Art for the Portfolio: A Centuries-Old $1.7-Trillion Asset Class, Now Accessible

By Allen Sukholitsky, CFA®
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Imagine for a moment what would happen if each share of stock on the stock market were priced in the millions. Even after the asset class had matured and proven its staying power, there would still be only a select number of wealthy families and institutions around the world with portfolios large enough to make these multi-million-dollar individual stock investments. And even for these families and institutions, the ability to build a diversified portfolio would be severely constrained due to the price points involved. After all, asset classes are widely accessible only when investors can afford to invest in them.

From an investment perspective, the reasons for such high price points are good ones, and they relate to the art market’s unique supply dynamics. For the sake of comparison, let’s look at another asset class with prices that are impacted by supply: commodities. If we take economic growth, and therefore demand, as a given, supply will be the primary determinant of commodity prices. If the gold supply is unable to meet demand, gold prices will rise. If the oil supply is unable to meet demand, oil prices will rise. But as a result, higher prices will incentivize mining companies to mine for more gold and oil companies to drill for more oil. This is what makes the art market so different from commodities, and potentially more attractive.

Supply in the art market ultimately is capped because an artist can produce only so much work in one lifetime. After an artist passes, any potential price increase for that artist’s work will not lead to an increase in the supply of that artist’s work. For example, today’s prices for works by Picasso do not impact Picasso’s ability to increase the supply of his paintings—he passed away five decades ago. Scarcity is a built-in feature of the art market.

However, the potential attractiveness of the art market’s supply narrative does not end there. In addition to supply being capped, every year a portion of the supply is removed from general circulation. In 2021, 11 percent of art purchases were made by museums and art institutions. Once a painting is acquired by a museum or another permanent collection, it almost never comes out. This leads to a permanent reduction in the available art market supply. The art market is unique, as far as asset classes go, because an individual artist’s supply actually may decline over time.

In short, art investing could be that $20 bill on the ground. It’s hard to believe it has gone unnoticed, but it is still right there waiting for someone to capitalize on the opportunity.
Now that we know about the supply dynamics driving paintings in certain sectors of the art market to sell for millions of dollars, let’s return to the original question of accessibility. How do you make multi-million-dollar assets accessible to investors? An efficient answer lies in an asset class that most investors already own: equities. Shares of stock represent fractional interest in companies—often multi-billion-dollar companies—and these fractional interests are accessible to the majority of investors because the multi-billion-dollar companies are fractionalized via the issuance of shares.

Multi-million-dollar paintings can be fractionalized with a similar process.

Step 1. Buy a painting.

Step 2. Create a limited liability company, i.e., a company, and transfer ownership of the painting to that company.

Step 3. Take that company public. Investors in that company effectively are investing in shares of the painting because that company’s balance sheet consists of nothing but the painting.

This process of securitization and fractionalization is what allows investors globally to invest in multi-million-dollar paintings, with allocation sizes that are more appropriate for their portfolios than buying entire paintings.

**IS ACCESSIBLE ART INVESTMENT WORTH IT?**

Different segments of the art market appreciate at different rates over time, the same way different equity market segments appreciate at different rates, e.g., large caps versus microcaps (see figure 1). In the art market, appreciation rates commonly are driven by the period when the art was produced. For example, Old Master paintings from around 1800 have a weaker appreciation rate than post-war and contemporary art, which has exhibited the strongest appreciation rate among art segments. From the perspective of investing in an illiquid asset class, the post-war and contemporary art segment potentially could be the most attractive when it comes to balancing historical appreciation rate versus liquidity. In other words, locking up capital for several years should come with enough expected return to make illiquidity a risk worth taking.

When it comes to volatility, art has exhibited a profile similar to other private-market asset classes such as private equity and venture capital. The data appears to support this—in fact, art’s volatility is almost identical to that of private equity. With an unlevered appreciation rate in the teens, and low double-digit volatility, the post-war and contemporary art segment’s Sharpe ratio also may be attractive for investors interested in improving their overall risk-adjusted performance.

Additionally, post-war and contemporary art has unique correlation profiles—between 1997 and 2022, its correlation to 15 major asset classes has been close to zero (see figure 2). Typically, an asset class has a low correlation to some asset classes but a higher correlation to other asset classes. Art, historically, has not been typical. Investors building portfolios composed of multiple asset classes do so for potential diversification benefits. These benefits are experienced most strongly when introducing low-correlation asset classes to a portfolio.

Consistently low correlation across major asset classes appears to be a characteristic unique to art. The correlations with art in figure 2 are close to zero, potentially implying that art may help to diversify a portfolio no matter what might already be in it. In contrast, each of the other asset classes has proven to be a mixed bag of correlation benefits, with low correlations to some asset classes but higher correlations to other asset classes. For example, private equity has a low correlation to bonds but a higher correlation to public equities; or commodities, which have a lower correlation to bonds but a higher
### CORRELATION PROFILES

Legend: orange = positive correlation; yellow = zero correlation; green = negative correlation

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![Figure 2](image1.png)

### CORRELATION BY ASSET CLASSES

**U.S. Equity Downside Correlation**

- U.S. Bonds: 0.6
- Commodities: (0.4)
- Hedge Funds: 0.6
- Contemporary Art: 0.1

**U.S. Equity Upside Correlation**

- U.S. Bonds: 0.1
- Commodities: 0.1
- Hedge Funds: 0.5
- Contemporary Art: (0.2)

![Figure 3](image2.png)

Correlation matrixes, although generally useful over long periods of time, are subject to pitfalls such as the asymmetric nature of correlation in different market conditions. For example, asset class A might have zero overall correlation to asset class B. But that overall correlation may be asymmetric in the sense that asset class A could be highly positively correlated to hedge funds. None of these examples are intended to imply that some asset classes have no place in a portfolio. Rather, although there are no guarantees, we believe it is important for investors to understand the magnitude of the diversification benefits that they might experience by including different asset classes. Because of art’s correlation profile, we would argue that its benefits are significant.

Source: Bloomberg, Masterworks. Data calculated from December 31, 1997 to December 31, 2022. Based on U.S. Bonds (Bloomberg US Aggregate Bond), Commodities (S&P GSCI Total Return), Hedge Funds (HFRIFOFD Global Hedge Funds), Private Equity (Refinitiv Private Equity), and Art (Masterworks Post-War and Contemporary Art Index).

Note: For illustrative purposes only. Comparison of assets that trade real time compared to assets that trade episodically such as art may have limitations. Past performance is not indicative of future results.
correlated to asset class B in one type of market environment and mildly negatively correlated to asset class B in another type of market environment. Although the overall correlation may still be zero, investors may interpret that overall correlation differently when presented with its asymmetric nature. To use common investor jargon, this gets at the idea that in volatile equity markets “all correlations go to one.” As a result, we believe investors should consider the details underlying overall correlation figures.

In figure 3 we look at the correlation symmetry, or lack thereof, of a few asset classes that often are considered to have lower correlations to U.S. equities and therefore should offer investors diversification benefits. These include bonds, commodities, and hedge funds that have had overall correlations to the S&P 500 of −0.2, 0.3, and 0.7, respectively. We explicitly left out asset classes that we believe many investors would readily accept as having higher correlations to the S&P 500, regardless of the environment that the S&P 500 might be in. Various equity markets such as the Russell 2000, MSCI EAFE, MSCI EM, and private equity would be examples of such asset classes that we explicitly left out; historically, equity markets of all stripes often have tended to move in a similar direction, albeit at different magnitudes.

The behavior of bonds highlights their diversification benefits, with an equity downside correlation of −0.4 and an equity upside correlation of 0.1. When U.S. equities are in negative territory, U.S. bonds are often in positive territory. Commodity markets, on the other hand, are quite correlated to the S&P 500 when equities are down, with a correlation of 0.6. As a result, their overall correlation of 0.3 could be misconstrued as indicating that commodities are a better diversifier of equities. Finally, hedge funds remain a moderately beneficial diversifier of equities in both negative and positive equity markets, with correlations of 0.6 and 0.5, respectively.

Contemporary art, in contrast to the other asset classes shown in figure 2, appears to exhibit a consistently attractive correlation profile relative to U.S. stocks. The asset class has an overall correlation of 0.0 to equities and has had a near-zero correlation in both negative and positive equity environments. We believe that these characteristics have the potential to make art an attractive diversifier for investor portfolios.

### ALPHA GENERATION OPPORTUNITIES

Investment professionals often take for granted how much data—financial or otherwise—is available for traditional liquid markets and mainstream alternative asset classes. Performance data is, of course, just the tip of the iceberg. Many data providers offer detailed security-specific data, asset-class flows, sentiment data, etc. In fact, data for traditional markets and mainstream alternatives is so prevalent that many asset managers are searching actively for alternative sources of data, because if every investor is using the same data it becomes more difficult to generate alpha.

Data for the art market is unusual because, although the asset class is so large and has existed for so long, most art market data has remained on paper until recently. One of our firm’s first endeavors was to digitize more than 1,000 catalogs worth of art market data from around the world. From this data, we constructed a digital treasure trove that covers more than 70 years of transaction history. For us, performance data also is just the tip of the iceberg. We track data on more than 7,000 artists, including auction bidder information and trends in market sentiment. However, unlike the data offered to asset managers by data providers, our data is entirely proprietary; we analyze it to inform our investment decisions and we do not make it available to any third parties.

After analyzing our data extensively, we arrived at many conclusions regarding where, how, and when to invest in various art market opportunities. Among these conclusions was that the dispersion in risk-adjusted appreciation, i.e., the Sharpe ratio, across individual artist markets was significant. In other words, it matters which artist an investor chooses to invest in (see figure 4). Artists such as Yoshitomo Nara, Helen Frankenthaler, and Jean-Michel Basquiat are on the stronger side of the risk-adjusted appreciation spectrum, but artists such as Andreas Gursky, Damien Hirst, and Jean-Baptiste-Camille Corot are on the weaker side. It also is notable
that the stronger artists historically have generated Sharpe ratios greater than one, which has been more attractive than many traditional markets and some mainstream alternative asset classes.

Leveraging a uniquely proprietary data-set with millions of data points for a $1.7-trillion asset class potentially could position an investor for alpha generation in the art market.

**DIVERSITY, EQUITY, AND INCLUSION CONSIDERATIONS**

In the past several years, there has been an explosion in interest for evaluating investment opportunities based on more than just traditional financial metrics. An investment may yield a profit, but does it harm the environment, thereby sacrificing the potential for future profits? An investment may yield a profit, but does it cement unethical labor practices for the region in which the investment is made? An investment may yield a profit, but does it only enrich the already advantaged at the expense of others? There are countless variations of these nontraditional investment questions but the crux is clear: What societal impact will the investment itself have?

At the risk of stating the obvious, investing in art is very different from investing in companies with existing cash flow or even those with the prospect of future cash flows. But by no means should this imply that investing in paintings has no societal impact. Investing in art requires an understanding of the narratives and themes exhibited in the paintings, as well as the legacies of the artists themselves. Because many investors are less familiar with the art market than with other endeavors, how and what they learn about art has the potential to shape social commentary and art history. In fact, when considering its societal impact, many impact investors may be surprised to learn that the art market itself lacks inclusivity, given that 96 percent of artists are male and that 85 percent of artists are Caucasians.

How else to better increase the visibility, appreciation, and inclusivity of diverse artists than to invest in and help build recognition for their art? After all, as we saw in figure 4, the strongest risk-adjusted performance has come from diverse artists: Yoshitomo Nara is a Japanese artist; Yayoi Kusama is a female Japanese artist; Jean-Michel Basquiat was an American artist of Haitian and Puerto Rican descent; and Helen Frankenthaler was a female artist. Diverse artists historically have generated strong risk-adjusted performance while artists with the weakest risk-adjusted performance have been Caucasian males.

An investor focused solely on traditional investment metrics and an investor focused solely on diversity, equity, and inclusion considerations could build nearly identical art portfolios. Pure historical performance-based art investing goes hand in hand with art impact investing.

**HOW MUCH COULD INVESTORS POTENTIALLY ALLOCATE?**

To answer this question, we look at three hypothetical baseline portfolios: 60/40, diversified, and endowment-like. For each baseline portfolio, we measured whether the addition of a small (5-percent) allocation to art helped the new portfolio to frequently outperform its baseline, i.e., without art, counterpart. In other words: Does a 60/40 portfolio with art frequently outperform the 60/40 without art, does a diversified portfolio with art frequently outperform the diversified portfolio without art, and does an endowment-like portfolio with art frequently outperform the endowment-like portfolio without art? The 5-percent art allocation is not optimized in any way—the allocation is simply used as a tool to compare historical portfolio performance.

For the 60/40 portfolio, we chose to fund the 5-percent allocation to art out of equities rather than fixed income because the former is a return-generating asset class and the latter is a risk-managing asset class. Prudence would therefore suggest funding art—a non–traditional alternative investment—out of equities. Nevertheless, the portfolio with the allocation to art frequently improved upon its baseline 60/40 counterpart. For example, in 90 percent of 10-year periods, the portfolio with art had a higher Sharpe ratio than the same portfolio without art (see figure 5).

As a result of strong U.S. equity performance versus international markets, the more diversified portfolio has proven to be less attractive from a performance standpoint, relative to a traditional 60/40 portfolio, for more than a decade. However, we still chose to explore whether this portfolio would benefit from...
an allocation to art because, as the quip goes, “diversification works over time, not every time.” As it turned out, the results for making a small allocation to art were even better than for the 60/40 portfolio. For example, in 100 percent of five-year and 10-year periods, the portfolio with art experienced higher Sharpe ratios than the portfolio without art (see figure 6).

Finally, the endowment-like portfolio owes much of its success to its harvesting of the illiquidity premium found in private markets, such as private equity, real estate, and infrastructure. Not surprisingly, this often has made it challenging to improve upon. For this portfolio, we funded the small allocation to art out of equities (1) for similar reasons outlined in the 60/40 portfolio section and (2) because it is not always easy to reallocate from illiquid asset classes. With the 5-percentage allocation to art, the endowment-like portfolio demonstrated frequent improvement over its non-art counterpart, albeit less frequently than in the prior two examples over five-year periods. Here, the portfolio with art had a higher Sharpe ratio in only 66 percent of five-year periods and 90 percent of 10-year periods (see figure 7).

CONCLUSION

The investment management industry has evolved considerably during the past century, with investors initially focused on domestic stocks and bonds, then broadening their exposure to international securities, commodities, hedge funds, private equity, real estate, and many more asset classes. Art, however, despite being one of the world’s oldest asset classes, was inaccessible to most investors until now. The post-war and contemporary art segment has generated historical price appreciation in the mid-teens with a volatility profile similar to private equity. Risk-adjusted performance for this segment also may be attractive to both traditional investors and impact-focused investors alike. Historically, even small allocations to art also have frequently improved traditional portfolios. We look forward to seeing art appreciated not just for its intrinsic beauty but for its investment potential, too. 

Allen Sukholitsky, CFA®, is the chief investment officer at Masterworks, the leading art investment platform for self-directed investors. He earned a BA in economics and political science from Columbia University. Contact him at asukholitsky@masterworks.com.

ENDNOTE

1. In art history, “Old Master” refers to any painter of skill who worked in Europe before about 1800, or a painting by such an artist. See Wikipedia: https://en.wikipedia.org/wiki/Old_Master.

2. In general, Masterworks invests in paintings with price points from $1–30 million within the post-war and contemporary art segment. These opportunities typically have historical appreciation rates of 10–40 percent, as well as Sharpe ratios higher than for most commonly-held asset classes. Masterworks is currently focused on investment opportunities from ~75 artists, while tracking a universe of 7,000+ artists.

See important disclosures at https://www.masterworks.com/about/disclosure.

CONTINUING EDUCATION

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