CKGSB Professor Mei Jianping announces Global MM Index with release of Annual 2024 MM Chinese Art Index

In December 2024, CKGSB Finance Professor Mei Jianping published the MM Global Impressionist Price Index and the Global Contemporary Art Price Index for the first time, as well as released the annual MM Chinese Art Index. The MM Chinese Art Index, examining prices, sentiments, liquidity and artist liquidity, has been co-developed by Prof. Michael Moses, a retired professor at New York University, and Jiang Guolin, a retired researcher at the Shanghai Academy of Social Sciences. The long-term study that came into being in response to Chinese art rising to make up to 20% ¹of the global art market, is based on auction records from Sotheby's, Christie's and Phillips.

1. Two major global art price trends – Impressionists and Contemporary Art

The data of the MM Global Impressionist Price Index come from the auction records of Sotheby's, Christie's and Phillips in nine locations, namely Shanghai, New York, London, Paris, Hong Kong, Milan, Dubai, Amsterdam and Cologne. The samples are taken from the works of 1,793 artists around the world that have been repeatedly auctioned by the three major auction houses from 1873 to 2024, comprising a total of 36,642 works, with an average sale rate of 77.8%.

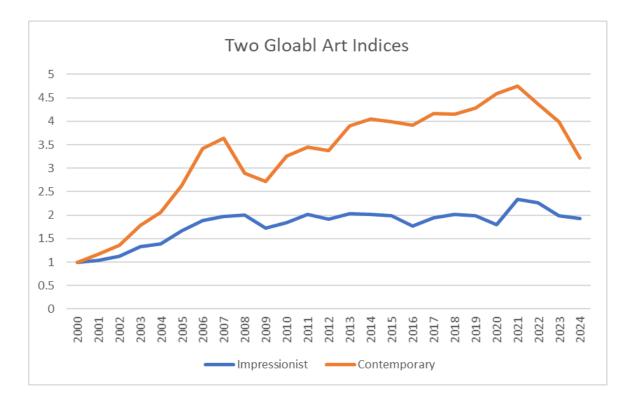
The MM Global Contemporary Art Price Index is comprised of auction records of Sotheby's, Christie's and Phillips in 16 cities: Shanghai, Beijing, New York, London, Paris, Hong Kong, Milan, Dubai, Amsterdam, Cologne, Los Angeles, Sydney, Rome, Melbourne, Doha and Zurich. The samples are taken from the works of 3,389 artists in the world that have been repeatedly auctioned between 1913 and 2024. A total of 29,850 works were tracked, with an average transaction rate of 80.0%. The MM Global Contemporary Art Index includes trade in works of certain contemporary Chinese artists. The theoretical models and compilation methods of the two indices are based on their academic paper published in the American Economic Review in 2002, as well as the authors' latest research.

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¹ 2021 Art Basel and UBS Global Art Market Report

Figure 1: Two major global art price indices

According to the two global art price indices, Impressionist art rose from 1 at the end of 2000 to 1.9 at the end of 2024, with a compound annual growth rate of 2.8%. The index shows that it fell by 3.2% in 2024. Contemporary art rose from 1 at the end of 2000 to 3.2 at the end of 2024, with a compound annual growth rate of 5.0%. The index shows that it declined by 19.5% this year. Figure 1 indicates that the Impressionist index was almost flat between 2007 and 2018, but the Contemporary index increased significantly after the 2008 financial crisis. The two global indices reached their historical highs in 2021, and then fell by 17.5% and 32.3%, respectively, over the past three years.

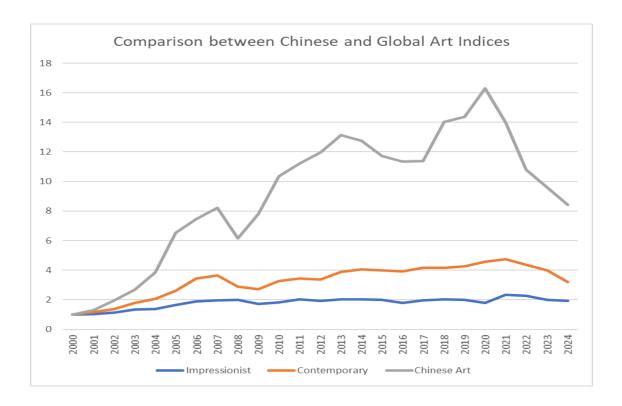


2. Trends in the Chinese art market and comparison with the global art markets

The Chinese Art Index data is derived from the auction records of Sotheby's, Christie's and Phillips in Beijing, Shanghai, Hong Kong, Singapore, Paris, London and New York. The samples come from nearly 400 Chinese artists from Greater China and overseas, who have been repeatedly auctioned at the three major auction houses between 1988 and 2024, with an average sale rate of 85%.

Figure 2: Comparison of the Chinese and two global art indices

According to the newly released MM Chinese Art Price Index, the index rose from 1 at the end of 2000 to 8.4 at the end of 2024, with a compound annual growth rate of 9.3%. The index shows that the market fell by 12.3% in 2024. Figure 2 shows that from 2000-2024, Chinese art significantly outperformed the global Impressionist and Contemporary art indices.



Chinese art reached its historical peak in 2020, and then was affected by the bear market in global art auctions and domestic factors such as COVID-19 and China's economic transition. After reaching its peak in 2020, the Chinese art market entered a period of correction, falling 48.4% from its peak, demonstrating the high growth and high volatility characteristics of emerging markets. In the next few years, impacted by value adjustments in Chinese assets such as equity and real estate, it will take some time for Chinese art to recover and reach new highs.

3. Four MM Chinese Art Sub-Indices

A unique characteristic of Chinese art is that a large number of Chinese artists work in ink paintings. For this reason, the MM team has split the sample it covers into two sub-indices: for ink and oil, or more specifically artists who predominantly paint in one or the other media. In order to study the relationship between artistic era and the art market, the art

covered by the Index is also reclassified as modern or contemporary, with modern for artists born before 1920, and contemporary for those born after 1920. According to the auction records of the past 25 years, the oil painting index and the contemporary index have outperformed the market, with an annualized growth rate of 10.8% and 11.5%, respectively, while the ink painting index and the contemporary index reaching annualized growth of 8.6% and 8.5%, respectively, slightly lower than the 9.3% of the Chinese Art Index (see Figure 3). This shows that collectors have increasingly favored the works of contemporary artists in the past 25 years, and have a preference for oil works, with its broader market and better liquidity.

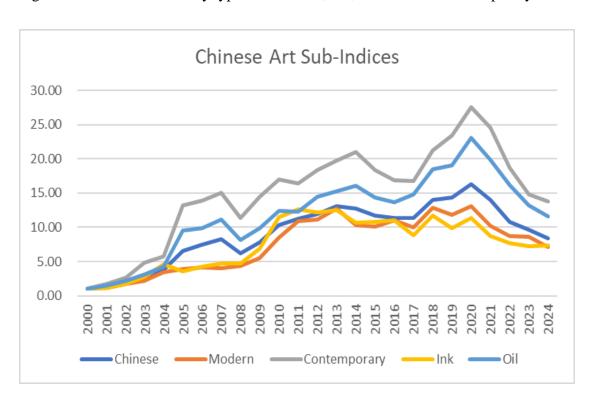


Figure 3: MM Chinese Art by type and era: Ink, Oil, Modern and Contemporary Indices

4. MM Chinese Art sentiment index

The MM Chinese Art Sentiment Index measures market enthusiasm, with a mean of zero. Since the sentiment index does not have as stringent data requirements as the price index, we have published it semiannually. As shown in Figure 4, the sentiment of the Chinese art market can be classified into three periods: Spring 2000-Spring 2008, Autumn 2008-Spring 2014, and Autumn 2014-Autumn 2024. In the first period, the sentiment index surpassed 0.5 for most years, indicating fierce bidding in the market and sales on average were 50% higher than the estimates. In the second period, affected by the global financial crisis, the sentiments

index fell sharply, followed by a lengthy phase in which market sentiment rose gradually. In the third period, affected by various factors, the sentiment index fell to new lows in the spring of 2020 and then the fall of 2023. Although the spring auction in 2024 showed that collectors' confidence had improved, the 2024 autumn auction markets saw continued sluggishness. (See Figure 4)

Figure 4: MM Chinese art sentiments index

5. MM Chinese Art Liquidity Index

The MM Chinese Art Liquidity Index measures the liquidity of works of art by artist. It consists of three indicators: years on auction, sale rates and liquidity. The number of years on auction are measured between 2000-2024, sale rates count percentage of works have been successfully sold in auction, and liquidity is a combination of years on auction and its sale rate. According to the liquidity index ranking in Table 1, the three Chinese artists rated with the highest liquidity from 2000-2024 are Zao Wou-Ki, Wu Guanzhong and Chang Yu.

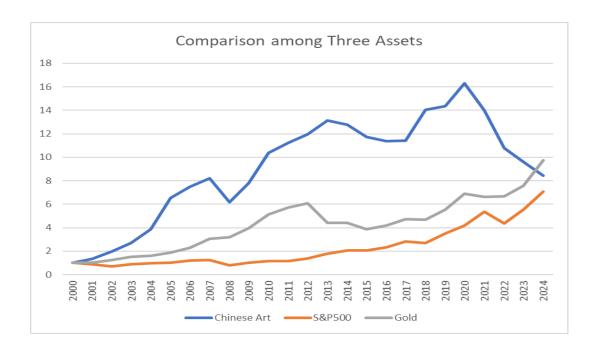
Table 1: MM Chinese Art Liquidity Index

| Name | Years on | Sale Rates | Liquidity |
|----------------|----------|------------|-----------|
| | Auction | | |
| ZAO WOUKI | 25 | 0.89 | 0.89 |
| WU GUANZHONG | 24 | 0.92 | 0.89 |
| SANYU | 24 | 0.91 | 0.87 |
| LIN FENGMIAN | 25 | 0.87 | 0.87 |
| ZHANG DAQIAN | 25 | 0.83 | 0.83 |
| ZHANG XIAOGANG | 23 | 0.87 | 0.80 |
| LIU YE | 21 | 0.92 | 0.77 |
| YUE MINJUN | 21 | 0.91 | 0.76 |
| CHU TEH CHUN | 22 | 0.86 | 0.76 |
| LIU WEI | 20 | 0.88 | 0.70 |

6. Comparison of returns on Chinese art and two major asset classes

The two major assets that global investors and collectors most often use in asset allocation are the S&P 500 Index and gold. Figure 5 shows a comparison between the Chinese Art Index and the two major assets between 2000-2024. (Data for 2024 as of December 17) It can be seen that Chinese art has long outperformed the two major indices. Although Chinese art was surpassed by gold this year, it still outperformed the world's largest index fund, the S&P 500. From 2000-2024, the annual growth rates of Chinese art, the S&P 500 and gold were 9.3%, 8.5% and 9.9%, respectively.

Figure 5: Comparison of returns between Chinese art and two major asset classes



The above results show that the Chinese art market is still in consolidation. Despite the four-year adjustment from 2021 to 2024 and a 48% drop, Chinese art has retained an annual growth rate in prices of 9.3% over the past 25 years. It shows that Chinese art has long-term investment value. As a physical asset, it could act as an inflation hedge as the world is flooded with liquidity. Moreover, great works by well-known artists have good liquidity. Therefore, with the development of China's economy and the growth of Chinese wealth around the world, it seems that Chinese art will continue to garner continued attention from collectors and investors.

The purpose of compiling the Chinese Art Index is to provide a scientific, systematic and comparable index system for the Chinese art market. It will allow us to track its various trends so that Chinese art can be valued rationally. And this may contribute to the healthy and orderly development of the Chinese art market.