

The Art Market Mirage: Examining the Realities of Investing in the Art World

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Abstract

This paper discusses the difficulty behind valuating artwork when looking to make investment decisions given today's tools. The paper offers an overview of the overall recent art market performance in comparison to that of US equities. Additionally, the difficulties that art investors or collectors may encounter in the acquisition process is highlighted through a comparison of valuation processes between art and equities. The discussion continues by comparing the performance of select artists, Michel Basquiat, and Robert Rauschenberg, to broader economic trends in order to analyze the correlation between economic cycles and artwork performance. Furthermore, research on the Florida art market and Art Basel 2022 highlights recent changes and effects of the current economy. More broadly, the paper discusses the changing marketplace for global artwork sales and shows how synthesizing increasingly disparate data is offering new challenges for individual collectors. The findings suggest that art's subjective nature makes traditional financial valuation techniques complex, and that price is most often driven by shifting preferences for art.

Defining Art

Art is one of the most difficult subjects to understand due to its contentious nature in everyday life. Whether it be academics, economics, technology or philosophy, art seems to find its way into almost every conversation. This may be because some would argue that everything is art. But others not so much. While the definition of art is not the main concern of this paper, its subjective nature, as described, is a major aspect that contributes to the ongoing uncertainty behind artwork pricing and a justifiable investment. While it would be easier to define art when comparing its performance to other asset classes, such as US equities it seems that this is one of the underlying difficulties when quantifying the asset. For simplicity purposes, this paper discusses Blue-Chip artwork and fine art in general.

Many claim that art is a powerful product for portfolio diversification as one can avoid exposure to varying economic cycles. Since art being more tangible, is bought and sold in a market removed from traditional assets such as stocks and bonds, or even real estate, risk can be varied further. While art is a unique asset based on valuation metrics that do not necessarily align with traditional economic data, it can perform very well. Tracking the performance of art as an asset has been a challenge that still faces the world today. Today, there are several indices that track “art’s” performance year over year. At glance, art seems to be greatly outperforming US equities.

Broadly, art markets have shown strong and resilient performance through even the toughest of economic environments, some name art as an inflation hedge or a safe haven in times of market instability, but the art market may not truly be the pretty picture it has been painted out to be. At the surface, art indices and auction data provided by intermediaries illustrate art as an asset that is soundly outperforming US equities and one that will continue to be a stable

investment for many years to come, however, with deeper analysis one can understand that the current indices do not serve as a systematic measurement tool for the broader US art market mainly because of art's subjective nature. While art can be a great diversification tool in a balanced portfolio the question becomes whether the information given is reliable enough to make prudent investment decisions into artworks.

Traditional US Equities and their Benchmarks

The S&P 500

The S&P 500 is a collective stock index that tracks the performance of 500 of the United States largest companies. Stocks included in the S&P must maintain a minimum market cap of \$14.5B, as of 2022 guidance.¹ Investors and analysts consider the S&P 500 an excellent tool because it provides a comprehensive and diverse representation of the US stock market, making it a suitable indicator of the overall health of the US economy. The S&P 500 is used as a benchmark for individual investment performance, mutual funds, and exchange-traded funds (ETFs). As a result, almost any investor can use the S&P 500 to evaluate the performance of their own portfolios relative to the broader market.

The S&P's performance dating back to 1957 has consistently produced an average return of around 10%.² Over the last 20 years the S&P has had a 9.51% return.³ With such consistent

¹ PR Newswire, "S&P Dow Jones Indices Announces Update to S&P Composite 1500 Market Cap Guidelines and Results of S&P Composite 1500 Index Consultation on Market Capitalization and Liquidity Eligibility Criteria Index Consultation on Market Capitalization and Liquidity Eligibility Criteria," S&P Global (S&P Global, January 4, 2023), <https://press.spglobal.com/2023-01-04-S-P-Dow-Jones-Indices-Announces-Update-to-S-P-Composite-1500-Market-Cap-Guidelines-and-Results-of-S-P-Composite-1500-Index-Consultation-on-Market-Capitalization-and-Liquidity-Eligibility-Criteria>.

² Kent Thune, "Average Return of the Stock Market: S&P 500, Dow Jones," Seeking Alpha (Seeking Alpha, January 2, 2023), <https://seekingalpha.com/article/4502739-average-stock-market-return>.

³ Kent Thune, "Average Return of the Stock Market: S&P 500, Dow Jones,"

returns, the standard desired percentage return for investors is aimed at 10% or greater. So, falling short of a 10% gain year-over-year would indicate that you are underperforming against the broader market. While there have been many recent economically challenging periods such as the recent COVID-19 dip, the Great Recession in 2008, or even the DotCom bubble in the late 1990's, the market has always been able to produce an average growth of 10% in the long run.⁴ While the S&P has performed consistently well and one might be tempted to solely invest in the index, diversification into other assets is a key aspect to a well-rounded portfolio.

Considering some of the biggest issues the world has ever faced over the past three years including the COVID-19 pandemic, inflation, and the Russia-Ukraine war, equities are still performing resiliently. Over the past three years the S&P 500 has produced a return of 22%, and over the past five years, as of February 2023, it has produced a return of a 48%.⁵ While the economic and political situation in the world, and specifically in the US, may be causing unease, for the average earner, many argue that there is not a more reliable place to invest their capital. Equities are resilient and can be quantifiably measured as consistently successful over long time periods.

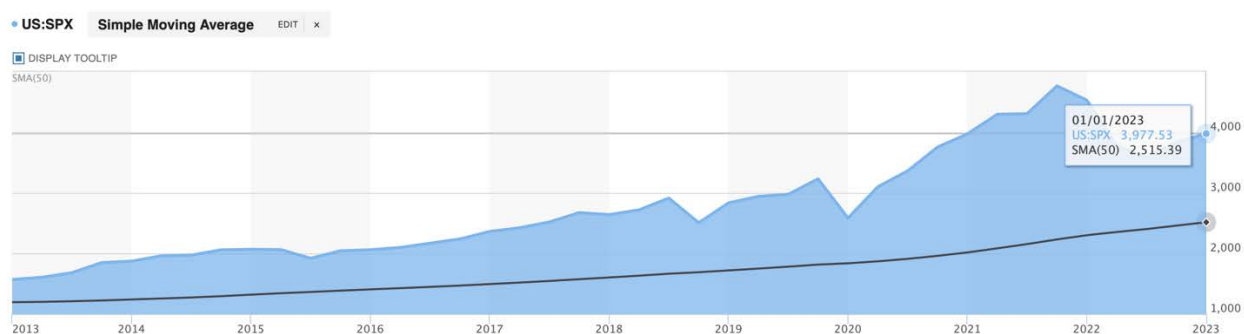


Figure 1: Historical 10-year return of the S&P 500⁶

⁴ Kent Thune, "Average Return of the Stock Market: S&P 500, Dow Jones,"

⁵ "S&P 500 Index Performance Report," Barchart.com, 2023, [https://www.barchart.com/stocks/quotes/\\$SPX/performance](https://www.barchart.com/stocks/quotes/$SPX/performance).

⁶ "SPX: S&P 500 Index Overview," MarketWatch (FactSet, 2023), <https://www.marketwatch.com/investing/index/spx?mod=home-page>.

The Dow Jones Industrial Average

Another benchmark commonly used to assess the performance and overall health of the US economy is the Dow Jones Industrial Average (DIJA). The DIJA is a collective of 30 large, strongly reputable US companies. Year-over-year, the DIJA has produced an average return of 8.70%.⁷ The DIJA is the second oldest index, but an important one as it produces an unweighted average that shows how some of the United States' strongest and most diverse companies are performing.⁸ Similarly, to the S&P 500, the DIJA has shown resilient performance for equities despite recent economic and political issues. Over the past three years, the DIJA has produced a return over 50% emerging from the pandemic lows, and more than a 35% return in the past five years.⁹ While the DIJA captures few companies, this snapshot of market performance further suggests that overall, equities continue to provide consistent opportunity over the long run. It is worth noting that the DIJA is a great proxy for the market, but the S&P 500 ultimately serves a better measure of the broader economy as it includes a wider range of companies and sectors.

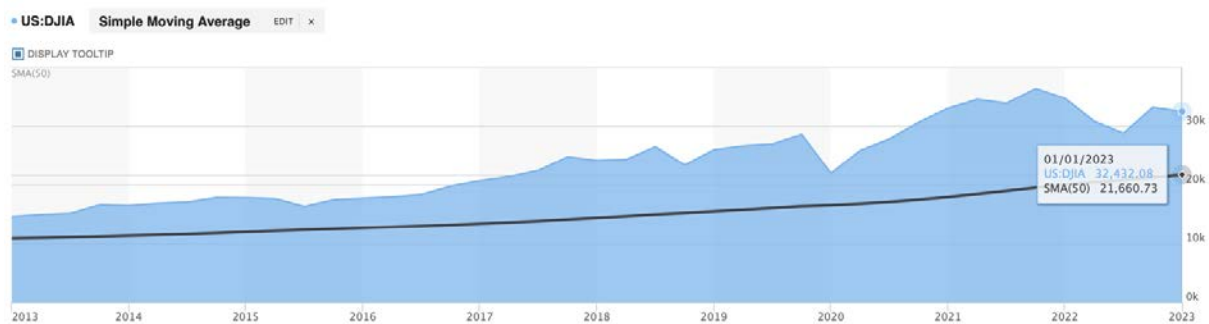


Figure 2: Historical 10-year return of the DJIA¹⁰

⁷ Akhilesh Ganti, "What Is the Dow Jones Industrial Average (DJIA)?," Investopedia (Dotdash Meredith, April 6, 2023), <https://www.investopedia.com/terms/d/djia.asp>.

⁸ Akhilesh Ganti, "What Is the Dow Jones Industrial Average (DJIA)?"

⁹ "Dow Jones Industrial Average Price, Real-Time Quote & News," Google Finance (Google, 2023), <https://www.google.com/finance/quote/.DJI:INDEXDJX?window=5Y>.

¹⁰ "DJIA: Dow Jones Industrial Average Overview," MarketWatch (FactSet, 2023), <https://www.marketwatch.com/investing/index/djia?mod=home-page>.

Both stock indices, as well as others, are great benchmarks when assessing the current performance and state of both markets and the overall macroeconomy. The broad range of business sectors and high volume of trading allows analysts to obtain a comprehensive measure that can aid in making projections, assessing individual portfolio performance, and even influencing investment strategy. Equity indices are easily accessible to anyone with access to a computer, TV, newspaper, or book. Not only is this information accessible, but also incredibly reliable since multiple banks, equipped with large teams of analysts provide guidance to individual investors based off thorough intrinsic analyses.

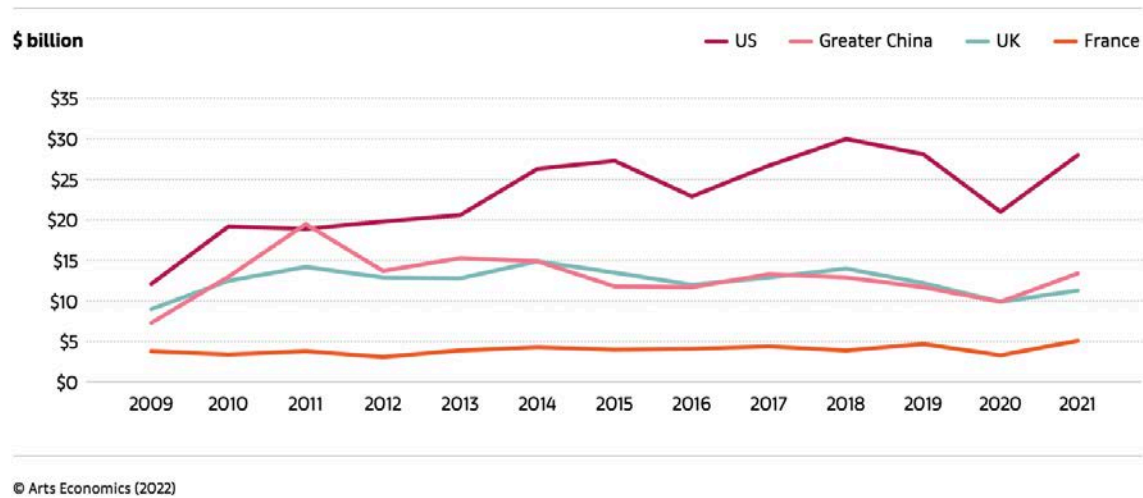
Art Market Performance and the Benchmarks

The most recent and comprehensive art market report, The 2022 Art Economics Report by UBS and Art Basel, mentioned many measures of success for the global art market and highlighted art's remarkable resilience through the pandemic. In 2021, global art and antique sales reached \$65.1 billion, a 36% increase from 2020.¹¹ The United States market proved strong as the US accounted for 43% of global sales.¹² The increase in sales suggests that there is persistent demand and continuing adaptability art vendors are experiencing from the pandemic.

¹¹ Clare McAndrew, "The Art Market 2022" (Art Basel & UBS Report, 2022), pp. 23.

¹² Ibid.

Figure 3: Sales in The Major Art Markets (2009-2021)¹³

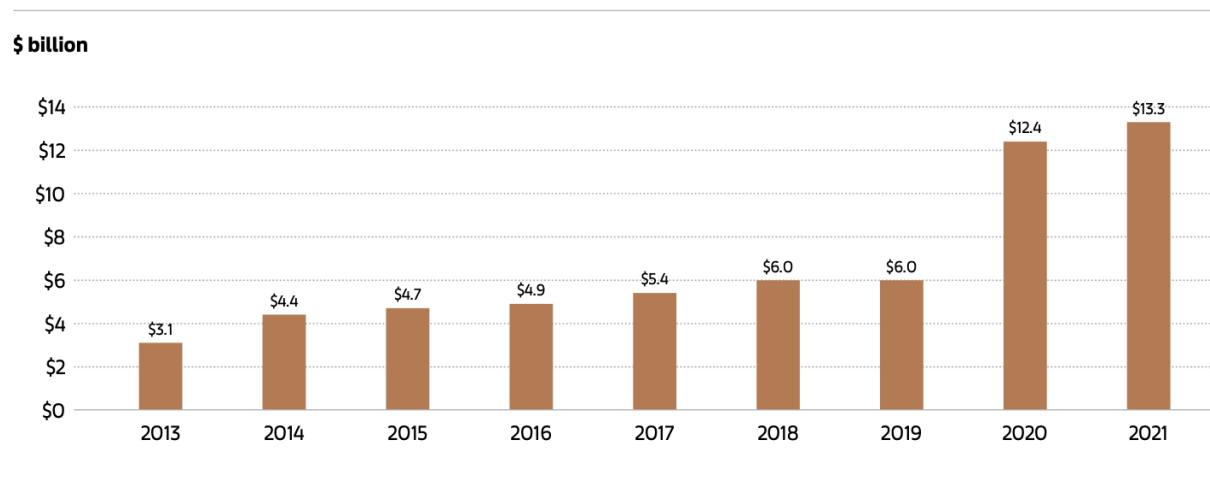


The adaptability comes from a development in the market; online sales played a significant role in the art market's recovery. Easy access to a countless number of works via online galleries coupled with swift online payment methods helped ease losses from cancelled art fairs and gallery closures. As a result, online sales were up by 106% in 2020 and continued to grow slowly in 2021 at a rate of 7%, with online sales accounting for 20% of all global sales.¹⁴ Increasing popularity of online sales indicates a significant shift in the way art is sold, meaning collectors and dealers must evolve with the changing landscape of the art market.

¹³ Ibid., 30.

¹⁴ Ibid., 37.

Figure 4: Online Sale of Art and Antiques (2009-2021)¹⁵



© Arts Economics (2022)

Art Indices

To better understand art's performance as an asset, several indices have been created in recent years by art enthusiasts and economists. One of the most popular, which has been purchased and utilized by Sotheby's, is the Mei Moses Index. The index is considered the most reliable benchmark for performance by many because it uses live, public, auction sales data from the biggest auction houses including Sotheby's and Christie's, dating back over 200 years.¹⁶ Sotheby's also argues that the data structure behind the Mei Moses is also another reliable factor: a weighting system based on the Case-Shiller Real Estate Index.¹⁷ The index currently covers over 80,000 works of unique art produced by more than 10,000 artists ranging in styles from Old Masters through Contemporary.¹⁸

¹⁵ Ibid., 36.

¹⁶ Morgan Stanley Wealth Management Team, "Demystifying Art Indices," Morgan Stanley, August 30, 2022, <https://www.morganstanley.com/articles/art-market-indices>.

¹⁷ "The Sotheby's Mei Moses Indices," Sotheby's, 2021, <https://www.sothebys.com/en/the-sothebys-mei-moses-indices>.

¹⁸ Morgan Stanley Wealth Management Team, "Demystifying Art Indices"

Art, according to the Mei Moses, has proved to perform strongly over the past few years despite tough economic headwinds including the COVID-19 pandemic, global political instability, and rising inflation. The last update on the index, released by Sotheby's shows the year 2021 as being especially strong. Since 1950, as shown in Figure 5: The Sotheby's Mei Moses Index (1950-2021), the index has produced a 8.5% annual growth rate for all artworks.¹⁹

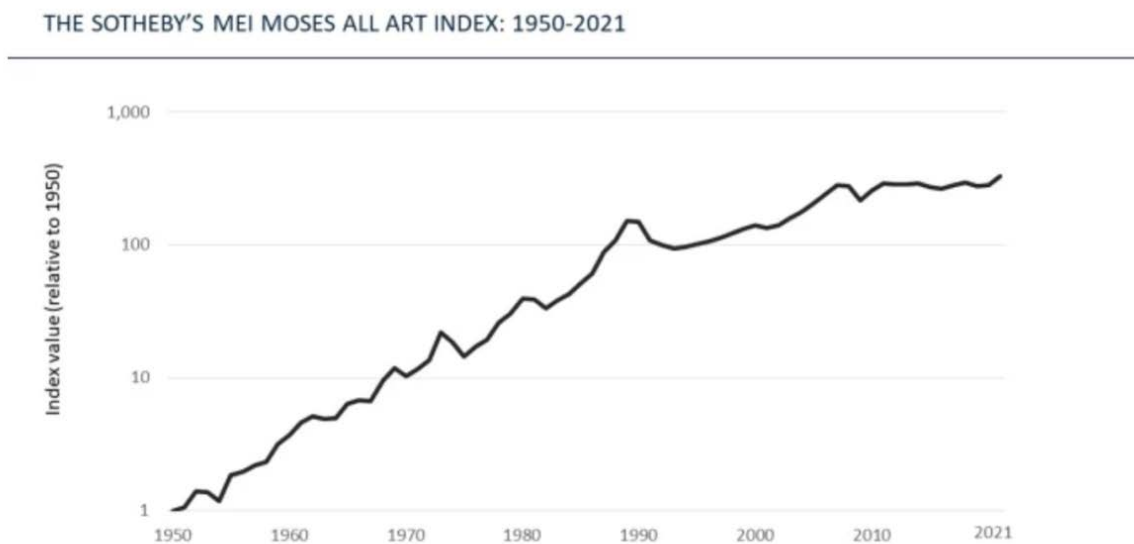


Figure 5: The Sotheby's Mei Moses Index (1950-2021)²⁰

Another index some may reference to track the performance of the art market is the Artprice100. The index is a theoretical investment simulation that tracks the performance of the art market's 100 most successful artists. Drawing data from over 6,300 auction houses, the index captures a more complete picture of art sales across the globe.²¹ More specifically, the Artprice100 tracks how Blue-Chip artists performed over the past five years and weights the artists accordingly.²² The Artprice100 has shown incredible, consistent performance year-over-

¹⁹ "The Sotheby's Mei Moses Indices"

²⁰ Ibid.

²¹ Thierry Ehrmann, "PDF," 2018.

²² Thierry Ehrmann, "The ARTPRICE100© Index of Blue-Chip Artists up 3% over 2022," Artprice.com, January 30, 2023, <https://www.artprice.com/artmarketinsight/the-artprice100-index-of-blue-chip-artists-up-3-over-2022>.

year and continues to outperform the S&P 500. Through the pandemic and navigating recessionary fears it appears that the art market is not slowing down even for the most expensive works. The Artprice100 puts the performance into perspective as the index gained over 3% in 2022, a 22% difference from the S&P 500 which fell almost 19% in the fourth quarter of 2022.²³

Artprice100© vs. S&P 500 – Base 100 in January 2000

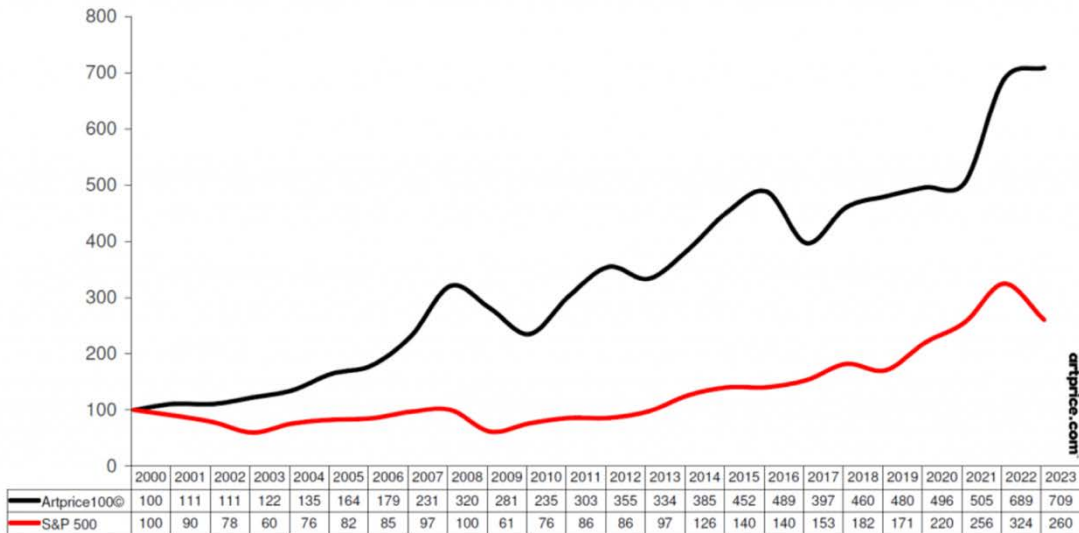


Figure 6: The Artprice100 vs. the S&P 500 (2000-2021)²⁴

A Cross Sectional Analysis of the Art Indices

While art seems to be performing well according to the indices, other approaches should be considered to understand the true performance of art as an asset. Tracking price performance can be a challenge due to art’s subjective nature. With that said, condensing the performance of art as an asset into a single index is problematic for many reasons. Is it convincing to condense

²³ Ibid.

²⁴ Ibid.

art sales, which vary greatly, into a single index and claim that the asset substantially outperforms traditional asset classes?

The performance of Blue-Chip paintings can be reasonably argued to maintain value and performance through difficult economic times, however, not many beyond the ultra-wealthy have access or the means to acquire such expensive work. The reason that “Blue-Chip” art and even the Artprice100 as discussed, performs so well is due to that fact that high net worth individuals, the primary buyers of Blue-Chip works, are not as heavily impacted by changing economic cycles. High net worth collectors will collect when they see a piece they admire. This idea will be illustrated by individual artists sales below. For those with lesser monetary means or knowledge in art, the indices do not provide much useful insight into the performance of individual, nameless artworks.

Shortcomings of the Artprice100

The Artprice100 is a unique tool that measure art’s performance as a collective asset but does not capture the necessary information to be considered a useful benchmark for analysts or individual investors looking to make select diversifications choices into art. The biggest shortcoming is the index’s lack of definitive intrinsic valuation factors, which would enable analysts to comprehensively understand the rationale behind artwork performance. The only quantitative measure within the index is realized price changes from the world’s top 100 artists.²⁵ To be factored into the index, an artist must have sold 10 paintings within the past year. This measure serves as a liquidity variable or criteria which can be useful to date the index properly

²⁵ Ibid.

and to provide more recent data but does not necessarily strengthen the index as a cogent market benchmark.

Data frequency is also another critical issue for the Artprice 100 index. Since the index is only released once, at year end, it is difficult for both prospective and active collectors to understand current market performance. Since market conditions are changing more rapidly than ever, this is an unfortunate shortcoming that ultimately leaves the Artprice100 useless in real time transactions. Sure, the index can be somewhat useful for those looking back in time, but overall, it seems that the Artprice100 solely captures price appreciation. Could this index just be a beautified capture of year-over-year inflation?

Risk Adjusted Metrics for the Artprice100

The artprice100, as pictured above, shows volatile movements fueled by infrequent, expensive Blue-Chip sales in the art market. With a standard deviation of 15.23, the index's volatility is around 1.5 times higher than the mean annual return, making the Artprice100 a risky investment. Additionally, a Sharpe ratio of .54 has been calculated for the index, suggesting the potential for attractive returns for those willing to take on risk. However, the market's volatility and illiquidity present problems. Nevertheless, collectors must bear a high appetite for risk when buying art, which is partly attributable to its subjective nature. Subjectivity as an attribute of art as an asset can further explain the risk creation for a .54 Sharpe ratio.

Shortcomings of the Mei Moses Index

As mentioned, Sotheby's Mei Moses is another reputable index many look to for aggregate art sale data. The index takes an approach inspired by the Case-Shiller Real Estate Index (CSEI) which tracks the prices of single-family homes.²⁶ The methodology borrowed from the Case-Shiller Index utilizes repeat sales data to track the price appreciation of artwork. From one sale to the subsequent, the difference is taken and then reported to help curb the effects of infrequent sales in the art market.²⁷ While the repeat sales methodology seems like a strong development of the index, the art market only sees a very small percentage of repeat sales.²⁸ Therefore, an aggregation of infrequent sales data becomes problematic as individual, outlying sales bear the potential to skew the index in radical directions making the Mei Moses a weak tool for broader price comparison. Contrastingly, the structure works well for the real estate market since the CSEI is based off a market where 90% of real estate is resold.²⁹ The illiquidity of the art market in this situation creates large limitations to the indices' ability to benchmark broader performance for the art market.

Not only are there so few repeat sales, but the Mei Moses index only captures data from the top auction houses Sotheby's and Christies. In 2015, the TEFAF market report indicated that the Mei Moses Art Indices only captured at most 2% of fine art objects sold.³⁰ More recently, the Art Economics report mentioned that both auction houses combined only accounted for 11% of art sales across the globe in 2021.³¹ While this shows strong performance for auction houses,

²⁶ Morgan Stanley Wealth Management Team, "Demystifying Art Indices"

²⁷ Ibid.

²⁸ Brian Boucher, "See What Experts Have to Say About Sotheby's Acquisition of the Mei Moses Art Indices," Artnet News, October 29, 2016, <https://news.artnet.com/market/sothebys-acquisition-mei-moses-art-indices-725648>.

²⁹ Ibid.

³⁰ Ibid.

³¹ McAndrew, "The Art Market 2022," 126.

89% percent of the art market is neglected in this index posing huge data limitations. Though the index may only capture a small share of market sales, it includes a diverse range of sales data in terms of both artwork medium and price. The Mei Moses index may benefit from a wide array of sales data; however, this diversity poses as a drawback for collectors looking to make accurate price comparisons or valuations for select artworks or movements. With just a few of these attributes alone, the Mei Moses cannot offer common buyers the information necessary to make a properly informed decision.

Art Indices compared to the S&P 500

When looking at the S&P 500 for comparison, the 500 stocks included only capture a small percentage of the US equity markets, but the value in market capitalization accounts for around 80% of the market's performance.³² The S&P's strength also comes from the consistency of its criteria. The S&P includes several companies in various industries but has standard measures in place to allow for an apples-to-apples comparison. The standards include positive earnings for four consecutive quarters, a market capitalization of at least \$12.7B, a public float of over 50%, and a few others.³³ The few measures mentioned are just a show of the criteria kept to ensure that the index is offering a consistent and holistic capture of the broader market.

The free art indices available to collectors and investors are interesting as they show the continual growth of art market sales but carry many limitations in the information that useful economic benchmarks should provide. Indices are always helpful for investors to understand their portfolio performance, but in the case of art it seems best to rely on the individual

³² "S&P 500 Overview," S&P Dow Jones Indices (S&P Global, 2023), <https://www.spglobal.com/spdji/en/indices/equity/sp-500/#overview>.

³³ Ibid.

characteristics of each piece for more information on price action and value. After all, art is not a cash producing asset, it doesn't bear interest or offer dividends so relative valuations should be considered.

Art Valuation Techniques

Whether it be artwork or individual investment in equities, valuing a single asset is necessary to make proper decisions. Valuing individual artworks can be a difficult task and one that is argued to be subjective in nature. Valuing artwork is obviously much different than a traditional asset because of its inability to produce cash flow. While some argue there are many contributing factors to an artwork's overall intrinsic value, the only true quantitative or monetary measurement that can be computed is price appreciation. Price appreciation for an artwork can simply be found by subtracting the original sale price from the new sales price, dividing the difference by the original sales price, and then multiplying the quotient by 100. As many call it, a percent change formula. Aside, from price appreciation, there are few other effective quantitative valuation techniques for pricing a work.

Comparable Analysis

Another technique many utilize when looking to price artwork is "comparable analysis." The comparables technique stems from a classic relative valuation method used across the financial industry where assets of the same supposed relative value with similar features or functions are drawn for price comparison. One may even think of this as comparing house prices within select neighborhoods when home shopping. This technique can be useful when trying to

capture a relatively similar or “ballpark” price. Assets are often made up of so many unique characteristics that make accurate relative valuations difficult. Comparable valuation gets even more complicated as value can often lie in the subjective preference for a particular piece. The subjective preference is a central factor that changes price within the art market.

One issue frequently cited by those pricing assets is that comparable analysis is often limited to public data.³⁴ As for artwork, access to relevant data can also be an issue unless purchasing artwork through a large auction house. Since around 40% of work is sold through auction houses, there is no guarantee that proper or accurate data will be offered when pricing an artwork.³⁵ While public data may be available there are issues regarding liquidity. As mentioned, the art market is illiquid since the majority of artwork does not resell. This means it might be even harder to find relevant comparable sales within a recent time span. Artwork by an artist who sells regularly throughout the year will offer the opportunity for easier price comparison, but this also means that their work is likely in high demand ultimately resulting in a higher purchase price. Therefore, the comparative sales valuation approach may be effective only for the small number of collectors who can afford to pay the price.

Individual Attributes and How They Help Value Artwork

Fundamental analysis varies from artwork to artwork depending on medium, but the most common attributes contributing toward pricing include: the artist, the provenance, the condition, authenticity, the subject, and the rarity.³⁶ The artist may be the most obvious attribute driving

³⁴ James Chen, “Comparable Company Analysis (CCA): How Is It Used in Investing?,” Investopedia (Dotdash Meredith, March 9, 2020), <https://www.investopedia.com/terms/c/comparable-company-analysis-cca.asp>.

³⁵ McAndrew, “The Art Market 2022,” 122.

³⁶ “How to Value Art,” Artnet Auctions, 2023, <https://www.artnet.com/auctions/pages/common/help/howtovalueart.aspx>.

price as accomplished artists with great reputations tend to hold value over time. Usually, the work of artists who have passed tend to appreciate since their reputation is no longer tarnishable and they can no longer add supply to the marketplace. Just think of any casual art buyer or museum goer, when they hear about an artist they know, their attention is engaged. While an artist's name is important there is not much value without authenticity. Authenticity verification is a critical component of price, and can be achieved through analysis and expertise, which often varies on a medium-by-medium basis.

Moreover, ownership history, known to the art world as “provenance”, influences the pricing of artwork.³⁷ Whether an artwork has been owned by a museum, a royal, or even an auction house, the hands of ownership can drive price in many unique ways. Between transfers in ownership, the condition of artwork is also assessed as another obvious characteristic that will impact price. No matter how historically rich or important an artwork is, if an artwork is in poor condition, buyers will shy away. The core purpose of artwork is to display it for others to see and when condition negatively impacts this ability, both the demand and the price will fall.

Another important price driver is the subject displayed in the artwork.³⁸ Different groups of buyers and different volumes of buyers are brought to the table when certain subject matter is featured within an artwork. Some buyers would prefer to buy landscape paintings to display in their new cabin house in the mountains while other modern art collectors would prefer theoretical works concerned with the synthesis of context rather than physical aesthetic. Lastly, rarity may be considered one of the most important price drivers. Like any commodity, currency, or common good, price is directly influenced by supply. If an accomplished artist produces few pieces of high desire, expect an exorbitant price tag.

³⁷ Ibid.

³⁸ Ibid.

All of the attributes mentioned help buyers reach a closer or justified consensus for an immediate purchase price of the artwork. It is important to note that these attributes help form an immediate price based off an array of physical and subjective preferences but do not offer insight into the future value of art. Just like any market for any good, tastes and preferences change by the day. Take fashion as an extreme example for instance, trends come and go by the week. The Art Economics Report frequently highlights instances of changing consumer preferences. Most recently, the 2022 report mentions that “newer collectors tended to have a greater share of living artists’ works (57% for those new to the market in the last two years versus 49% for collectors of 20 years or more)”.³⁹ As stated above, an artist’s name can create value, but the demand or preference for the artist’s work will ultimately drive price. The same is true when looking at the historical significance, the size of the piece, its medium, and authenticity. While they can contribute toward the value of a piece, future collectors may change preferences at any given moment. This lies in the fact these attributes contribute toward a subjective valuation. In contrast to art, traditional equities consider a mix of broader economic projections and intrinsic metrics to predict future demand. Since investors are primarily in the business of making money, they rely on valuations that calculate the discounted future cash flow of a company which is aided by more predictable, broader economic trend data.

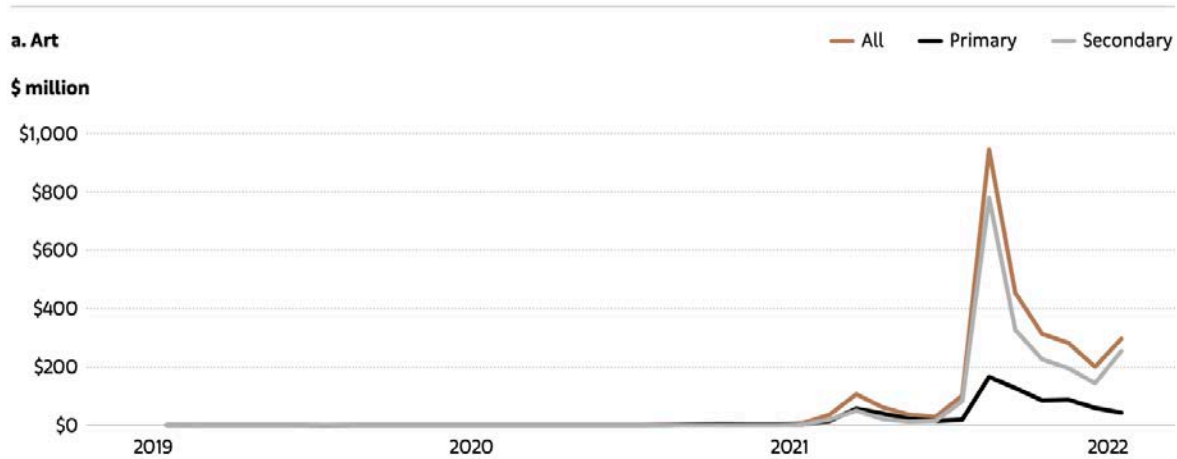
³⁹ McAndrew, “The Art Market 2022,” 214.

Changing Preferences for NFTs: The Boom, the Bust, and the Valuation Difficulties

Looking further at changing collector preferences, one can look at the recent boom and bust in the NFT market. The 2021 NFT bubble, is a clear example showing how inflated digital art prices were. Once the federal reserve began tapering its quantitative easing program and stopped offering stimulus checks, the markets began to turn, and many began to sell their NFTs in exchange for free cash. Within two years, the demand for the blockchain backed digital artwork boomed and busted leaving many with almost monetarily “worthless” digital illustrations. While many saw the digital artworks as great investment opportunities in a stimulated, low-rate environment, the preference for reliable, cash flow generating assets ultimately re-engaged investor’s focus when interest rates began to climb, and the economy began to turn in 2022. NFTs are digital art, takeaway all the stimulated hype and the true value lies in the owners’ eyes.

Figure 7: Monthly Values Traded in Art and Collectibles NFTs (2019-2022)

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NFTs were marketed well during the pandemic. With boundless hype surrounding crypto currency, NFTs were argued to have a well backed financial system that would bolster some of

⁴⁰ McAndrew, “The Art Market 2022,” 45.

the value behind artwork. Blockchain technology, inflated crypto prices, and celebrity influencers fueling the hype encouraged approximately \$11.1B in art NFT sales at the peak in 2021.⁴¹

Recent data from the Art Economics Report shows the unregulated crypto market began to cause fear as interest rates rose and investors sought out exposure to interest bearing assets. The majority of NFTs are backed by tokens like Ethereum and Solana which decreased in value by almost 40%. While falling crypto prices did not help, there was an even bigger issue, the fact that the “digital objects share a common feature with traditional works of art with regard to difficulty with valuations. Both artworks and NFTs do not have cash flows and thus cannot be modeled easily with discounted cash flows”.⁴² The influx of new digital art buyers likely brought in a wave of sophisticated investors who saw several problems with the inability to project future asset performance intrinsically. As the hype simmered, it became clear that NFTs could only be valued with techniques as strong as those used on traditional artwork, which don’t offer meaningful insight to investors. The incapacity for intrinsic valuation combined with the volatile and speculative crypto market creates a risky asset class that leaves many uncertain about the future.

Individual Artists Performance Compared to Index Performances

Basquiat Sales in Correlation with the Broader Market

⁴¹ Ibid., 42.

⁴² Ibid., 52.

Since Jean-Michel Basquiat's sales have been heavily recorded, and he ranks as the second most weighted artists in the Artprice 100 index at 4.4%, examining his price performance over the last few years offers interesting insight to the relationship between the broader economy and the demand for Blue-Chip art.⁴³ In 2021, Basquiat sold 23 lots which surmounted to approximately \$299.5M in auction sales.⁴⁴ Three pieces alone, "In this Case", "Versus Medici", and "Warrior", accounted for over 62% of the sales revenue each sold for \$93.1M, \$50.8M, and \$41.9M respectively.⁴⁵ With a range from \$93.1M to \$97.4k on the lower bound, the average



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Figure 8: Jean Michel Basquiat's "In This Case"

⁴³ Thierry Ehrmann, "The ARTPRICE100© Index of Blue-Chip Artists up 3% over 2022"

⁴⁴ "Jean Michel Basquiat," Masterworks, 2022, <https://www.masterworks.com/research/artist/jean-michel-basquiat>.

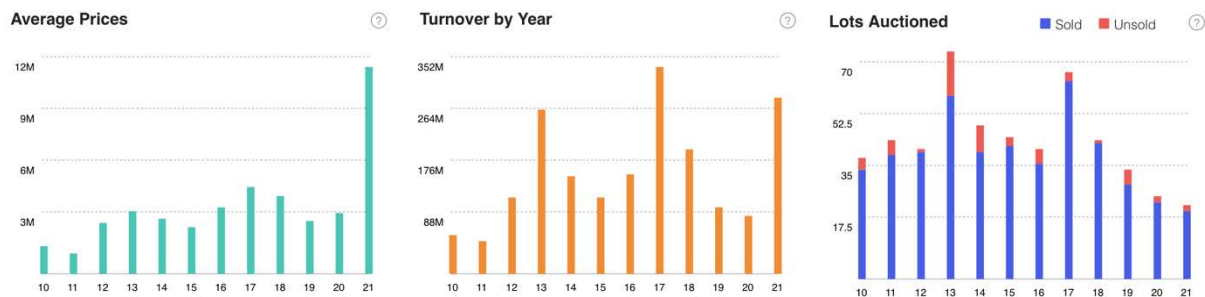
⁴⁵ Ibid.

⁴⁶ Michel Basquiat, 2021, *Christie's*, 2021, <https://www.christies.com/features/A-head-above-the-rest-An-iconic-Basquiat-skull-painting-comes-to-auction-11622-3.aspx>.

price of each painting was approximately \$11.9M.⁴⁷

There is no doubt that Basquiat is one of the world’s most famous and best-selling artists, yet it may be challenging for the common investor to understand the historical price action. When considering the broader market trend, especially throughout the COVID-19 recovery, it is difficult to argue that Basquiat’s performance correlates to the overall market.

Figure 9: Basquiat Sales (2010-2021)⁴⁸



Look at the “Lots Auctioned” graph alone from 2018 to 2021. The graph shows a small decline in sales through the years which opposes the broader market trend at the time. As soon as the government offered financial support and COVID fears settled, markets soared in the middle of 2020 and through 2021. While one may argue that average price and turnover by year increased in 2021 which do follow broader market trends, as seen in Figure 9: Basquiat Sales (2010-2021), it is important to remember that three works alone accounted for 62% of sales revenue skewing Basquiat’s average sales prices for the year. Additionally, since there is little liquidity in the trading of Basquiat masterpieces due to high prices, you can certainly not rely on average price appreciation over time. The illiquidity argument draws a direct connection to the shortcomings of the ArtPrice100 index which can be easily skewed by singular Blue-Chip artwork sales.

⁴⁷ Ibid.

⁴⁸ “Jean Michel Basquiat” Masterworks, 2021.

To understand true price action and the implications behind the numbers, it is important to examine artworks individually. Masterworks compiles interesting data to offer to collectors, but the aggregation of data essentially tells buyers nothing about singular works since each is so unique.

Rauschenberg Sales in Correlation with the Broader Market

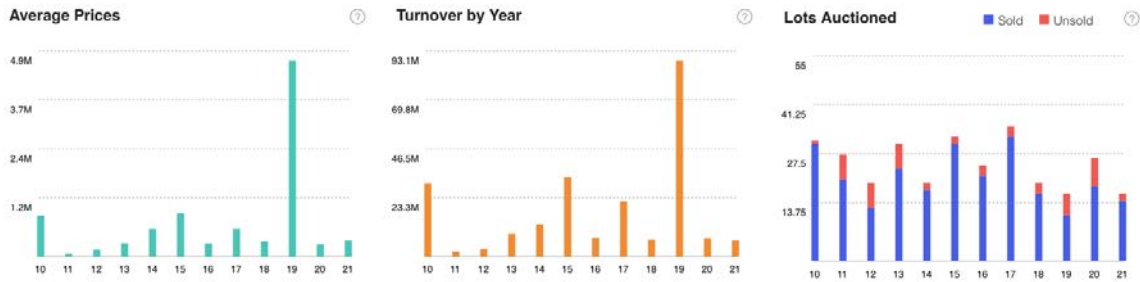
Another well-known artist to look at within the ArtPrice 100 index is Robert Rauschenberg. Rauschenberg, an American modern artist, who ranks 50th in the index with a weighting of .6% making him another great artist to examine in comparison to the broader market.⁴⁹ In 2021, Rauschenberg sold 17 lots via auctions for a grand total of around \$7.6M.⁵⁰ A standout sale from the year, “Forge”, sold for \$4.8M accounting for 63% of total sales revenue.⁵¹ While \$7.6M is a large amount of money, one may ask if his sales performance was truly so strong in the year of 2021. Sure, one may argue that 2021 was a difficult year for sales because of the pandemic, but when examining the past ten years of sales data, the pandemic may not have even influenced his sales like it did to traditional assets. With further investigation, Rauschenberg’s work does not seem to be correlated with the broader economy.

⁴⁹ Thierry Ehrmann, “PDF,” 2018.

⁵⁰ “Robert Rauschenberg,” Masterworks, 2022, <https://www.masterworks.com/research/artist/robert-rauschenberg>.

⁵¹ Ibid.

Figure 10: Rauschenberg Sales (2010-2021)⁵²



The truth is Rauschenberg did not have a particularly great year and this may be because preferences are changing. Rauschenberg’s big sale in 2021, “Forge” lost value of approximately 30% on its most recent sale in November of 2021.⁵³ Rauschenberg’s work, being so expensive and historically rich is considered Blue-Chip work just like many of Basquiat’s, but it has not performed the same. When looking for concrete quantitative answers as to why, there are not many. There is no intrinsic valuation that can be done to predict the next price action for the piece. The price will move with preference, and it seems that Rauschenberg’s work has not been desirable.

The Rauschenberg example also raises an important point for prospective buyers which is that one cannot necessarily look at broader market trends or even the global economic trends when looking to make investment decisions in select artworks. Even when looking for uncorrelation to avoid risk from traditional assets it is difficult to predict how art will move.

When looking at Rauschenberg’s sales frequency or volume, as seen in Figure 10: Rauschenberg



Figure 11: Rauschenberg's "Forge"

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Robert Rauschenberg, 2021, *Arnet*, 2021, <https://www.artnet.com/artists/robert-rauschenberg/forge-5fDFNZSDgZitAz05rWECBQ2>.

Sales (2010-2021), the incongruency is not obviously decipherable. Over the past ten years it appears that lots have sold and gone unsold at variable rates regardless of the economic conditions. To illustrate the variability, look at years 2015 and 2017 in Figure 1: Historical 10-year return of the S&P 500 . In 2015, the S&P declined by .73% year-over-year and only two Rauschenberg lots went unsold, whereas the S&P gained 19.42% in 2017 with only 3 lots unsold.⁵⁵ With such different economic environments, the number of lots auctioned and unsold remained relatively similar showing no correlation to the broader economy. The illiquidity of the Rauschenberg market creates similar price comparing drawbacks to the market for Basquiat artworks. Since there are few data points, it becomes more difficult to draw upon relative works for valuation purposes, while also limiting one's ability to see how demand for Rauschenberg's work is changing over select time periods.

Art Sales in Florida: Art Basel as a Proxy for Market Recovery

Florida has seen a rising interest in fine art as the population of high-net-worth individuals continues to grow. The pandemic created a mass migration to the sunshine state as COVID guidelines allowed for more freedom for those comfortable.⁵⁶ The art interest in Florida continues to grow in one city in particular, Miami Beach, where one of the most popular art events in the world is held every December, Art Basel. Celebrities, athletes, artists, and the ultra-wealthy gather in Miami every winter to experience the world's best artwork and music. The

⁵⁵ "Dow Jones Industrial Average Price, Real-Time Quote & News," Google Finance (Google, 2023), <https://www.google.com/finance/quote/.DJI:INDEXDIX?window=5Y>.

⁵⁶ Jacoba Urist, "The Pull of Palm Beach Proves Irresistible for Blue-Chip Galleries—But for How Long?," *The Art Newspaper*, October 30, 2020, <https://www.theartnewspaper.com/2020/10/30/the-pull-of-palm-beach-proves-irresistible-for-blue-chip-galleriesbut-for-how-long>.

event and art sales each year have become so significant that Miami's Art Basel can be viewed as a key indicator for the demand and the health of the broader art market. Most recently in December of 2022, Art Basel sold a tremendous amount of work and very quickly, at least from what galleries have reported.⁵⁷ As described, collecting art sales data can be tricky especially when hundreds of galleries offer variations of sales reports. The inconsistency and variation are likely the main reasons aggregate reports are not available. Regardless, the numbers posted by galleries in Art Basel 2022 proved demand was recovering well since the 2020 cancellation caused by COVID-19.

Before Art Basel 2022, many were skeptical of sales volume given the economic environment. Comments made from gallery owners such as Pace CEO Marc Glimcher mentioned that expectations were moderate, but sales were strong reaching into the millions, even after the first day.⁵⁸ The sentiment across the board was strong for Miami with paintings leading the majority of the sales reaching up to \$7M.⁵⁹ Several galleries reported single day sales in the tens of millions: Hauser & Wirth sold over \$18M and Pace over \$11.8M.⁶⁰ While there is no aggregate data available for Art Basel's sales, countless galleries within the show saw better than expected sales, but acknowledged the pace was slower than usual as "people were taking their time and thinking about their acquisitions", insisted Alex Benrimon, an art dealer.⁶¹

A combination of better-than-expected sales and diligent buyers seems fitting given the volatile economic environment seen throughout the fourth quarter in 2022. High net worth collectors are going to continue buying despite difficult economic times as art is currently being

⁵⁷ Angelica Villa, "\$7 M. Paintings by Agnes Martin and Philip Guston Lead Art Basel Miami Beach Sales," ARTnews (PMC, November 30, 2022), <https://www.artnews.com/list/art-news/news/art-basel-miami-beach-2022-sales-1234648470/>.

⁵⁸ Ibid.

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ Ibid.

viewed at as a potentially lucrative alternative asset, although this may change. In 2022, non-art enthusiasts may have faced several challenges when looking to make an informed decision about purchasing artwork. The situation at Art Basel highlights this well as gallery sales were infrequently reported to the public leaving those uninformed, further uninformed.

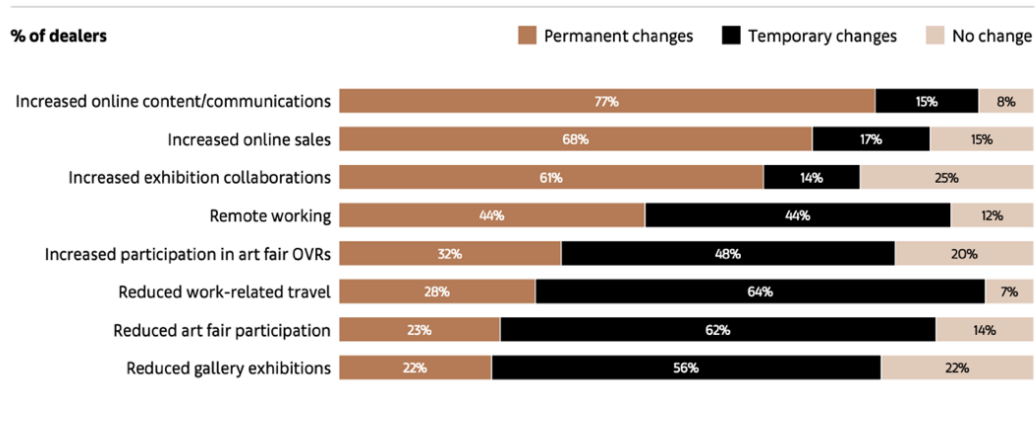
Data Decentralization is Leaving Individual Collectors Lost

Another change catalyzed by the pandemic is the decentralization in sales and data from the top tier auction dealers. The pandemic has recently pushed many buyers online changing the market as well as the quality of data available to buyers. With an estimated \$13.3B in art and antiques sales across the web in 2021, it is becoming to be harder for individual buyers to acquire synthesized and refined data to use for future purchases.⁶² Since sales are becoming spread, buyers must now pull data from multiple sources which may not be validated. While the decentralization of art sales gives many new players the opportunity to sell work, buyers should be sure to raise questions about the quality of data they encounter when purchasing artwork. The Art Economics Report found that in 2022, 68% of dealers surveyed expect the increase in online sales to remain permanent.⁶³ As shown in Figure 12: Dealers' Views on the Permanence of Pandemic-Led Changes, the data indicates that art dealers are anticipating a more permanent shift to online related sales.

⁶² McAndrew, "The Art Market 2022," 36.

⁶³ Ibid., 117.

Figure 12: Dealers' Views on the Permanence of Pandemic-Led Changes⁶⁴



© Arts Economics (2022)

While it may be easier to conduct business online, the bulk of physical and expensive artwork purchases should be conducted in person. With online sales becoming a top business priority for art dealers across the world, buyers should be encouraged to take the necessary steps to verify dealers and the authenticity of the artwork. Online art shopping comes with plenty of advantages such as convenience and boundless access, however, many may be at risk without proper precautions.

Conclusion

Sound investment decisions require thorough due diligence accompanied by a form of quantitative analysis in which one is able to determine a fair market price for an asset. When looking to invest in art it has been determined that due diligence is possible through an investigation of an artwork's past ownership, condition, medium, subject matter, and other

⁶⁴ Ibid.

relative properties. The difficulty in the pricing process arises when trying to assess the qualitative or intrinsic value of a piece. As discussed, a lack of market correlation, illiquidity, and ineffective data make both comparable and intrinsic valuation extremely challenging. For new or modest art collectors with mere experience this creates a dilemma. Without an intrinsic valuation possible, due to an artwork's inability to produce cash, artwork ultimately is priced off subjective desire as illustrated through the cross comparison of both Basquiat and Rauschenberg. While pricing an artwork is already difficult many factors such as the growing online marketplace are making data synthetization even more challenging for individual collectors. The lack of intrinsic valuation methodologies and regulated market data makes the objective of making a confident and well-informed investment decision especially challenging.

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