



Feasibility study of developing an Art Index of 100 Indian artists to foster investments in Art

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Background

In order to foster greater interest in Investments into Art in India, an index is a useful tool. Movements in the index provide a base for asset pricing and portfolio allocation for investors. While the first Indian art gallery was established in 1936, artworks by Indian artists made their presence felt in international auctions in the later half of the twentieth century. Art auctions in the India market took even longer to get started. As the Indian market shows signs of lifting off, the time for the development of more organized market structures seems ripe. In 2022 India's premier management institute IIM Ahmedabad collaborated with AuraArt, a Mumbai based Art infrastructure solutions provider to launch an Art Index called the IAIAI (IIMA-AuraArt Indian Art Index). For this index, the data gathered from the auction and art market included 25 top selling Indian artists in terms of the number of artworks that were auctioned in a 20 year period. While this is relevant to people and businesses who can afford the top end of the most expensive pieces of art, in the larger context of the growing Indian market, for further people to adopt Art as an asset class, we must increase the number of artists in the Index. The next logical step would therefore be to evaluate the feasibility of expanding the index, and further implications. In this study we will explore the question :

What is the feasibility of developing an Art Index of 100 artists in India to foster investments into Art as an asset class?

The IAIAI - a review of its origin, uses and challenges

The contemporary Indian art market comprises a large number of artists with diverse styles and techniques. Aura Art, in the original data set, included auction results of around 9000 artworks by Indian artists in the period April 1, 2001 to June 30, 2022.

Given the large number of artworks auctioned in recent times, the IAIAI team made a decision to focus on top artists and selected auction houses. The IAIAI is thus based on a selection of 25 Indian artists with the highest number of artworks auctioned in the last 20 years. The auction houses included in the index are Saffronart, Christie's, Astaguru, StoryLtd, Sotheby's and Pundole's. Exhibit 1 lists the 25 artists included in this index ordered by count of auctions held per artist.

These are without a doubt some of India's best known artists and their work spans beyond the better part of the last 25 years which have seen the Indian art market grow and develop significantly.

Rank (by count of auctions)	Artist
1	MF Husain
2	FN Souza
3	Jamini Roy
4	SH Raza
5	Ram Kumar
6	Krishen Khanna
7	Akbar Padamsee
8	Thota Vaikuntam
9	Jogen Chowdhury
10	K Laxma Goud
11	Ganesh Pyne
12	Sakti Burman
13	KG Subramanyam
14	Lalu Prasad Shaw
15	Manu Parekh
16	B Prabha
17	Manjit Bawa
18	Badri Narayan
19	VS Gaitonde
20	Bhupen Khakhar
21	Bikash Bhattacharjee
22	Jehangir Sabavala
23	Tyeb Mehta
24	Anjolie Ela Menon
25	Satish Gujral

Exhibit 1: Top 25 Indian artists in the IAIAI index

In the period 2001 to 2022, the count of artworks (of these 25 artists in the index) auctioned has risen from around 200 per year to over 1000 per year, around five times. The growth in auction price and total sales value needs to be verified. An analysis of the 25 artists included in the index throws up some interesting observations. There is a preponderance of modernists and postmodernists in the constitution of the index vis-a-vis the actual growth witnessed for contemporary artworks.

Auction house	Profile of auction house	Rank by number of auctions	Rank by price per artwork
Saffronart	Indian - contemporary art with online focus	1	5
Christie's	International - physical and online with modern and contemporary art	2	1
Astaguru	Indian - contemporary art with online focus	3	4
StoryLtd	Indian - contemporary art with online focus	4	6
Sotheby's	International - physical and online with modern and contemporary art	5	3
Pundoles	Indian and International presence for modern and contemporary art	6	2

Exhibit 2: Auction Houses |A|A| Data spans 2001 Q1 through 2022 Q1

From the above Exhibit 2, it is evident that the international auction houses like Christie's and Sotheby's rank higher by price of artwork sold. The biggest names in the art world often sell at these auction houses given their brand and top notch customer base. Saffronart is the leader by number of auctions and has opened up the art market significantly through their online channels. Pundole's launched only in 2011, is already well regarded in the Indian and international market and commands a high price per artwork.

Benchmarking with Global Art indices

Sotheby's Mei Moses indices

These indices are the gold standard for the state of the global art market and use repeat auction sales for the same artworks over time to provide a reliable measure of price growth. By using repeat sales of the same work, they eliminate all the qualitative differences and control for factors like quality, color, size, maker and aesthetics. From 1950 the baseline year set at a value of 1, the index tracks the growth in price and has clocked a CAGR of 8.5% up until 2021. Developed in 2002 by two professors from NYU Stern, Professor Michael Moses and Professor Jianping Mei, this index was acquired by Sotheby's in 2016.

THE SOTHEBY'S MEI MOSES ALL ART INDEX: 1950-2021

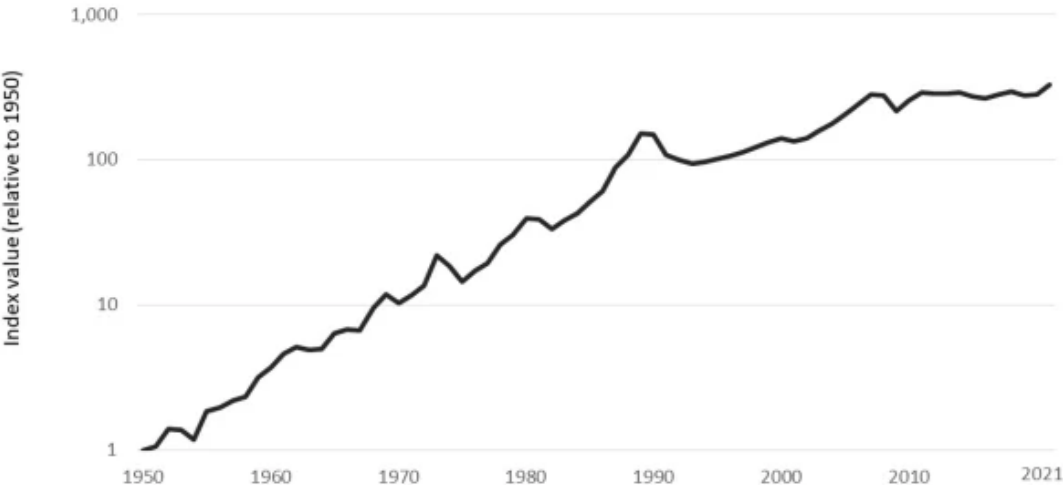


Figure 3: Sotheby's Mei Moses index growth

The trajectory of the overall art market based on this index shows a CAGR of 8.5% between 1950 and 2021. This index is based on the data of 60,000 repeat sales from 1810-present. It can also be used to compare the performance of art subcategories, identify trends and market dynamics and plot the market's relationship to other socio-economic parameters. The methodology for the Mei-Moses index is based on the Case-Shiller Real Estate Index. The Case-Shiller index formally known as the S&P CoreLogic Case-Shiller U.S. National Home Price NSA Index, is an economic index that measures the change in value of U.S. single-family homes on a monthly basis. This index is based on the repeat pricing technique developed in the 1980s by economists Karl Case and Robert Shiller. Data on successive arms-length sales of the same house are extracted from local property records for this purpose.

MM Chinese Art indices

These indices were launched by the Cheung Kong Graduate School of Business as recently as May 2023. The study has analyzed a total of 327 artworks by Chinese artists from the Greater China region and overseas that have been repeatedly put up for auction from 1988 to 2022 and saw an average sale rate of 85 percent. The price index rose from 1 to 12.8 between 2000 and 2022. This index follows the repeat sales regression model which inherently brings down the sample size of the works. Till this index was developed, the Chinese art market was considered something of a “black box” with very little transparency and information to potential art buyers. Chinese artworks are known to have good investment value and this index provides investors with the information and reason to look at art purchases logically. The MM Chinese Art indices are comprised of three different indices - the Price and sentiment index, the Liquidity index and the Artist popularity index:

- The Price and sentiment Indices show volatility in line with the economy and markets. The index rose from 1 to 12.8 between 2000 and 2022, a cumulative rise of 11.8 times. However, the compound annual growth CAGR fell steeply by 25% during the financial crisis in 2008. In Spring 2020, the Sentiment Index fell to -0.45.
- The Liquidity Index is a measure of the liquidity of Chinese artists' works through the years. The artworks of famous Chinese artists Wu Guanzhong, Zao Wou-ki and Sanyu have been found to be the most liquidated.
- Finally The Artist Popularity Index plots the market value of artworks by the top selected artists. This is done by looking at the sale value of repeatedly auctioned individual works of these well-known artists. The artist Xu Bing has topped the ranking and consistently outperformed the market by around 22% every year.

These indices described above as well as other leading global indices rely on data from just half the art market – the auction market – when 53% of the global art market is actually made up of private gallery and dealer sales, according to TEFAF's latest report. Typically, they also track the most successful art sales at auction, in some cases, artworks that have successfully sold at auction more than once, while omitting artworks that fail to sell at auction (around one quarter of lots).

Challenges of creating a reliable Art index

The challenges with creating and sustaining a reliable art index are manifold:

- Unlike financial assets, artworks as a class are highly heterogeneous. For a financial asset, the price change is attributed solely to the passage of time and to the changing demand-supply movement of the asset over time. Two financial assets on the same platform (ticker) are homogeneous. However with art, no two artworks are alike - they are difficult to compare, even if they are made by the same artist.
- Second, adequate transaction volumes are needed to observe a price trend. Hence the need to have artists in the index with substantial volumes of artworks transacted. As the number of artists to be included grows, this criterion may be difficult to meet.
- There are several factors beyond the passage of time which can significantly influence the growth of art prices. These factors called “confounds” include the participation of particular auction houses, media etc which could vary substantially and influence art prices. The index would have to account for these qualitative differences and report only the growth or difference attributable to time.

To account for these qualitative differences, IAIAI uses the hedonic pricing model which has been used widely in real estate pricing. This model filters out the multiple qualitative differences to arrive at the change in value purely attributable to the passage of time.

The IAIAI shows a CAGR of 80% between 2001 and 2006 which follows the development of the secondary market in Indian art in the same period. This uptrend abruptly ends with the 2008 financial crisis. From 2014 onwards the growth has stabilized and for the consolidated 21 year period of the index, we see a CAGR of around 17%.

Next steps for this study

As this study goes into the next stage, AuraArt, the Mumbai based Art infrastructure provider is culling out the data with respect to the volume of artworks sold for the next 75 artists in their database over the last 20 years, or as far as the data will be significant enough to include. Thereafter the following areas will be analyzed:

1. 100 artists' artwork data analysis will be carried out . If we conceptualize going from 25 to 100 artists, which kinds of artists would be included - this will be based on the artist profile, category of art they create, sales of their artwork etc.
2. Feasibility of creating this index will then be assessed in terms of availability of sales and pricing data through multiple channels - primary, secondary and auction etc. as well as other factors to be considered.
3. Conclusions will be drawn from this evaluation and further directions articulated..

The data analysis for this study is expected to take 3 months (November'23 to January'24) followed by assessment of which artists from the next set of 75-100 can be added to expand the Indian art index in a reliable and sustainable manner.