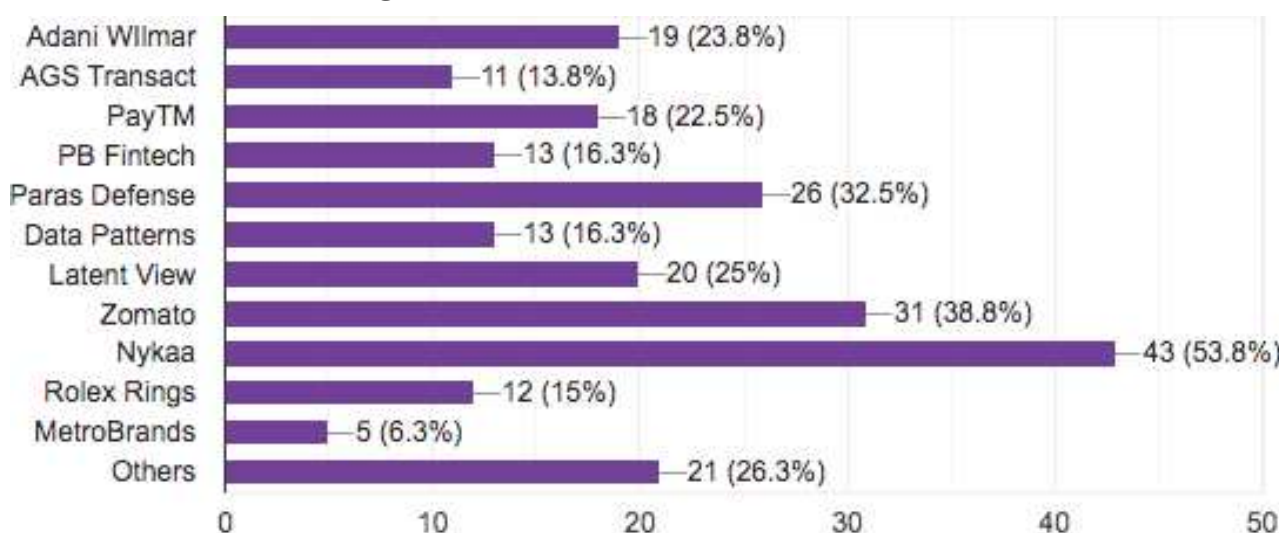
The company posted a 53% rise in its YoY net profit for Q3FY22. It even had a strong first earnings post listing.

Interestingly, one reason that are compelling analysts to place a “Buy” call is that the company is a leader in the industry and still has better P/E ratios with better growth and RoCE profile than competitors Bata and Relaxo.

The footwear retail industry has large growth opportunities, and Metro is a brand that has delivered consistent free cash flows and profitable growth for over a decade.

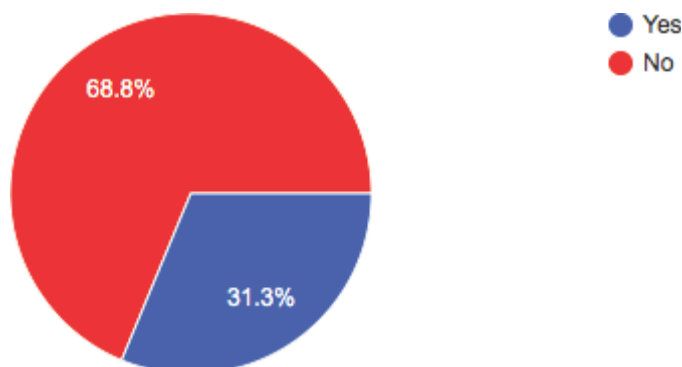
It is even backed by finance mogul, Rakesh Jhunjhunwala.

Maybe, investors overlooked all these factors due to short sightedness, with listing gains as the only factor. And using the GMP to speculate the listing price. We need to take into account that most retail investors in India still rely on speculation, rather than comprehensive research considering thorough assessment and careful analysis of qualitative and quantitative factors of the company stock. **The lure of making a quick buck is often the reason for good companies being overlooked and herd mentality leading to hyped companies performing well in the shorter term and then falling over time.**



### 10. Do you buy shares on the listing day if you are not given allotment?

A whopping 68.8% of answers indicate “No” to this question. This can be due to the fact that **most retail investors subscribe to IPOs for the aspect of benefitting from listing gains** as explained previously. Also because, listing day is a day full of speculation and last year the average **IPO listed at a premium rather than a discount, making it unattractive for investors** to buy shares.

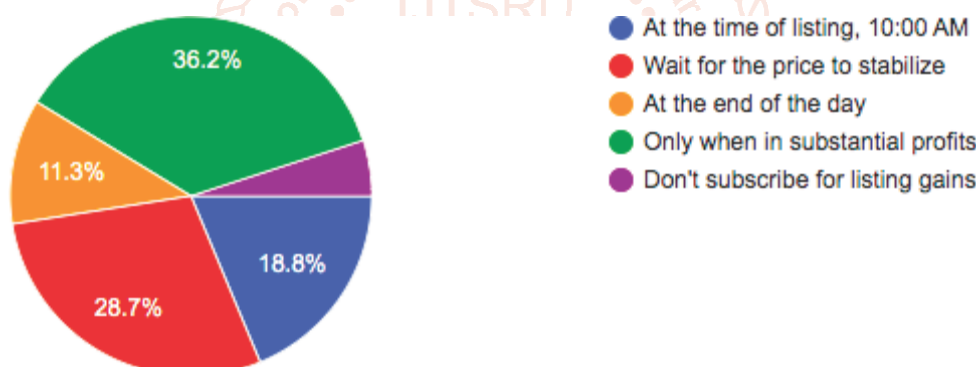


### 11. If you are subscribing for listing gains, when do you generally book your profit?

1. “Only when in substantial profits”
2. “Wait for the price to stabilize”

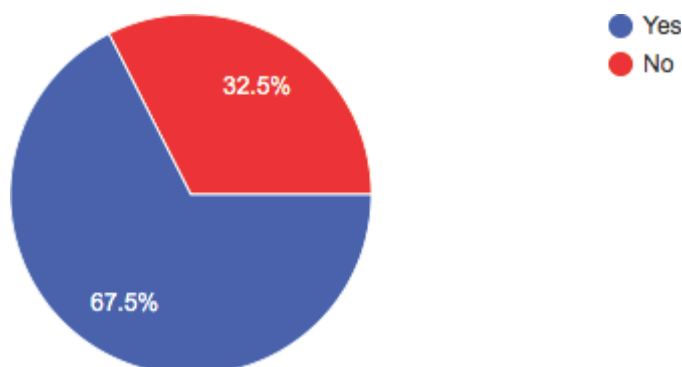
As observed in the chart, these were the two most popular responses. Interestingly, very few people wait till the end of the day to book their profits and even lesser were the number of people who do not subscribe to listing gains, thus making the points in the above analysis credible.

It makes sense for the investors to wait for prices to stabilise to avoid uncertainty and to book profits when they are maximum; this **aligns with the motive behind the psyche of subscribing to IPOs for listing gains**.



### 12. Are you still holding shares of any companies you received an allotment of?

More than half of the respondents answered with a Yes. This coupled with the fact that most respondents of this particular questionnaire were to some extent subscribing for listing gains, indicates that perhaps a part of the shares were sold in profit and the rest kept for capital appreciation due to good fundamentals and other indicators leading investors to believe that, that particular company has good potential in the medium to longer term.





**SECONDARY DATA ANALYSIS**

Regression Analysis							
OVERALL FIT							
Multiple R	0.649482		AIC	872.8153			
R Square	0.421827		AICc	873.0169			
Adjusted R Square	0.417049		SBC	878.4396			
Standard Error	34.46576						
Observations	123						
ANOVA							
				Alpha	0.05		
	df	SS	MS	F	p-value	sig	
Regression	1	104866.7	104866.7	88.27997	4.43E-16	yes	
Residual	121	143734.5	1187.888				
Total	122	248601.2					
	coeff	std err	t stat	p-value	lower	upper	vif
Intercept	1.288273	4.198533	0.306839	0.759493	-7.02383	9.600376	
QIB	0.297256	0.101579	2.926357	0.004097	0.096154	0.498358	2.813884
HNI	-0.01105	0.030852	-0.35801	0.720961	-0.07213	0.050035	3.636446
RII	1.005935	0.188182	5.34555	4.31E-07	0.633379	1.37849	1.592228

Around 42% of variance in listing gains is described by subscription by various category of investors. As the P value of the overall model is less than .05 this states that this multilinear regression is significant. Model equation for the listing gains can be  $1.28 (\text{intercept}) + .29 \times \text{QIB} - .01 \times \text{HNI} + 1 \times \text{RII}$ . The results show that subscription by QIB category and RII category has some impact on listing gains.

If we consider all 123 companies and then a t test is done on them to find whether the valuations given by the merchant bankers are different from that given by market on the listing day. The P value attained was less than .05 which means they are significantly different. Then we further divided the companies in terms whether there was a listing gain or a loss to know if merchant bankers generally undervalue the companies or overvalue them. 70% of the times there was listing gain this tells fair no. of times merchant bankers have undervalued the companies.

Percentage of companies negatively listed	30.08%
Percentage of companies positively listed	69.9%
correlation of no. of times subscribe and listing gains	0.598289
correlation of no. issue size and listing gains	-0.19952

## Paired Samples T-Test

Paired Samples T-Test

			Statistic	p	Mean difference	SE difference
issue price	Listing close	Wilcoxon W	1589.00000*	< .001	-64.15006	23.94980

\* 1 pair(s) of values were tied

Normality Test (Shapiro-Wilk)

		W	p
issue price	- Listing close	0.68421	< .001

On finding some statistical reasons that indicate how will the listing be, analysis showed us that there is a moderate positive correlation between no. of times subscribed and listing gains.

for positive companies listing price is quite significant from that of CMP, which states that value given by merchant banker and value given by market is quite different, to see whether overreaction was or not we compare CMP with listing price, for which the p value is less than .05 which means this is significant and the market reaction was not appropriate. then to know whether there was an overreaction or not, but the results show that CMP quite higher than that of listing price. This means merchant bankers have fairly undervalued these companies if we consider the mean values CMP is 1.78 times of the issue price. this tells us that there was an under reaction by the market.

## Paired Samples T-Test

Paired Samples T-Test

			Statistic	p
ISSUE Price	cmp	Wilcoxon W	629.00000	< .001

Normality Test (Shapiro-Wilk)

		W	p
ISSUE Price	- cmp	0.72452	< .001

Paired Samples T-Test

			Statistic	p
listing close	ISSUE Price	Wilcoxon W	3741.00000	< .001

Paired Samples T-Test

			Statistic	p	Mean difference
listing close	cmp	Wilcoxon W	1487.00000	0.099	-61.55009

For negative companies listing price is quite significant from that of CMP, which states that value given by merchant banker and value given by market is quite different, to see whether overreaction was or not we compare CMP with listing price, for which the p value is more than .05 which means this is not significant and

the market reaction was not appropriate. then to know whether there was an overreaction or not, but the results show that the CMP is quite higher than that of listing price. This means merchant bankers have fairly valued the companies but on the listing day there was an overreaction that over the period has corrected and CMP is quite near to that of issue price.

#### Paired Samples T-Test

			Statistic	p
issue price	CMP	Wilcoxon W	330.00000	0.754

#### Paired Samples T-Test

			Statistic	p
issue price	Listing Close	Wilcoxon W	703.00000	< .001

For traditional companies listing price is quite significant from that of CMP, which states that value given my merchant banker and value given by market is quite different, to see whether overreaction was or not we compare CMP with listing price, for which the p value is greater than .05 which means this is not significant and the market reaction was appropriate.

#### Paired Samples T-Test

			Statistic	p
issue Price	listing close	Wilcoxon W	900.00000 *	< .001

#### Paired Samples T-Test

			Statistic	p
issue Price	cmp	Wilcoxon W	1165.50000	< .001

#### Paired Samples T-Test

			Statistic	p
listing close	cmp	Wilcoxon W	1805.00000	0.194

For NewGen listing price is not significant from that of CMP, which states that value given my merchant banker and value given by market are not significantly different, to see whether overreaction was or not we compare CMP with listing price, for which the p value is greater than .05 which means this is not significant and the market reaction was appropriate. merchant bankers have done fair job over here.

#### Paired Samples T-Test

			statistic	df	p
issue Price	Listing close	Student's t	-2.91394	28.00000	0.007

#### Paired Samples T-Test

			Statistic	p
issue Price	CMP	Wilcoxon W	99.00000	0.009

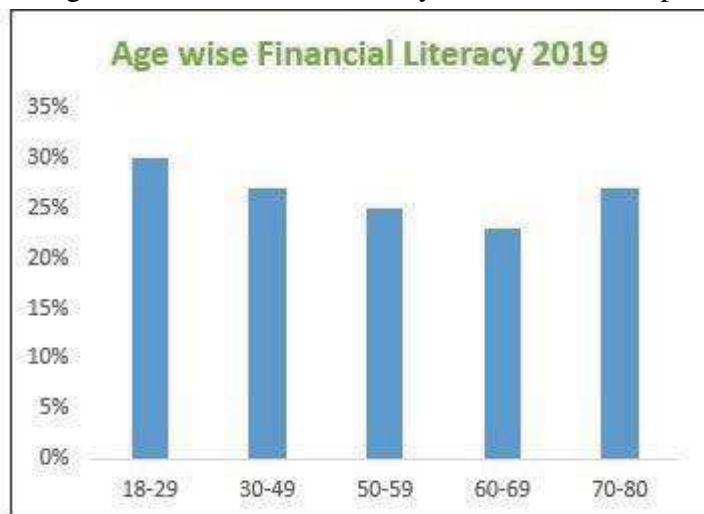
#### Paired Samples T-Test

			Statistic	p
Listing close	CMP	Wilcoxon W	148.00000	0.137



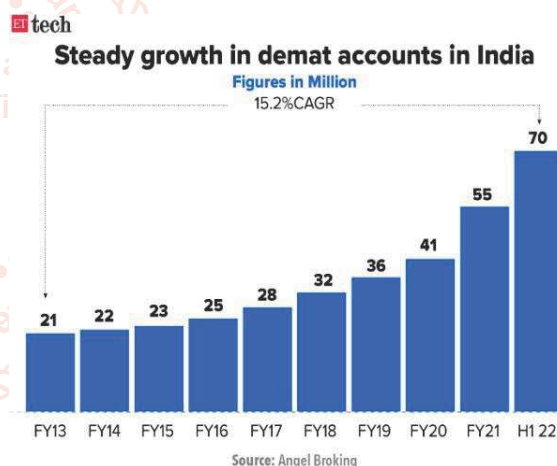
## NEW-AGE COMPANIES' IPO PERFORMANCE COMPARED TO TRADITIONAL BUSINESSES' COMPANIES

Financial literacy is one of the most important factors which help in increasing stock market participation. India's financial literacy rate has been growing gradually among its young as well as adult population. In 2019, it is observed for you the young population to have the highest financial literacy. The Government of India, through different financial literacy courses, workshops and schemes is trying boost this goal for India's youth as

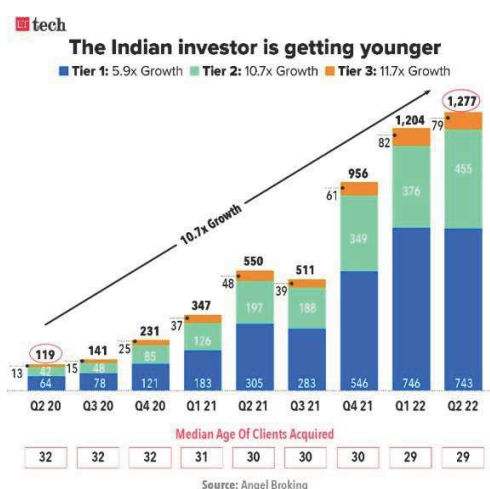


Source: National Centre for Financial Education report, 2015 & Financial Literacy and Inclusion in India Survey Report, 2019

well as the adult population. This is because, the population has realised the potential technology advancement can have and investors and traders are more aware about the happenings and news because of better media coverage. With financial literacy, comes ease and convenience of digital payments and transactions which makes handling Demat account easier. The government of India is also constantly working on improving financial literacy and digitalisation of the finance sector, making it available to most of the population. Number of transactions with respect to digital payments in India grew 5x from 1,004 crores (10.04 billion) in 2016-17 to 5,554 crores (55.54 billion) in 2020-21. Even, in Indian stock market, retail participation improved exponentially. This was because young investors realised the potential and capabilities of new-age technology companies and changed their focus from traditional business investment to these new age technology companies. Since, these investors are young, in search of high returns, they tend to have a huge risk appetite. Due to COVID-19, lockdown and remote working conditions were put in place. This along with digitalisation and high internet fuelled their fervour and from April to November 2021, two depositories added 28.6 million new Demat accounts. In FY2013, there were only 21 million demat accounts but with the gradual growth India had a total of 41 million demat accounts in FY2020. Then, in 2020 the pandemic hit, and a stock market surge was observed. Post that, in only 18 months, 70 million demat accounts were there in India. From FY 2013 till the second quarter of 2022, there was 15.2% CAGR in the number of demat accounts in India.



IPOs are nothing but a tool to earn money quickly with the help of listing gains. Rather than holding most of the investments, this is a faster way to get huge returns in 7 days. This has been supported by the recent record subscriptions in IPOs in India. Apart from new-age companies, the trend has been observed for all IPOs, regardless of the nature of the company. It is a worthy sequence. When a substantial section of investors make profit through the listing gains in the market, it leads to more investors keen to apply for upcoming IPOs which in turn leads to major oversubscriptions. Oversubscriptions portray the enthusiastic participation of investors in the stock market creating hefty premiums on the listing day. Correlating this to the increase in the number of demat accounts, the median age for a demat account holder is reducing. Q2 of FY22 showed that the average age of a new demat account holder is 29 years, which two years ago was 32. This means, that the financial literacy amongst the youth has led to creation of more demat accounts. Since the young population use technology and new-age products frequently and rely on its usage on a daily basis, they tend to believe in the potential of companies who create this technology and products. Hence, their



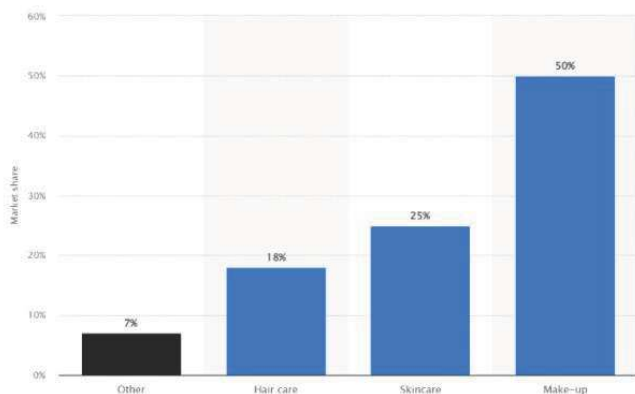
psychology makes them more likely to invest in tech-led companies.

During the previous year, investors were keen about the new-age companies IPOs also because most of these were household names and how the utilization of services and products provided by these companies is very evident for example Nykaa, Zomato or Paytm. The business models of these companies and how they provide convenience to the customers also affect the IPOs and create a bias while applying to them. The IPOs of these companies can be understood moreover individually:

### Nykaa

Nykaa has performed exceptionally well when compared to its peers as it has a very robust marketing strategy and it focuses not only on customer potential from Tier 1 cities but also from Tier 2, 3, 4 cities. Also, this brand offers products across most categories like cosmetics, skincare, haircare, fragrances, bath and body, personal care and wellness products for both women and men. During the year 2019, make-up was the leading category in Nykaa's revenue share, accounting for approximately 50 percent. Nykaa is an online multi-brand beauty and personal care products retailer. Nykaa has been valued at over 700 million dollars as of April 2019. All these factors led to the massive subscription of its IPO.

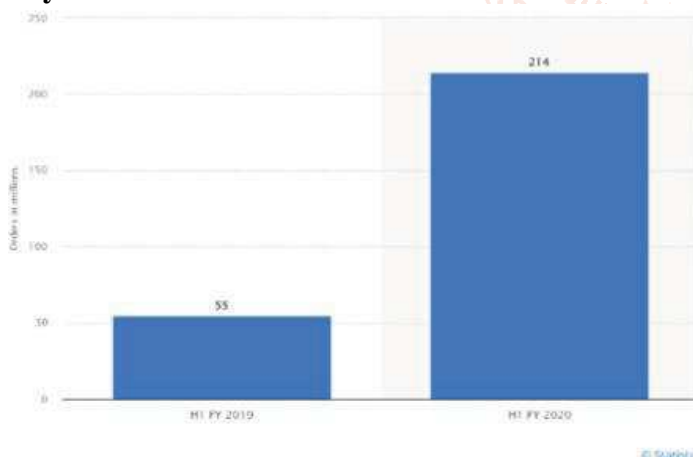
### Zomato



Details: India; Inc42: 2019

the pandemic of COVID-19 the orders hiked from 55 million to 214 million orders. Due to all these factors, its IPO was subscribed 38.25 times and 7.45 times in retail category.

### Paytm



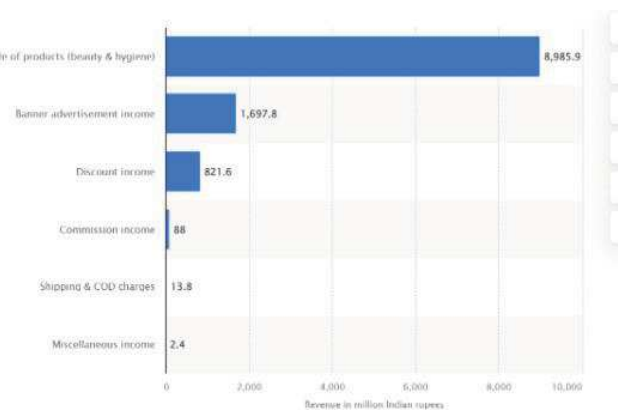
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assurance but regardless of that, the IPO was subscribed 1.89 times and 1.66 times in the retail sector.



In India, the equity risk premium is observed to be at 6.42%. To calculate the risk-free rate, average of India's 10-Year Bond Yield has been taken which comes to 6.74%. To check, whether the listing gains of the new age companies IPOs have maintained or outperformed the benchmark, sum of the equity risk premium and risk-free rate is taken. From September 2017 to January 2022, in all the new age companies' IPOs, in terms of listing gains we observe that majority the companies have outperformed the market providing massive returns. As

Zomato's marketing strategy made it one of the most prominent brands in food delivery sector. In 2020, due to



Details: India; FY 2019

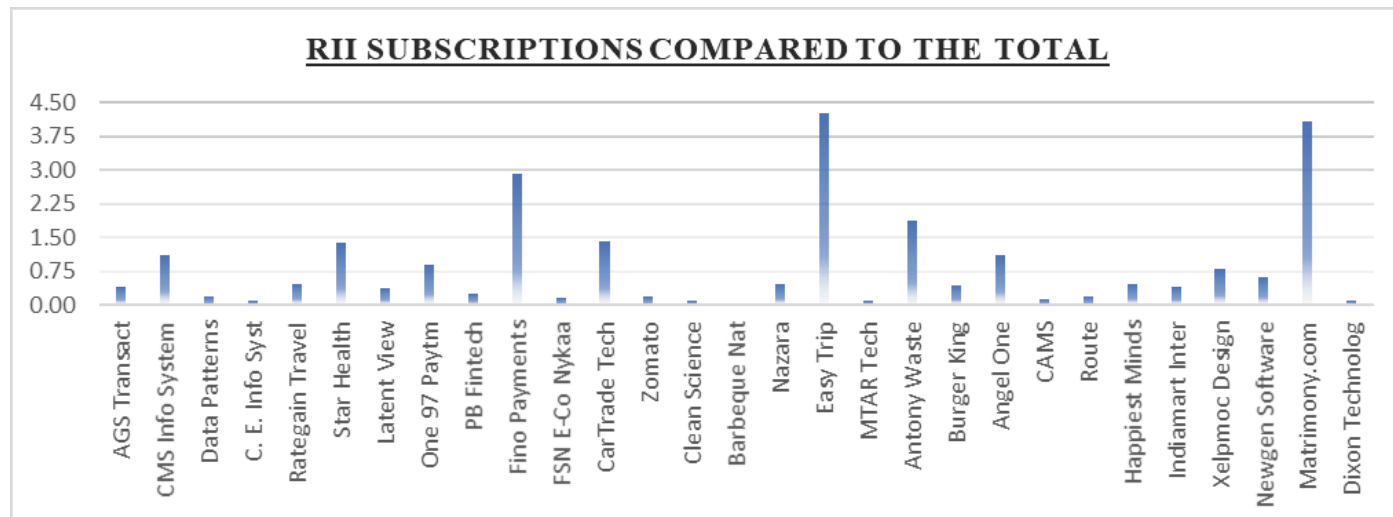
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With the pandemic in 2020, payments in cash became a risk. This paved way for electronic methods of payments. Adoption of payment instruments issued by Paytm Payments Bank, including Paytm Wallet and Paytm UPI contributed about 60 per cent to the total transactions registered on the gateway. In March 2021,

Paytm announced that it was the biggest processor of business payment with 750 million transactions on a monthly basis. This is where the psychology of the investors can be observed. The fundamentals and financials of this company don't provide much

discussed previously, for investors customer service and convenience create biases. Hence, when it comes to IPOs behavioural finance plays a major role. Generally, with IPOs, Herd Behaviour Bias takes place, when retail individual investors do not check the financials of a company and still

continue to apply for them and blindly follow other investors. Due to this attitude, it is observed that when compared to the total number of times subscriptions, RIIs number of subscriptions for new age companies is much higher, since majority of the public is attracted by the listing gains and ignores the financials of the company.



## CONCLUSION

Most people we surveyed feel that the merchant banker's valuation isn't justified. This could be because of a general distrust in of merchant bankers and due to the market sentiments in the current scenario.

Market sentiments were generally high, that could also be the rationale behind investors' thinking merchant bankers were overvaluing the IPOs, taking advantage of the euphoria.

The lure of making a quick buck is often the reason for good companies being overlooked and herd mentality leading to hyped companies performing well in the shorter term and then falling over time.

The survey also leads us to think that perhaps a part of shares is sold in profit on the listing day and the rest kept for capital appreciation due to good fundamentals and other indicators leading investors to believe that, that particular company has good potential in the medium to longer term.

After all the analysis, we can conclude that there exists a significant difference between the valuations given by merchant bankers and the valuation given by the market on the listing day, in some cases there exists a significant undervaluation by the merchant bankers such that even after bumper listing the CMP is higher than the listing price. Which also states that the bumper listing was not because of overreaction by the market, it was just the undervaluation. Other important conclusion of the whole analysis is when the merchant bankers have fairly valued the

companies, they have listed negative and over a period of time the overreaction has stabilized, and the price of the negatively listed shares have approached the valuation given by the merchant bankers. We can say merchant bankers consciously set the price band low in comparison to their fair values, so that they can keep the interest of investors in IPO and get them fully subscribed even if they are quite large or the market sentiments are bearish.

It is also observed that with new-age companies, the listing gains have a higher probability to outperform the market. With regards to new age companies, 72% of companies outperformed the market and only 28% companies' listing gains underperformed compared to the market. Whereas when it came to companies with traditional businesses, a smaller percentage of 66% only could outperform the market with respect to listing gains.

## LIMITATIONS

There are a few impediments of our review.

- Initial public offering studies can give disconnected outcomes considering the periods in which they are considered and there are no size fits general model in these investigations.
- Our review horizon of 61 months is preferably short and maybe a more drawn-out time frame of additional over 100 months could be thought of. We didn't take such a horizon for two reasons.
- One was of information accessibility for the National Stock Exchange.
- Second was the adjustment of guidelines which was probably going to perplex our outcomes.



Additionally, we needed to concentrate on the pricing of recent times.

- Our review doesn't concentrate on the portion design between the retail and institutional financial backers which drives the level of valuing. Such a review can be taken up in future.
- We have likewise not had the option to concentrate on the flipping conduct of retail and institutional financial backers to decide the degree to which money left on the table is picked up by these investors.
- Likewise, essential information which was gathered with the assistance of poll can't be depended upon totally as the respondents who filled the structure could not conceivably know totally about the elements and intricacies of securities exchange and IPO related angles.
- The Questionnaire's length was kept short to cater the attitude of respondents, who for the most part cease from filling long surveys. Subsequently, the essential information examination isn't exhaustive in nature

These are areas of conceivable future examination.

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