#### HOT AND COLD IPO MARKETS: EVIDENCE FROM INDIA

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#### ABSTRACT

The primary issue is of great essence not only to issuers and investors but also to the economy as a whole. The strength of the primary market depicts the potential of an economy. It is mainly ruled by the existence of market inefficiency and investors behaviour, which, do not let it achieve its full potential. The study overviews the inherited inefficiencies and fluctuations in the Indian Initial Public Offering (IPO) market by studying the market timing as hot and cold. It uses 3 months centred moving average for the number of issues, issue amount and premium per equity from April 2017 to December 2020. The findings of the study reveal 2017–18 as the only year having the most favourable conditions to invest based on all three variables, while for the rest of the period the timing of the issue is fluctuating. The finding of the study embarks that no wise investor should observe issues on the basis of only one factor, as the consideration of a set of variables will ensure the maximum returns not only to investors but to the entire economy as well.

*Keywords:* Market timing, market conditions, hot market, cold market, IPO.

#### Introduction

The smooth functioning of IPOs in the first quarter of 2021 depicts a high momentum of the Indian primary issue market continuing from late 2020, as an amount worth 2.5 billion dollars are raised through 22 issues. The tone of the market is at its peak and reveals a fast recovery from COVID-19 uncertainty and economic slowdown. Mookerjee and Bhattacharya (2020) describe it as the strength of the Indian primary issue market that despite pandemic Indian issue market stands strong. Contrary to expectations just a year ago, the Indian primary market had reinforced its strength with the greater investor's confidence and domestic participation. The reason for this smooth functioning of the issue market is the strong growth perspectives, domestic liquidity and robust corporate earnings in India. These market fluctuations left everyone in awe and worth studying by analysts, market participants and academia. It approves the dynamic and volatile nature of the issue market in India (Dash, 2020).

The decision of going public is very important in a company's lifespan as it involves the major transition of a private company into a public organisation. Being an issuer, a company cannot comply with its impression and performance during the issue of the IPOs. Thus, apart from other major decisions like pricing, underwriters, lead manager and banks, an issuer must decide about the timing of going Going public involves a tedious public. process and market volatility in India further challenges the issuers, as they ought to satisfy the investors on listing day with high initial returns. To provide these higher initial day returns, the issuers come with their issues during the favourable market conditions and harness the benefits. Lin, Yu and Lin (2021) state that "investors cannot distinguish between IPO firms with high versus low qualities during such favourable market conditions usually known as the hot market period. Therefore, in the short run, both firms enjoy high returns initially but low-quality firms cannot survive long and eventually underperform." It can be discerned that some issuers set the tone or rhythm of the market, while other issuers derive the fruit of that setting. It makes raising funds not only a corporate phenomenon but also an economic phenomenon. The issuers are not only liable to investors for their returns, but also to the whole economy via capital formation. The failure of IPOs during the postissue year not only sways investor's interest but also accounts for the losses to national development by not channelizing the raised funds properly in the economy. Thus, the sustainability and post-issue performance of issuers need to be concerned. Apart from concrete literature on long-term performance,

Burugula and Mirchandni (2019) mentioned that most of Indian IPOs since 2008 are performing below the offer price with about a 99 per cent fall in prices of 61 per cent issuers. It can be viewed that despite raising funds to a greater extent, the issuers are not efficient enough to have their contribution to the national interest. They raise money in the primary market and fulfil their interest, but are not able to supply the money in the economy owing to the improper fund management.

The Indian IPO market has undergone deep transformations under the observance of the Securities Exchange Board of India (SEBI) from initiation of book building, grading, corporate governance norms and issue disclosure (Issue of Capital and Disclosure Regulations (ICDR) and Listing Obligation and Disclosure Requirement (LODR)) guidelines. The recent reduction of the listing period from T+6 to T+3 and the period for disclosing price band from five days to two days is worth noting (Zachariah, 2018). Persisting its efforts, SEBI's special norms regarding flexible guidelines during the COVID era shows the adaptability of Indian regulators and market to the contemporary situations. These regulations ensure transparency and efficiency in the market. A decrease in market vulnerability with less listing time and altered market structure certifies the superior efficacy of the Indian primary market. However, abundant plaguing malpractices, unsophisticated retail investors of India and their expectations still pause a challenge. The role of sentiments cannot be denied. Noticing the sentimental attitude of investors, issuers time their issue to the most favourable investor's response. Mudgill (2016) notifies the investors to wary of their IPO investments as the interference of investors' sentiments into their IPO decisions provide a window of opportunity to the issuers. The role of investor's enthusiasm is found to be inevitable and so the market timing. The issuers prefer to become public during the best economic conditions and positive investor sentiments, which studies remark as a hot market. During the outbreak of COVID-19, the Indian IPO market has faced a great set back and gone through a cold market period. However, the recent uplift in the market because of the vaccine has restarted the engine

and is providing a boost symbolising the persistence of the hot market. It is not for the first time that the Indian market is approving its strength. The survival of the Indian market during the 2008 crisis is a milestone up till now. Presently too, the market is trying to stand strong with the availability of new opportunities. As the advent of pandemic leads to a low IPO market globally, the arrival of its vaccine brought back the glory of the market. The decisions of going public and varying IPO market timing is though studied worldwide, the Indian researches are still in its initial phase. The presence of hot and cold market timing in India did not receive much insight until now.

Thus, the present study focuses on the hot and cold edge-line and their characteristics in the Indian primary market, along with an in-depth analysis of variables i.e. the number of IPO issues, issue amount and premium per equity. The study presents an introduction in Section I, literature review in section II followed by the methodology and findings in section III and IV, respectively, with section V at the end to conclude the study.

#### Literature review

The flows of dramatic cyclical swings in the IPO markets are defined as the hot and cold behaviour of the markets. These ups and downs (swings) are majorly a reflection of variation in investors sentiments and corresponding factors that affect the issue of equity in the primary stock market (Aggarwal, 2006; Helwege & Liang, 2001). It is also evidenced in the numerous studies around the globe (Helwege & Liang, 2001; Ibbotson & Jaffe, 1975; Ritter, 1984). Hence, it would be of great interest to study these swings in context to the Indian primary issue market which is one of the renowned and most dynamic markets in the world. They owe great importance to the companies too, that aims to issue the new IPOs in the country. When explored, the studies of the existence of the hot and cold markets presented a diverse outlook for each country (Ibbotson & Jaffe, 1975 (US); Helwege & Liang, 2004 (US); Morgan & Abetti ,2004 (Rome); Agathee, Brooks & Sannassee, 2012 (Mauritius); Brownhilder & Smit, 2013 (South Africa); Warganegara & Warganegara, 2014 (Indonesia); Zaier & Abdelmoula, 2014 (Tunisia) and Abdelmoula & Zaier, 2017 (Tunisia and Egypt); Jain & Kanjilal, 2017 (India): Johansson & Osterman, 2017 (Swedish) and Wadhwa & Syamala, 2017; 2018 (India)). The studies reveal factors like market position (hot/cold market), types of industry, the nature of business etc. as a major influencer for the occurrence of hot and cold market periods. However, India is a developing own inherited economy and has its characteristic variants i.e. the concrete role of promoter's contribution and compulsory allotment to be qualified institutional investors. These distinctions in the Indian business environment has always been a priority for the investors over the other issue markets around the world, which finely motivates this study. The description of hot markets all through these studies has been vibrant. The hot market as deviations in the proportion of IPOs values corresponding to the industries and timings is studied by King (1966), an average of offer price by Ibbotson (1975), a cycle of dramatic swings in Ibbotson and Jaffe (1975), Ritter (1984) and Johansson and Osterman (2017), over-optimistic investors in Ritter (1991), rigorous oversubscription, high volume and underpricing by Helwege and Liang (2004), Zaier and Abdelmoula (2014), Abdelmoula and Zaier (2017) and Wadhwa and Syamala (2017; 2018), high initial returns and volume along with the number of IPOs by Morgan and Abetti (2004), Agathee, Brooks and Sannassee (2012) and Jain and Kanjilal (2017) and the scheduled monthly IPO volume and an annual volume of new listings in the IPO markets (highest volume of listings per annum) by Alti (2006), Brownhilder and Smit (2013) and Warganegara and Warganegara (2014).

Inscribing the results of the short-term abnormal returns to investors, Reilly and Hatfield (1969) also discussed the benefits from new stocks ranging between 1 and 95 per cent. Further research connotes that "the serial dependency in the aftermarket could, however, be used to time the transactions of those investors who must either buy or sell" (Ibbotson, 1975 and Ibbotson & Jaffe, 1975). Studies such as Taggart (1977), Ritter (1980), Ibbotson, Sindelar and Ritter (1988) and Ritter (1991), concluded the presence of managers timing during the firm's equity issues. The studies even emphasized that the issuers time issues during favourable market their conditions to have the windows of opportunities along with the best offer prices. For example, Anthony Waste Company, in India, came out with its issue in March 2020 but got a cold response due to COVID lockdown. This company again came out with its second issue in December 2020 and received value for its shares. These studies expressed that the issuers must sell their securities at a time when markets are at their best to pay for securities at the highest values, irrespective of the hot issue market price or efficient (aftermarket) publicly traded price.

The first to entail hot and cold issues market, Ibbotson and Jaffe (1975), applauds the predictability of the "hot issue" markets over ordinary unseasoned share with serial correlations and runs tests. Commending the presence of serial dependency between new issue and past issues data in United States IPO markets, the study recommended issuers to be at an advantage by issuing them in cold issue markets at higher offer prices. Further assessment by Ritter (1984), Loughran and Ritter (2004), Brailsford, Heaney, Powell and Jing (2000), Agathee et al. (2012) and Johansson and Osterman (2017) in US, Mauritius and Sweden enlightened the study with regard to the hot and cold market periods. Even, Helwege and Liang (2004) in US hightechs, Morgan and Abetti (2004) in Italy Biotech companies and Doeswijk, Hemmes and Venekamp (2006) in Dutch, uncovered many veiled realities of hot general market illustrating the initial underpricing and longterm underperformance anomalies. Hence, at present, the advanced tactics of Alti (2006) are promptly instigating the formerly existing impulsive approach.

The research on market timing and capital structure dynamics in developing markets was followed by Brownhilder and Smit (2013; South Africa), Warganegara and Warganegara (2014; Indonesia), Zaier and Abdelmoula (2014; Tunisia) and Abdelmoula and Zaier (2017; Tunisia and Egypt) consequently. These studies acknowledged the presence of hot and cold market periods for the IPOs of those firms, which are going to be public. Due to this only, firms in the long span keep their capital

structure policies more steady with their gearing finance targets. Later, in assistance with past studies, a pioneering and advanced view in the work of Jain and Kanjilal (2017) and Wadhwa and Syamala (2017, 2018) was observed in India. These studies reported the presence of both hot and cold periods in the Indian IPO market with a bidirectional lead-lag relationship among IPO volume and initial returns, majorly over 'hot' periods. They have notified the presence of vigorous market timing in the Indian IPO market, through high initial returns and high volumes. Wadhwa and Syamala (2017, 2018) studied the trends of market timing and market conditions in the regulatory and non-regulatory period and market timing and pseudo-market-timing tendencies in the hot/cold issue period. The Indian research arena with just a few studies is still in its initial phase of the study of hot or cold market trends.

The Indian IPO market is the world's secondlargest in terms of the number of IPOs and the amount raised (Patnaik, 2020). After looking at the status of the Indian primary market in the last two decades, it is found that the public issues market has enriched with watchful regulators, stiff eligibility norms and a fast listing process. Hence, the significance of continuous and regress reforms initiated by the government and regulators (SEBI) on market conditions cannot be denied. These situations need to be analysed with contemporary market conditions. Thus, the study focuses on market timing in India by imposing the research question to study the presence of hot and cold markets in India.

#### Data

The sample for the study comprises all the IPOs listed on the Bombay Stock Exchange (BSE) of India from the period 1 April 2017 to 26 December 2020 collected as of 26 December 2020. 2017 is the base year of the study as it was the last peak period for the slow Indian stock market until 20 December 2020. The data is collected from the CMIE-Prowess database and consist of 373-company's IPOs

(after excluding FPOs).

#### Variables

To check the existence of hot and cold market and their effect on the Indian IPO market three variables i.e. number of IPOs, issue amount and premium per equity are considered for the study.

# Methodology for assessing the hot and cold market periods

The usage of numerous methodologies for distinguishing 'hot' and 'cold' IPO markets such as IPO volume, the magnitude of underpricing, initial returns, above-average offering prices and the moving average is intensely validated from the literature study. To smoothen the seasonal effects on the results of the study, the moving average method is considered. (Helwege & Liang, 2001; Alti, 2006). The hot and cold periods in the Indian IPO market are identified separately for each variable i.e., Number of IPOs (Ritter, 1991), Issue Amount (Morgan & Abetti, 2004; Alti, Brownhilder 2006; & Smit, 2013: Warganegara & Warganegara, 2014; Zaier & Abdelmoula, 2014) and Premium per equity. Initially, the sum of variables i.e. Number of Issues, Issue Amount and Premium per equity for each calendar month during the sample period is calculated. Then, the 3-months moving average of sample firms is generated for that sum. The median of moving average is used as a classifying factor based on available literature.

The values derived from the 3-month moving average are then sorted into the hot and cold market periods. The months having above the median distribution for each variable are the 'hot' periods (Morgan & Abetti, 2004) and the months' below-median distribution of moving average of the variables are classified as 'cold' periods (Wadhwaa & Syamala, 2018; Morgan & Abetti, 2004). After identifying the market, all the three-issue characteristics are studied according to each segregation.

#### **Empirical Results and Discussions**

## Table 1: Descriptive statistics of IPO variables - number of issues, issue amount and premium per equity

Variables	Number of Issues	Issue Amount (Rs. Million)	Premium per equity (Indian Rupee)
Mean	8.55	6340.52	852.01
Median	6.00	3685.85	681.66
Minimum	2.00	261.43	104.333
Maximum	19.67	22332.87	3260.333

Source: Authors Calculation

#### **Table 2: Hot and Cold Months in Indian IPO Market** Number of Issues **Issue Amount** Premium per equity Cold Hot Hot Hot Cold Cold May-17 Apr-17 Jun-17 May-17 Apr-17 Apr-17 May-17 Nov-18 Jun-17 Jul-17 Aug-17 Jun-17 Jul-17 **Dec-18** Aug-17 Jul-17 Apr-18 Sep-17 Aug-17 Jan-19 Sep-17 Jun-18 **Oct-17** Apr-18 Jul-18 Jun-18 Sep-17 Apr-19 **Oct-17** Nov-17 Oct-17 Jun-19 Nov-17 Sep-18 **Dec-17** Aug-18 Nov-17 **Jul-19 Dec-17** Nov-18 Jan-18 Nov-18 Dec-17 Aug-19 Jan-18 **Dec-18** Feb-18 **Dec-18** Months (Apr 2017- Dec 2020) Jan-18 Sep-19 Feb-18 Jan-19 Mar-18 Jan-19 Feb-18 **Oct-19** Mar-18 Mar-19 May-18 Feb-19 Mar-18 Nov-19 Jul-18 May-18 May-19 Mar-19 Apr-18 **Dec-19** Aug-18 Jun-19 Sep-18 May-19 May-18 Jan-20 **Oct-18** Jul-19 **Oct-18** Jun-19 Jun-18 Feb-20 Feb-19 Sep-19 Apr-19 **Jul-19** Jul-18 Aug-19 Mar-20 Apr-19 **Oct-19** Sep-19 Aug-19 Mar-20 Aug-18 Apr-20 Nov-19 **Oct-19** Sep-18 Jun-20 Dec-19 Jan-20 Sep-20 Nov-19 Mar-20 Oct-18 Jul-20 Feb-20 Nov-20 Dec-19 Feb-19 Aug-20 Sep-20 Apr-20 Jan-20 Mar-19 Oct-20 Jun-20 Nov-20 Feb-20 May-19 Dec-20 Nov-20 Jul-20 Apr-20 Dec-20 Sep-20 Aug-20 Jun-20 Oct-20 Jul-20 Aug-20 Oct-20 Dec-20

Source: Authors Calculation

Table 1 shows the descriptive statistics of the moving average of IPO variables i.e. the number of issues, issue amount and premium per equity for the 4 years starting from April 2017 till December 2020. The hot and cold months are studied both, distinctively and collectively on the basis number of issues, issue amount and premium per equity. The values of mean, median, maximum and minimum concerning IPO variables are calculated for the 3-months moving average for each variable. However, for evolving the

descriptive analysis of the variables, the numbers derived from 3-months moving averages are used. The mean value of the number of issues for sample firms turns out to be 8.55 along with the median of the issue as 6. According to the methodology, the median classification used for hot and cold market period distinction for the variable i.e., a number of issues, visualizes the major contribution of hot months especially during the years 2017-2018 and 2018-2019 (Figure1).





the cold period sees However, greater contributions from period 2019-2020 and year up to December 2020 with only June 2017 as the cold month in the year 2017-2018 and November-2018, December-2018 and January-2019 months from 2018-2019. The amount raised by IPO companies (Issue amount) depicts a little different picture with a balancing number of months (Table 2) having the median value of Rs 3685.85 million. Consistent with the number of issues, the response for the hot period of issue amount is

majorly from 2017–2018 (Figure 2) having its 10 months as hot whereas the rest of the study period (2018-20) contributes approximately in equal proportion to the hot market trends. The colder period on the basis of issue amount has a good number from years 2018-2019 and 2019-2020 (Figure 2) with an equal contribution of eight numbers of cold months from each year. Yet, the results shown by the sample firms for the variable i.e. premium per equity (Indian Rupee) in the descriptive table are vast.



The mean moving average of premium per equity is Rs 852.01 ranging between Rs 3260.333 and Rs 104.333. In addition, the value of the median for premium per equity (Indian Rupee) counts at Rs 681.66, indeed classifying the market for the premium per

equity by colder months (especially during the years 2018-2019 and 2019-2020). However, the hot period premium for most issuers goes consistent with the prior two variables i.e. the year 2017-2018 (Figure 3).





Overall, we observe that the IPO market in India has May-2017, August 2017-March 2018, May-2018, October-2018 and September-2020 as a hot issue period approving the hot issue market of 2017–18 in India. Whereas November 2018 – January 2019, June 2019-July 2019, September 2019-February 2020, April 2020-August 2020 are the months identified as cold issue period in India. The results show that the fluctuation in the market and sentimental effect of the uncertainty perceived around a change in governing authority due to the national elections 2019 and the spread of pandemic namely COVID-19 around the world. As during major economic events, the stock market is the first to visualise the change due to the quick variation in investors' sentiments and the Indian market cannot avoid it (Haritha & Rishad, 2020).

Table3: Quarter wise data-table on basis of IPO's number of issues, issue amount and
nremium per quity

					premium per quity									
Year	Quarters	Numbo	er of Is	sues	Issue Amo	ount (Rs. Mill	lion)	Premium per equity (Indian Rupee) Panel III						
		Panel 1	[		Panel II									
		Total	Hot	Cold	Total	Hot	Cold	Total	Hot	Cold				
2017-2018	Apr-Jun	25	20	5	13815.3	12752.9	1062.4	2103	1143	960				
	Jul-Sept	51	51	0	33480.7	32139	1341.7	6997	6529	468				
	<b>Oct-Dec</b>	48	48	0 0 5	57821.2	57821.2 63567.8 166280.69	0 0 2404.1	5683	5683	0				
	Jan-Mar	51	51 170		63567.8			4804.65 19587.65	4804.65 18159.65	0				
	Total	175			168685					1428				
2018-2019	Apr-Jun	41	41	0	13591.3	9995.6	3595.7	2436	1323	1113				
	Jul-Sept	29	29	0	10888.3	6815.5	4072.8	2303	1669	634				
	<b>Oct-Dec</b>	27	21	6	7366.2	6528.8	837.4	1810	1574	236				
	Jan-Mar	18	15	3	12046.5	10241.4	1805.1	1108	0	1108				
	Total	115	106	9	43892.3	33581.3	10311	76570	4566	3091				
2019-2020	Apr-Jun	15	7	8	7033.8	4738.4	2295.4	1268	687	581				
	Jul-Sept	14	0	14	5702.3	5062.3	640	2032	1854	178				
	<b>Oct-Dec</b>	12	0	12	11194.2	10411.2	783	657	0	657				
	Jan-Mar	12	0	12	5648.3	5138.6	509.7	1003	820	183				
	Total	53	7	38	29578.6	25350.5	4228.1	4960	3361	1599				
Dec-20	Apr-Jun	4	0	4	163.8	0	163.8	217	0	217				
	Jul-Sept	12	7	5	9173.8	8414.1	759.7	1957	1326	631				
	Oct-Dec	14	9	5	22021.3	22021.3	0	2699	1519	1180				
	Total	30	16	14	31358.9	30435.4	923.5	4873	2845	2028				
	Total	373	299	74	273514.8	255648.1	17866.7	37077.65	28931.65	8146				

Source: Authors Calculation

The detailed study of IPO characteristics, namely, number of issues, issue amount and premium per equity is conducted on a quarterly basis (Table 3). Statistics for each variable are examined individually to have a better insight into the Indian stock market during hot and cold periods over the time study of April 2017 to December 2020. The table presents five consecutive quarters as the period having all the hot issues (July-September, 2017 to July -September 2018) while July- September 2019 to April-June, 2020 i.e. four consecutive quarters with a wholly cold market based on the number of issues. Apart from it, all other time windows show mixed market conditions close to hot market issues based on the mean moving average calculated. Panel II presents the segregation of market condition on the basis of issue amount with October-December. 2017; January-March, 2018 and the latest quarter October-December, 2020 as wholly hot market and April-June 2020 as wholly cold issues. The remaining quarter shows a mix of hot and cold issues with a close inclination towards the hot market based on the mean moving average calculated. Study of premium (per equity) in Panel III observes October-December, 2017; January-March, 2018 as wholly hot, October-December, 2019 and April-June, 2020 as the entirely cold issues with another quarter depicting a mix of two, skewed towards hot issues on the basis of the mean of moving average. Altogether all three

measure present October-December, 2017 and January-March, 2018 as hot period and April-June, 2020 describing extreme low market in all context. Further, the table embarks a maximum number of 51 issues each during October-December, 2017 and January-March, 2018 with a maximum issue amount of 63657.80 million rupees for January-March, 2018 and a maximum premium of Rs. 6997 to during July-September, issuers 2017. Mascarenhas (2020) and Fioretti (2020)declares it a turn back for IPOs in India during the post lockdown period, thus churning the market. Altogether, the examination concludes the year 2017-2018 among the best in terms of the three variables of the study, ultimately proving the expert outlooks of claiming 2017 to be the best year for issues after 2007 (Menon, 2017). The overall average performance of variables on a quarterly and yearly basis goes best with 2017-2018. Nevertheless, April- June 2020 confirms the utterly cold market for December 2020 owing to the no economic activity in the country in the phase of pandemic i.e. COVID-19 lockdown.

Vear	Quarters	1	Numh	er of Is	sues	Issue	Amount	(Rs Mi	illion)	Premium per equity (Indian					
I cai	Quarters	1	(unio		sues	15540	mount	(105.111	monj	Rupee)					
		Hot	Cold	Hot%	Cold%	Hot	Cold	Hot%	Cold%	Hot	Cold	Hot%	Cold%		
~	Apr-Jun	20	5	80	20	6671.4	7143.9	48.29	51.71	1526	577	72.563	27.437		
01	Jul-Sept	51	0	100	0	33480.7	0	100	0	6997	0	100	0		
7-2	<b>Oct-Dec</b>	48	0	100	0	57821.2	0	100	0	5683	0	100	0		
01	Jan-Mar	51	0	100	0	63567.8	0	100	0	4804.65	0	100	0		
7	Total	170	5	97.143	2.857	161541.1	7143.9	95.765	4.235	19010.65	577	97.054	2.946		
6	Apr-Jun	41	0	100	0	13591.3	0	100	0	2436	0	100	0		
010	Jul-Sept	29	0	100	0	10888.3	0	100	0	2303	0	100	0		
8-2	Oct-Dec	21	6	77.778	22.222	6528.8	837.4	88.632	11.368	1574	236	86.961	13.039		
01	Jan-Mar	15	3	83.333	16.667	11311.1	735.4	93.895	6.105	932	176	84.116	15.884		
7	Total	106	9	92.174	7.826	42319.5	1572.8	96.417	3.583	7245	412	94.619	5.381		
_	Apr-Jun	7	8	46.667	53.333	1823.9	5209.9	25.931	74.069	464	804	36.593	63.407		
)20	Jul-Sept	0	14	0	100	0	5702.3	0	100	0	2032	0	100		
-2	Oct-Dec	0	12	0	100	0	11194.2	0	100	0	657	0	100		
019	Jan-Mar	0	12	0	100	0	5648.3	0	100	0	1003	0	100		
5	Total	7	46	13.208	86.792	1823.9	27754.7	6.166	93.834	464	4496	9.355	90.645		
	Apr-Jun	0	4	0	100	0	163.8	0	100	0	217	0	100		
20	Jul-Sept	7	5	58.333	41.667	8414.1	759.7	91.719	8.281	1326	631	67.757	32.243		
ec-	Oct-Dec	9	5	64.286	35.714	3738.9	18282.4	16.979	83.021	544	2155	20.156	79.844		
D	Total	16	14	53.333	46.667	12153	19205.9	38.755	61.245	1870	3003	38.375	61.625		
	Grand Total	292	74	78.284	19.839	217837.5	55677.3	79.644	20.356	28589.65	8488	77.108	22.892		

 Table 4: Hot and Cold Period on basis of Number of IPO Issues

Source: Authors Calculation

A cross-study of issue characteristics is conducted based on each issue characteristic separately to have insight into the details of issue characteristics according to hot and cold market variations. Table 4 studies the two-issue characteristics (Issue Amount and Premium per equity) based on hot and cold market timing of the number of IPOs issued. It is done to observe the quarters with mixed timing of issues. The table reveals 77.108 per cent to 79.644 per cent of issues concerning the hot market for the whole study sample. Further, the yearly analysis depicts April 2019-March 2020 (86 to 93.834 per cent) having higher issues belonging to the cold market for all three issue characteristics and year April 2017-March

2018 (95 per cent to 97 per cent) having maximum issues belonging to the hot market. Studying each quarter depicts that apart from 100 per cent hot and cold issue market, January-March, 2019 shows the highest inclination towards the hot market for the number of issues (83.33 per cent) and issue amount (93.895 per cent), while the October-December 2018 for premium per equity (86.961). October- December 2020 shows the highest inclination towards the cold market on the basis of issue amount (83.021 per cent) and a premium per equity (73.844 per cent) with no inclined cold issue for number of issues on the platform for this study period.

Vear	Quarters	Issue	on)	1	Numb	er of Is	811.66	Premium per equity (Indian						
Ital	Quarters	issue rinount (its. minioli)					uiii	CI UI 15.	sucs	Rupee)				
		Hot	Cold	Hot%	Cold%	Hot	Cold	Hot%	Cold%	Hot	Cold	Hot%	Cold%	
~	Apr-Jun	12752.9	1062.4	92.31	7.69	15	10	60	40	1720	383	81.788	18.212	
01	Jul-Sept	32139	1341.7	95.993	4.007	37	14	72.549	27.451	6529	468	93.311	6.689	
7-2	Oct-Dec	57821.2	0	100	0	48	0	100	0	5683	0	100	0	
01	Jan-Mar	63567.8	0	100	0	51	0	100	0	4804.65	0	100	0	
7	Total	166280.9	2404.1	98.575	1.425	151	24	86.286	13.714	18736.65	851	95.655	4.345	
(	Apr-Jun	9995.6	3595.7	73.544	26.456	17	24	41.463	58.537	1323	1113	54.31	45.69	
010	Jul-Sept	6815.5	4072.8	62.595	37.405	6	23	20.69	79.31	634	1669	27.529	72.471	
8-2	Oct-Dec	6528.8	837.4	88.632	11.368	21	6	77.778	22.222	1574	236	86.961	13.039	
2018	Jan-Mar	10241.4	1805.1	85.016	14.984	8	10	44.444	55.556	445	663	40.162	59.838	
	Total	33581.3	10311	76.508	23.492	52	63	45.217	54.783	3976	3681	51.926	48.074	
	Apr-Jun	4738.4	2295.4	67.366	32.634	5	10	33.333	66.667	687	581	54.18	45.82	
020	Jul-Sept	5062.3	640	88.776	11.224	5	9	35.714	64.286	1854	178	91.24	8.76	
-2(	Oct-Dec	10411.2	783	93.005	6.995	5	7	41.667	58.333	435	222	66.21	33.79	
019	Jan-Mar	5138.6	509.7	90.976	9.024	4	8	33.333	66.667	820	183	81.755	18.245	
5	Total	25350.5	4228.1	85.706	14.294	19	34	35.849	64.151	3796	1164	76.532	23.468	
	Apr-Jun	0	163.8	0	100	0	4	0	100	0	217	0	100	
20	Jul-Sept	8414.1	759.7	91.719	8.281	7	5	58.333	41.667	1326	631	67.757	32.243	
ec-	Oct-Dec	22021.3	0	100	0	14	0	100	0	2699	0	100	0	
Q	Total	30435.4	923.5	97.055	2.945	21	9	70	30	4025	848	82.598	17.402	
	Grand Total	255648.1	17866.7	93.468	6.532	243	130	65.147	34.853	30533.65	6544	82.351	17.649	

1 able 5: Hot and Cold Period on basis of IPUs Issue Amo
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Source: Authors Calculation

Table 5 hereby explores the data for the hot and cold period on the basis of issue amount and further studies the aftermath of this categorisation on the number of issues and premium per equity. The table presents an overall variation for the hot market during the study period from 65.147 to 93.468 per cent for issue amount based segregation. Observing the yearly numbers, the year April 2017-March 2018 is found to have the greatest inclination hot for all towards the issues three characteristics varying from 86.286 per cent for the number of issues to 98.575 per cent for issue amount whereas April 2019-March 2020 shows the maximum inclination towards cold market (64.151 per cent). A further insight of quarterly numbers depict October-December, 2018 as most inclined towards the hot issues for issue amount (95.933 per cent) and a premium per equity (93.311 per cent), while 77.778 per cent for the number of issues in October-December, 2018. The table also presents a greater inclination for the cold market on the basis of issue amount for the number of issues (66.667 per cent) in April-June, 2019 and January-March, 2020 and July-September, 2018 for the premium per equity (72.471 per cent). Altogether, it can be concluded that 2017–2018 is the best year in line with prior discussion considering the variable performance (98.575 per cent, 86.286 per cent and 95.655 per cent), which even covered news headlines around the end of 2017 giving the high perspectives on Indian IPO market status (Anand, 2017).

Year	Quarters	Premium Rupee)	per equ	ity (Indi	an		Numb	er of Iss	sues	Issue Amount (Rs. Million)			
		Hot	Cold	Hot %	Cold%	Hot	Cold	Hot%	Cold%	Hot	Cold	Hot%	Cold%
8	Apr-Jun	1143	960	54.351	45.649	10	15	40	60	5609	8206.3	40.6	59.4
018	Jul-Sept	6529	468	93.311	6.689	37	14	72.549	27.451	32139	1341.7	95.993	4.007
7-2	Oct-Dec	5683	0	100	0	48	0	100	0	57821.2	0	100	0
01	Jan-Mar	4804.65	0	100	0	51	0	100	0	63567.8	0	100	0
2	Total	18159.65	1428	92.71	7.29	146	29	83.429	16.571	159137	9548	94.34	5.66
6	Apr-Jun	1323	1113	54.31	45.69	17	24	41.463	58.537	9995.6	3595.7	73.544	26.456
01	Jul-Sept	1669	634	72.471	27.529	23	6	79.31	20.69	9390.9	1497.4	86.248	13.752
2018-2	<b>Oct-Dec</b>	1574	236	86.961	13.039	21	6	77.778	22.222	6528.8	837.4	88.632	11.368
	Jan-Mar	0	1108	0	100	0	18	0	100	0	12046.5	0	100
	Total	4566	3091	59.632	40.368	61	54	53.043	46.957	25915.3	17977	59.043	40.957
	Apr-Jun	687	581	54.18	45.82	5	10	33.333	66.667	4738.4	2295.4	67.366	32.634
020	Jul-Sept	1854	178	91.24	8.76	5	9	35.714	64.286	5062.3	640	88.776	11.224
-2	Oct-Dec	0	657	0	100	0	12	0	100	0	11194.2	0	100
019	Jan-Mar	820	183	81.755	18.245	4	8	33.333	66.667	5138.6	509.7	90.976	9.024
2	Total	3361	1599	67.762	32.238	14	39	26.415	73.585	14939.3	14639.3	50.507	49.493
	Apr-Jun	0	217	0	100	0	4	0	100	0	163.8	0	100
-20	Jul-Sept	1326	631	67.757	32.243	7	5	58.333	41.667	8414.1	759.7	91.719	8.281
ec-	Oct-Dec	1519	1180	56.28	43.72	2	12	14.286	85.714	16265.9	5755.4	73.864	26.136
D	Total	2845	2028	58.383	41.617	9	21	30	70	24680	6678.9	78.702	21.298
	Grand Total	28931.65	8146	78.03	21.97	230	143	61.662	38.338	224671.6	48843.2	82.142	17.858

#### Table 6: Hot and Cold Period on basis of IPOs Premium per equity

Source: Authors Calculation

Table 6 presents the hot and cold periods based on the IPO premium per equity and reveals its effect on other variables (number of issues and issue amount). The table depicts an overall inclination towards the hot market for the study period with a variation from 61.622 per cent to 82.142 per cent on the basis of premium per equity. The yearly analysis represents April 2017-March 2018 as a year inclining with variations from 83.429 per cent to 94.34 per The quarter-based analysis depicts cent. October-December, 2017 having a greater inclination for the hot market for premium (per equity) (93.311 per cent) and issue amount (95.993 per cent) and October-December, 2018 for the number of issues (77.778 per cent). The greater inclination towards the cold market on the basis of issue amount for number of issues (66.667 per cent) in April-June, 2019 and January-March, 2020 () is also observed. It agrees with the figures presented in Table 5. Altogether, the study period 2017–2018 is the most favourable time for the issuer to have a public issue. It is also concluded that analysis of issue amount and premium (per equity) works in synchronisation, while the number of issues works independently having the greatest influence. The findings agree with the dynamic nature of the Indian issue market being a capital market belonging to a developing economy.

#### Conclusion

One cannot deny the essence of market timing to the issuing company. The issue by Anthony Waste Company, in India, is its most recent instance, which got a cold response due to COVID lockdown in March 2020 and get good market in December 2020.

However, it is due to market timing, lots of a while inefficient companies became public and

invisible after a few days of listing, thus leaving their investors distraught. As IPOs are not the concern of an individual company only but of investors and an economy too, it is necessary that along with issuers, investors should also have awareness of the hot and cold market period and its influences. This study provides a basic framework on the basis of descriptive statistics that delve into IPO timing of issues along with issue characteristics that vary significantly. The findings of the study reveal that in a truly favourable condition all the characteristics of the study behave similarly and ensure the welfare of the company, investors and the economy. Usually, numbers of issues are keenly observed by investors and have a significant influence on their decisionmaking. However, the number of issues solely do not ensure the market conditions to be

favourable for all. As the illusion gets created and companies with inefficient credentials also have public issues at the back of some legendary issues. In such a situation, many issues fail to perform during the post-issue period and even get eliminated, thus swaying investors and economic interests of the whole nations. The findings of the study disclose the extent of fluctuation in the Indian issue market, which may assist investors, analysts and market participants in optimised investment decisions. The study also symbolizes the market inefficiency persisting in India so that the regulatory bodies can control the steep fluctuation with efficient measures. Conclusively, an investor is the soul of the Indian issue market and what seems true and fair to investors defines the true pace of arcades.

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