

<u>Investing in Art: Correlation Between Art and the Stock Market</u>

By Jacob Koch-Gallup October 13th, 2021

Are art and the stock market correlated? Is art a good investment? What are the returns on art? How much should one's portfolio be allocated to art? How do people invest in art? Does art come with more responsibilities than buying a stock? Is buying NFTs equivalent to buying physical art? These are all questions that will be answered in this report.

Are Art and the Stock Market Correlated?

One of the biggest appeals to investing in art is its correlation to the stock market, or rather lack thereof. Modern Portfolio Theory suggests that diversification and variance is the most important aspect of one's portfolio. In order to achieve diversification, investors must put their money in assets whose prices move independently from one another or in other words assets that are uncorrelated. In times of uncertainty if one aspect of the market or a certain group of financial products gets hit worse, the investor limits their exposure to that downside. For years investors have purchased works of art as a way to protect their wealth and receive positive returns at the same time.¹

The Sotheby's Mei Moses Indices, an art index developed in 2002 by New York University Professors Jianping Mei, Ph.D. and Michael Moses, Ph.D., tracks same-sales data of art sold at auctions to produce a comprehensive measurement of changes in the value of art. These indices calculated the long-term correlation coefficient of art and the S&P 500 as 0.04. A correlation coefficient of 0.04 signals almost no correlation at all. ² A coefficient of zero signals no correlation and +1.0 or -1.0 signals perfect positive or inverse relationships, respectively. In 2013, professors Luc Renneboog, Ph.D. and

¹ https://medium.com/@masterworksio/why-art-should-be-in-every-investors-portfolio-d30b7df13527

² https://www.sothebys.com/en/the-sothebys-mei-moses-indices

Christophe Spaenjers, Ph.D. published *Buying Beauty: On Prices and Returns in the Art Market* in order to investigate the investment performance of art. They used a hedonic regression model instead of using same-sales data to create their art index. They found that art has an inverse relationship with the S&P 500 with a correlation coefficient of (0.03), a positive relationship with the global stock market with a correlation coefficient of .20.³

Is Art a Good Investment?

Based on the Sotheby's Mei Moses Indices and Renneboog and Spaenjers art index, art has been shown to have nearly an inverse relationship to the stock market. This leads to the belief that art is a good investment due to its ability to be used as a safe store of wealth and a hedge against market downturns. Warren Buffet disagrees with this notion stating that art is a poor investment. In a letter to his Buffet Partnership clients in 1963, he brought up the purchase of Leonardo Da Vinci's "Mona Lisa." Buffet recalled that in 1540, Francis I, the former king of France, bought the "Mona Lisa" for 4,000 gold crowns or \$20,000. If Francis I had placed that \$20,000 into an investment vehicle which netted an annual return of 6% after-tax, the value would have been \$1+ quadrillion in 1963. At that time, the "Mona Lisa" was insured at a value of \$100 million.⁴ Although this is an extreme example, it is important to note the potential negative aspects of investing in art.

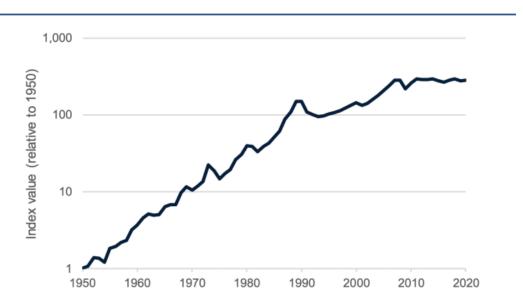
³ Renneboog, Luc, and Christophe Spaenjers. "Buying Beauty: On Prices and Returns in the Art Market." Management Science, vol. 59, no. 1, INFORMS, 2013, pp. 36–53, http://www.jstor.org/stable/23359604.

⁴https://markets.businessinsider.com/news/stocks/warren-buffett-mona-lisa-art-investment-berkshire-hathaway-national-indemnity-2 021-9

What Are the Returns on Art?

The graph below shows the Sotheby's Mei Moses Index for the broader art market from 1950 to 2020.⁵ The index's compound annual growth rate is 8.4%. This number shows why so many people invest in art because when comparing it to the S&P 500's compound annual growth rate from 1950 to 2020 of 7.93%, it beat the market.⁶

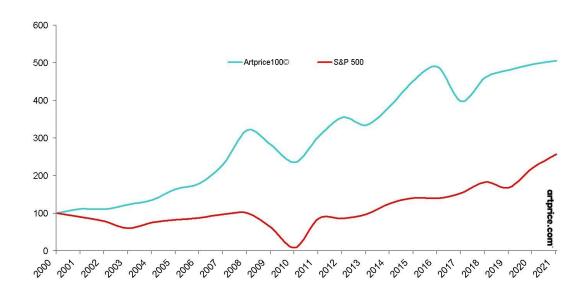




⁵ https://www.sothebys.com/en/the-sothebys-mei-moses-indices

⁶ http://www.moneychimp.com/features/market_cagr.htm

There is another art index called the Artprice100©. The Artprice100© represents the one hundred most important artists on the art market including Pablo Picasso, Andy Warhol, Claude Monet, and many others. The Artprice100© has had a total growth of +405% since 2000. Below is a graph comparing the returns of the Artprice100© compared to the S&P 500.⁷



How Much Should One's Portfolio Be Allocated to Art?

Portfolio allocation always depends on one's risk tolerance and financial goals, but many experts have recommendations on portfolio allocation toward art. The Wall Street Journal reports that ~8% of total wealth is held in "passion investments" or non-traditional assets such as art. Professor Michael Moses, creator of the Sotheby's Mei Moses Index stated that an allocation of 10-20% is reasonable. Phillip Hoffman, former art curator, and creator of the Fine Art Fund believes that investors should allocate between 1% and 5% of their portfolio to art. Bernard Duffy, manager of an emotional assets fund, recommends an 8% allocation to passion investments in a portfolio.8 So, it all boils down to one's risk tolerance and attitude toward alternative investments, but it is safe to say that one can't go wrong with having art in their portfolio.

⁷https://www.prnewswire.com/news-releases/artmarketcom-the-artprice100-index-is-continuing-to-grow-405-since-2000-301238478.

⁸ https://www.wsj.com/articles/SB10001424052748703467004575463112027277830

How Do People Invest in Art?

Investing in art differs drastically from investing in equities or cryptocurrencies. Since art is subjective and has no cash flow statements, it is extremely hard to value. However, the main goal of investing in art is for the demand for the piece of art to increase faster than the supply of similar pieces. This will increase the value of the piece, potentially leading to profit.

The first step to invest in art is figuring out which artist's work the investor wants to purchase. This can be as simple as liking the artist's style or as complex as spending hours of research to figure out what artist might provide the best returns. The latter is unlikely to happen as artists generally do not appear on investor's radars until the artist has built a reputation with galleries and auction houses, charging high prices for their work. In addition, artists' work sells for more once the artist has passed, making it a lot harder to figure out which artist has potential.

The next step is deciding what type of piece to buy. The Motley Fool outlines three types of art investment options:

- 1. High risk and high cost Investors can purchase original artwork at auctions, galleries, or fairs. These works will be the most expensive and will probably only be from up-and-coming artists whose work may or may not appreciate. This is the biggest gamble because these types of artwork cost the most and are not guaranteed to go up in value.
- 2. Low risk and low cost Investors can buy prints of an original artwork instead of the actual work. This option is a lot cheaper because it is not the original work; however, if the prints are high-quality and there is only a limited supply, they have the potential to increase in value.
- 3. Low risk and high cost Investors can purchase artwork from blue-chip artists.

 Blue-chip artists are the Facebook (\$FB), Apple (\$AAPL), Amazon (\$AMZN), and Google's (\$GOOG) of the art world. Art from artists such as Andy Warhol, Pablo Picasso, Salvador Dali, Claude Monet is the most expensive but will hold their

value the best. These artworks are not speculative and have the most stable value, but may not offer the highest growth potential.⁹

Does Art Come with More Responsibilities than Buying a Stock?

The simple answer is yes. The art market is highly illiquid meaning that investors cannot easily sell and buy art, especially when compared to the stock market. Investors will have to hold on to their art investments for a long time and may have trouble selling even if their art investment has appreciated. Another important difference between art and stocks is that art is a tangible object. This means that art requires maintenance to retain its value. Investors' art must be kept in a controlled area where it will not be damaged by temperature, humidity, sunlight, or other factors. There is also a string of additional costs associated with purchasing and selling artwork. Investors must factor in sales tax, transportation expenses, authentication and appraisal fees, and insurance.¹⁰

Is Buying NFTs Equivalent to Buying Physical Art?

NFTs, or Non-Fungible Tokens, represent digital ownership of art. They have been all the craze in 2021 with some even going for millions of dollars; however, since NFTs are so new, it is hard to predict their trajectory over the next few years. Diana Wierbicki, a Partner and the Global Head of Art Law at Withersworldwide, commented on NFTs comparing them to contemporary art. She said that since NFTs's values are not fixed, they come with major risks. Evan Beard, lead of the art services group at Bank of America Private Bank, said "I don't see NFTs as collectibles like baseball cards," but rather "I see them as these rare digital artworks. They're just a different form from what you'd see in traditional art." With major auction houses, galleries, and museums taking part in the NFT craze, it is obvious that there is major potential. It is hard to say that purchasing NFTs is equivalent to purchasing physical art because, at the end of the day, they take on such different forms and there is rarely long-term data.

⁹ https://www.fool.com/investing/stock-market/market-sectors/communication/media-stocks/art-investment/

¹⁰ https://www.fool.com/investing/stock-market/market-sectors/communication/media-stocks/art-investment/

¹¹https://economictimes.indiatimes.com/magazines/panache/a-physical-painting-or-an-nft-which-is-a-better-investment/articleshow/8 4755644.cms?from=mdr