

India's New Asset-class: Evaluation of the Importance of Different Factors in Determining the "Value" of Sneakers in India

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Abstract

Over the past decade, there has been a sharp spike in the demand for sneakers in India, also classifying it as the country's new asset class. A \$351 Billion industry worldwide and contributing to over 2 per cent of the country's GDP the industry is growing at an exponential rate. Because of the high growth rate and lack of theoretical knowledge about investing in the new industry the sneaker reselling market in India has become volatile. People tend to succumb to irrationality and undervalue the sneakers, also known as undercutting, leading to an overall fall in the market value and less profit for the other retailers carrying out their operations in the market. This research study aimed to evaluate the importance of different factors that determine these sneakers' market value. Out of the 5 factors examined, the study found stock numbers to be the highest-rated factor amongst all 4 categories of respondents- Sneakerhead, reseller, hype beast, plug - determining the value of sneakers. After stock numbers, a close second will be the influence of a famous personality and silhouette type with a mean of 8.4 which is not that far away from stock numbers with a solid mean of 8.9. All the data and rating provides rationale with the fact that basic economics does operate in the sneaker industry since the mean ratings are all above 8.2 showing significance of all 5 factors. Being a consumer good as well, the economic price (The price a consumer will be willing to pay according to the value consumer can find in the consumable good/service) needs to be taken into consideration. The data collected via the survey covered this dimension as well, by studying the tangible variables like colour and silhouette. Preferred by more than 50 per cent of the sample primary and dark colours like red, blue and black are preferred over the others with the preferred sneaker silhouette being Air Jordan 1 Highs. This stands to be statistically significant with a p-value of 0.001 and thus can be used in market operations by new investors in the industry and upcoming resellers who have recently started reselling. This will prevent any further volatility and the

operations will be much easier in a competitive market with bigger margins

Keywords: *sneaker, reselling, Investments, stock numbers, volatility, p-value, primary colours, silhouette, asset.*

Introduction

During the 1870s, sneakers were known as plimsolls driving their inspiration from the shape of a ship's hull. During this time, they were worn by popular sports persons primarily because of their comfort. Gradually, by the 1900s, the demand shot up and provoked the need for mass production (Lisa Gotez, 2020). The 1936 Olympics proved to be one of the major catalysts in popularising sneakers since sneakers were worn by popular athletes. Hopping onto the trend, the youngsters of that generation inclined towards more classy, sleek and athletic shoes, i.e. the present-day 'sneakers'. This led to a massive shift in demand for classy and leather shoes to sneakers. In no time, brands like Fila, New Balance started to come into sportswear. The reselling industry (The after-market where extremely limited and sought after sneakers are sold) saw its first big player in 1985 when Michael Jordan collaborated with Nike to come up with the first iteration of his signature basketball line Air Jordan 1's.

Now initially it was just like any other sneaker, which used to retail at stores, once it got banned by the NBA in October 1984 (Marvin Barias, 2019), because they were a violation of the dress code at that time, their existence got linked to this historical moment and they sold out like bread (Marc Bain, 2019). In the upcoming years, they followed the trend of demand and supply and gave birth to the reselling community in the late 1900s after NBA banned Jordan 1s. In the upcoming years, many such historical trends took place, 34 iterations of Jordan were made, more than 200 colourways (No defined number), 1000+ silhouettes to choose from, and an infinite number of collaborations took place (Mike Sikes, 2020). As the numbers went on increasing, the community expanded its reach to the Asian Subcontinent of India, after 2010 and saw an exponential rise in the last 2 years.

Although research studies (Roger Wu, 2020) (Moritz Lux, 2018) have covered how the market growth as a whole worldwide, There are hardly any papers which are

studying sneakers in the Indian Sneaker market and how their value can be predicted/evaluated, thus making experience and few apps like StockX and GOAT (which are an inaccurate benchmark as most of the demand and supply operations take place in Non-Asian countries) the only way to attain such knowledge, which is time-consuming and takes time to master a skill via experience. On the other hand, it takes approximately 8-10 hours for an average human to master a skill via the use of pre-existing knowledge, which the field is lacking. This leaves the market highly volatile to instability and the operations for the people who are in the market equally difficult. Eg. The saturation of sales of Jordan 1 Highs in early 2021 due to less demand caused by depletion in Income and evident savings of the consumers. This never meant the sneakers lost any value, despite that due to the lack of awareness of value the resellers operating in the market sold all sneakers at a price that had a significant deviation from the actual market price, which resulted in minimal profits and at times even losses.

This research paper analyses the important factors affecting the value of sneakers in the Indian sneaker market and provides insights regarding the actual value of the asset to the resellers operating in the market, making them aware of the market value and staying firm on that value henceforth stabilising the market.

Description of the Research Study

Research aim and research approach

This research study aimed to evaluate the importance of factors determining the value of sneakers, India's new asset class by using a mixed-method approach. Under the quantitative approach, an online survey asking respondents to rate the importance of the 5 influencing factors on a scale of 1-10. "1" being the least important, and "10" is the most important. The qualitative data collected was also via the same questionnaire, where the

respondents were asked about their favourite silhouette, colourway and collaboration by deploying short answer type questions and that data was manually interpreted into quantitative data for further analysis (see the questionnaire in Appendix A).

The relevant factors have been identified as follows, based on an exhaustive review of literature:

- Supply/Stock numbers: The quantities of goods or services offered for sale at a particular time or particular price.
- Colourway: Any of a range of combinations of colours in which a style or design is available.
- History: The whole series of past events connected with a particular person or thing.
- Influence/Affiliation of a famous personality: The capacity to have an effect on the character, development, or behaviour of someone or something, or the effect itself.
- Silhouette / Shape: The external form, contours, or outline of someone or something.

The hypotheses tested can be classified under 3 broad categories. The first category involves comparing the respondents' mean ratings of the importance of the different factors in determining the value of sneakers in India.

Null Hypothesis 1a: There are no differences in the mean ratings of importance between the factors that determine the value of sneakers In India.

Alternative Hypothesis 1b: There are differences in the mean ratings of the importance between factors that determine the value of sneakers In India.

The second category determines which colourway is most desired by the respondents,

and creates the highest demand since it's a consumer good as well.

Null Hypothesis 2a: There is no difference between the colour preference of the respondents and all in favour of all colours equally without any bias.

Alternative Hypothesis 2b: There is a difference between the colour preference of the different respondents and favouring a specific colour with a personal bias.

The Third category determines which silhouette is most desired by the respondents, and creates the highest demand since it's a consumer good as well.

Null Hypothesis 3a: There is no difference between the silhouette preference of the respondents and thus creating no majority and keeping this factor constant.

Alternative Hypothesis 3b: There is a difference between the silhouette preference of the different respondents and a majority favours a specific silhouette.

Data Gathering

The online survey that targeted Indian residents aged 14 to 32 was distributed via WhatsApp, Instagram with an accompanying invitation stating the research aim and reassuring the respondents of their anonymity and their data confidentiality (see Appendix B). In total, 94 respondents participated in the survey, excluding invalid respondents, thus constituting a good representative sample to evaluate the importance of factors affecting the value of sneakers in I

Data Analysis

For the analysis of the data, descriptive statistics were used to determine the mean differences between the respondents' ratings as a whole. Moreover, one-way ANOVA tests were run to evaluate the statistical significance

of the mean differences between the factors among the respondents. Next, the qualitative data collected was converted into quantitative data to study the impact of factors like colour and shape on a consumers choice, and descriptive stats were used to figure out the mean, median, mode and variance of the collected and transformed data to determine the demand of the respondents on a psychological level.

Results and Discussion

In this segment of the paper the results from the statistical analyses, as outlined in the “Description of Research Study” section, are presented and examined in detail. The implications of the research outcomes about the importance of each factor in determining the market value of sneakers in India as well as determining the colour and silhouette preference of various consumers to precisely determine how to market operations are to be carried out while buying and selling of these assets via resellers with a profit motive.

Evaluation of the importance of different factors influencing the value of sneakers in India

This section explores the relative importance of 5 factors in determining the value of sneakers in India. Based on Table 1, the factors, presented in order of importance from the most important to the least, are as follows: Stock Numbers/Supply($M = 8.96$; $SD = 1.15$); Influence/Affiliation of a famous personality ($M = 8.42$; $SD = 1.243$); Silhouette ($M = 8.410$; $SD 1.432$); History($M = 8.21$; $SD = 1.63$); Colourway ($M = 8.2$; $SD = 1.69$).

Table 1

Descriptive Statistics: Influence of Factors on Respondents’ Purchasing Decisions

	Mean	Standard Error	Median	Standard Deviation
<i>Stock numbers</i>	8.96842105	0.11826729	9	1.150
<i>Influence/Affiliation of a famous personality</i>	8.42105263	0.12749543	8	1.243
<i>Silhouette</i>	8.41052632	0.14700804	9	1.432
<i>History</i>	8.21052632	0.16724816	8	1.630
<i>Colourway</i>	8.20000000	0.17362482	8	1.690

A one-way ANOVA test was run to determine whether the mean differences are significant. As shown in Table 2, the results showed that the differences in the importance of factors are significant: $F = 4.44085365$ (higher, than the F critical value of 2.39), $p = 0.0015$, $p < 0.05$. (Table 2)

Table 2

One-way ANOVA: Ratings of Factors on Respondents responses in the questionnaire

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	37.1158	4	9.2794	4.48	0.0015	2.39
Within Groups	982.0421	470	2.0897			
Total	1019.1579	474				

Upon observation, we can see that the scores of the mean value or almost even across the table of 5 factors, ranging from 8.2 to 8.9 with a decrease in variance from 1.69 to 1.15. This indicates that all factors are important while determining the value of sneakers in India as all have a mean in the 8-9 range lying in the upper quartile. The decrease in variance depicts the simultaneous relative increase in the importance of the factor with the lowest variance and highest mean. (Table 1)

Stock numbers ($M=8.9$) and affiliation with a famous personality ($M= 8.42$), have the highest mean rating out of all the other factors which aligns with the fact that in the sneaker market the traditional demand-supply relationship of economics remains constant and had to be followed while prediction of the market value of sneakers. The mean age of the respondents was 19.65 years, i.e. Adult teens who are the major consumers of high fashion and follow the upcoming worldwide trend (Terry Nguyen,2021). This data is a supporting factor to the mean rating of 8.4 belonging to “influence/affiliation with a famous personality”

Although there are some instances where other factors out rule the importance of stock numbers and influence despite their higher mean ratings.

AJ 1 high mocha and AJ1 high x JBalvin have the same resale value of 45,000Inr despite JBalvin having the edge of affiliation with a famous personality and low stock number. The changing factor is the colourway, while J1 high mochas have a simpler and more attractive to the human eye colourway, the JBalvin consist of the whole Vibgyor making it very flashy, which might not appeal to the human eye.

It is to be noted that this is a very rare scenario where the demand is majorly affected by the colourway. It is almost guaranteed that JBalvin would have had a much higher resale value if the colourway was less vibrant, considering more Subtle colours such as blue, red and black have a higher demand than flashy/vibrant colours. JBalvin being a famous artist and the stock number being limited the only factor affecting the resale price of this sneaker is its colour.

NOTE: This case can be considered an exception because of the extremely vibrant colourway thus decreasing demand in general and ruling out the factors in its favour i.e. Low stock numbers and it being a collaboration with a famous artist.

Evaluation of the most desired colourway in the market, while keeping all other factors constant

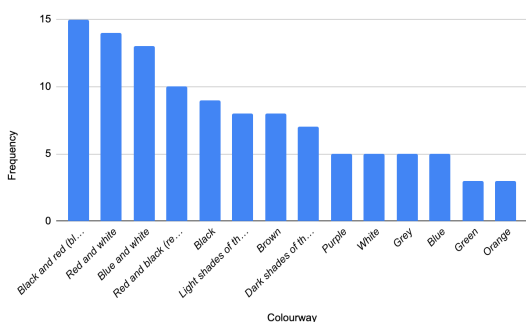
Table 3

Frequency table: Comparing the frequencies of various colourways chosen by the respondents

Colourway	Frequency
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<i>Black and red (black dominant)</i>	15
<i>Red and white</i>	14
<i>Blue and white</i>	13
<i>Red and black (red dominant)</i>	10
<i>Black</i>	9
<i>Light shades of the vibgyor</i>	8
<i>Brown</i>	8
<i>Dark shades of the vibgyor</i>	7
<i>Purple</i>	5
<i>White</i>	5
<i>Grey</i>	5
<i>Blue</i>	5
<i>Green</i>	3
<i>Orange</i>	3

Figure 1: Histogram: Representation of data in table 3, comparing the frequencies of various colourways chosen by the respondents



From the above data collected, it can be inferred that a selective group of colourways are preferred by a large number of people. Since the standard deviation is high the value of a sneaker is dependent on the colourway as

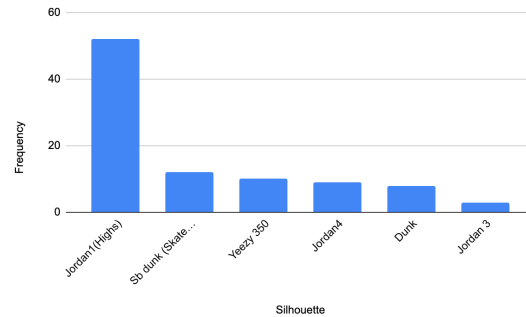
well. Black, Red and black, blue and white, Red and white, Black and red are solely demanded by more than 50 per cent of the sample population and the rest of the sample consist of preferences towards various other colourways with much lower frequencies.

To further prove this theory we will take examples of sneakers with similar stock numbers and the same silhouette type with the colourway as a variable. To not let factors like history and affiliation with a famous personality influence the value, we will consider releases that happened in the past 3-4 years and were released to the public as general releases.

Table 4: Sneakers with similar stock numbers and the same silhouette type with the colourway as a variable

Name	Colourway	Release year	Market Value (In INR)
J1 high banned Bred	Black and Red	2016	85,000+
J1 high Black Toe	Red and Black	2018	50,000+
J1 high University Blue	Blue and White	2021	38,000+
J1 high Dark Mocha	Brown and Black	2020	40,000+
J1 high Shadow 2.0	Grey and white	2021	20,000+
J1 high Smoke grey	Grey and white	2020	25,000+
J1 high Volt Gold	Light yellow	2021	16,000+
J1 high Electro Orange	Orange and white	2021	16,000+

From the above data, we infer that the data collected via the survey conducted and the examples shown have a positive correlation which is unbiased as all factors other than colour have been kept constant. Thus proving the findings accurate.



Evaluation of the most desired silhouette in the market, while keeping all other factors constant

Table 5

Frequency table: Comparing the frequencies of various silhouettes chosen by the respondents

<i>Silhouette (x)</i>	<i>Frequency (y)</i>
<i>Jordan1(Highs)</i>	<i>52</i>
<i>Sb dunk (Skateboard)</i>	<i>12</i>
<i>Yeezy 350</i>	<i>10</i>
<i>Jordan4</i>	<i>9</i>
<i>Dunk</i>	<i>8</i>
<i>Jordan 3</i>	<i>3</i>

Figure 2: Histogram: Representation of data in table 4, Comparing the frequencies of various silhouettes chosen by the respondents

Upon observation, we observe a clear preference towards Jordan1 highs ($F=52$), which are preferred by more than half of the sample population, and the standard deviation of 18.05 makes it clear that Jordan1's can solely dominate the market. Other silhouettes like the Nike SB dunks, Jordan4 and Yeezy 350's have a mean frequency of 10 with a standard deviation of 1.5 which is significantly lower than that of Jordan 1's. These values are followed by that of the Jordan3 and all other silhouettes who were not even significant enough to show up in the sample.

Thus we can infer that Jordan 1's are preferred by the sample population over any other silhouette and there is a significant difference in the frequency of the given silhouettes thus pointing towards different preferences

To further prove this theory we will take examples of sneakers with similar stock numbers and the same colourway with the silhouette as a variable. (To not let factors like history and affiliation with a famous personality influence the value, we will consider releases that happened in the past 3-4 years and were released to the public as general releases)

Table 6 :Jordan 1's VS Nike SB dunks and dunks

Silhouette	Colourway	Market Value (In INR)
Air Jordan 1 High Court purple	Purple and White	31,000+
Sb Dunk Court Purple Low	Purple and White	25,000+
Air Jordan 1 High University Blue	blue and white	35,000+
Dunk low University Blue	blue and white	22,000+

Table 7: Jordan 1's VS Jordan 4's

Silhouette	Colourway	Market Value (In INR)
Air Jordan 1 High Banned Bred	Black and Red	85,000+
Jordan 4 Bred	Black and Red	25,000+
Air Jordan 1 High University Blue	blue and white	35,000+
Jordan 4 University Blue	blue and white	25,000+

Table 8: Jordan 1's VS Yeezy 350

Silhouette	Colourway	Market Value (In INR)
Air Jordan 1 High Banned Bred	Black and Red	85,000+
Yeezy 350 V2 Bred 2.0	Black and Red	35,000+

From the above data, we infer that the data collected via the survey conducted and the examples shown have a positive correlation which is unbiased as all factors other than silhouette have been kept constant. Thus proving the findings accurate.

Conclusion

This research paper aimed to evaluate the importance of different factors in determining the value of sneakers in India. Based on the results, every null hypothesis is rejected from the collected and evaluated. We observed that Stock numbers ($M=8.9$) and Affiliation/Influence of a famous personality ($M=8.41$) are the 2 most important factors in determining the value of sneakers. The other factors(history, colourway and silhouette) hold their importance with an average mean rating of 8.27. Thus it can be concluded that all factors are important in determining the value of sneakers, but relatively speaking, Stock numbers and Affiliation/Influence of a famous personality are more important and should be given preference. This preference is also in line with the fact that the respondents mean age is 19.8 years and they prefer what is in trend and base value upon their recent acquisition of knowledge about demand and supply.

Since the new asset class is also a consumer good i.e. Can be used via consumers for daily use purposes they have preferences towards specific colourways and silhouettes of the sneaker which affect the appearance of the sneaker also affecting the demand.

The data collected add rationale to this statement by showing a clear preference of consumers towards specific colourways and silhouettes of sneakers which adds to their demand and eventually value because of the operation of demand and supply in the market.

- o The most preferred colourways being black and red($F=15$),

Red and white ($F=14$), Blue and white ($F=13$), red and black ($F=12$), followed by other colourways like black, light and dark shades of Vibgyor, grey and vibrant colours like orange and green on the bottom.

This data has been further proven with examples.

- o The most preferred silhouette being Jordan1 highs ($F=52$), followed by Sb dunks, Jordan4's, Dunks, Yeezy 350 with a mean frequency of 9.75 with a standard deviation of 1.25 showing the similarities in preference within this group and at the last comes the least preferred Jordan3's ($F=3$).

This data has been further proven with examples.

Resellers or Investors operating in the Indian sneaker market had been primarily using apps like Stock x and goat as a benchmark to determine the value of sneakers in India, which is not right as these apps have their primary clients and sales based in non-Asian countries thus leading to a misinterpretation of value if used in India. The following data collected and interpreted can be used via these resellers and investors to correctly evaluate the value of these assets and sell/list them at their exact value.

To conclude this research may lead to a paradigm shift as the sellers reading the paper will have a concrete idea of the value of a sneaker thus preventing undercutting which causes a fall in the market price and inevitably loss of profit.

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