Citi GPS

# THE GLOBAL ART MARKET

## Drivers of Evolution

**Citi GPS: Global Perspectives & Solutions**

December 2019

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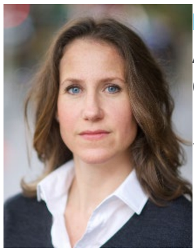

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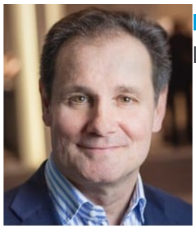

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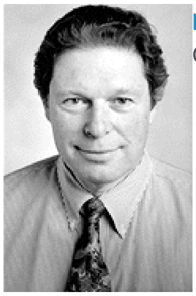

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# THE GLOBAL ART MARKET

## Drivers of Evolution

**Suzanne R Gyorgy**
Global Head of Art Advisory & Finance
Citi Private Bank

For generations, many of the world's wealthiest individuals and families have collected art. These personal collections have brought them enjoyment as well as created social networks and special bonds with family, friends, scholars, and fellow collectors. Many collectors lend artworks from their collections to museum exhibitions for others to study and enjoy while adding to the prestige of the collection. Additionally, over recent decades, high quality works of art have increasingly gained recognition for their investment potential.

Citi Private Bank's Art Advisory & Finance team guides clients through the art market, helping to create important private art collections that reflect each collector's vision. We provide administration and management, consultation on wealth planning, and offer loans collateralized by artwork.

Our advisors seek to help clients buy wisely, save money, and turn their collections into valuable assets. We have longstanding expertise in numerous fields, including modern and contemporary art, Chinese antiquities, and impressionist paintings. We can source acquisition and disposal opportunities, research provenance and authenticity, and give insights into the significance of potential additions in context of overall collections. Besides impartial artistic expertise, we bring financial perspective to the collecting process, including intelligence about market trends, cycles, and timing.

Having pioneered the concept of using art as collateral forty years ago, we enable liquidity to be unlocked from collections. That liquidity can be used to buy further artwork or for other investments. We accept internationally marketable paintings, sculptures, drawings, and high-value photographs as collateral for loans. In most cases, a collection used as collateral can remain in the client's home or office. Our in-house loan appraisals allow discretion and confidentiality to be maintained.

As well as advising collectors and providing art loans, we offer a comprehensive art management service. We can arrange packing, shipping, installation, conservation and framing of artworks, as well as administration and accounting for collections. This includes managing art insurance policies and appraisals, coordinating loans of works to exhibitions, and negotiating vendor services. We manage significant art holdings for trusts and foundations, as well as for individuals and families.

With the potential for technology to enhance the world of art over the coming years, we believe that art's existing appeal to collectors and investors could increase further. We stand ready to help clients grow and realize value from their collections.

In the report that follows, we look to a variety of experts who talk about changes in the art market, including Nanne Deking from Artory Inc. on the use of technology such as blockchain and Anders Petterson from ArtTactic on how changing demographics are triggering different behaviors and motivations around philanthropy. We also hear from Michael Moses and Jianping Mei from artasaninvestment.com on the financial characteristics of individual artists and groups of artists based on their relative liquidity level, Steven Wieting, Global Chief Investment Strategist from Citi Private Bank on the performance of art and its characteristics in an investment portfolio, and Betsy Bickar from Citi Art Advisory & Finance on the evolution of the art market over the past 40 years.

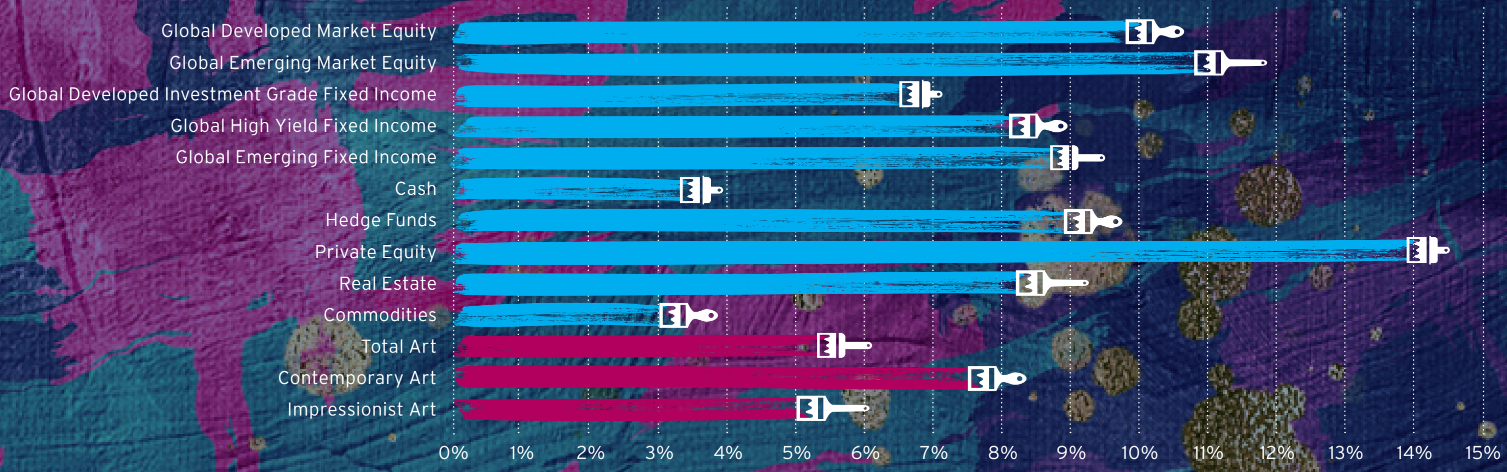
# Art Market Evolution

Art could gain increasing recognition as an investment asset class over time given its rate of return and lack of correlation with major asset classes.

## 1. THE BROAD ART MARKET HAS RISEN AT AN ANNUALIZED RATE OF 5.3% SINCE 1985, SIMILAR TO THE RETURN OF DEVELOPED INVESTMENT GRADE FIXED INCOME (6.5%) AND HIGH YIELD FIXED INCOME (8.1%).



Estimated annualized return, 1985-2018




## 2. WITH LIMITED CORRELATION TO THE TOP TEN ASSET CLASSES, ART CONTINUES TO ACT AS A PORTFOLIO DIVERSIFIER.



Art's correlation with other asset classes (1985-2018)

| | DM Eq | EM Eq | IG | HY | EM | Cash | HF | PE | RE | Com | Art |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Developed Market Equity | 1.00 | 0.69 | 0.25 | 0.72 | 0.31 | 0.13 | 0.78 | 0.84 | 0.61 | 0.19 | 0.13 |
| Emerging Market Equity | 0.69 | 1.00 | -0.04 | 0.62 | 0.54 | 0.08 | 0.66 | 0.74 | 0.55 | 0.47 | 0.14 |
| Developed Investment Grade Fixed Income | 0.25 | -0.04 | 1.00 | 0.32 | 0.10 | 0.34 | 0.45 | 0.14 | 0.28 | -0.23 | -0.15 |
| High Yield Fixed Income | 0.72 | 0.62 | 0.32 | 1.00 | 0.45 | -0.13 | 0.71 | 0.78 | 0.66 | 0.21 | -0.37 |
| Emerging Fixed Income | 0.31 | 0.54 | 0.10 | 0.45 | 1.00 | -0.06 | 0.46 | 0.43 | 0.53 | 0.57 | -0.03 |
| Cash | 0.13 | 0.08 | 0.34 | -0.13 | -0.06 | 1.00 | 0.43 | -0.14 | -0.16 | 0.05 | 0.34 |
| Hedge Funds | 0.78 | 0.66 | 0.45 | 0.71 | 0.46 | 0.43 | 1.00 | 0.71 | 0.49 | 0.27 | -0.11 |
| Private Equity | 0.84 | 0.74 | 0.14 | 0.78 | 0.43 | -0.14 | 0.71 | 1.00 | 0.75 | 0.21 | -0.08 |
| Real Estate | 0.61 | 0.55 | 0.28 | 0.66 | 0.53 | -0.16 | 0.49 | 0.75 | 1.00 | 0.14 | 0.01 |
| Commodities | 0.19 | 0.47 | -0.23 | 0.21 | 0.57 | 0.05 | 0.27 | 0.21 | 0.14 | 1.00 | 0.21 |
| Art | 0.13 | 0.14 | -0.15 | -0.37 | -0.03 | 0.34 | -0.11 | -0.08 | 0.01 | 0.21 | 1.00 |

**AN ORGANIZING APPROACH TO INVESTING IN ARTISTS**

Source: artasaninvestment.com©

Analyzing data from 13,000 works of art sold since July 2016, we find generally:

The **longer** a piece of art is **held**, the **lower** the **risk** to returns.

Except for moderate purchase prices of $50k to $250k, there is **no advantage** (on a return or risk-adjusted basis) **to buying expensive art.**

**Higher returns** are seen from artists who are 'liquid' i.e., at least **7 repeated auction sales** per season.

However, **results** within each liquidity category are **not uniform** and **correlation** between artists **exist.**

**NEW TECHNOLOGIES LIKE BLOCKCHAIN ARE PROMISING TO ADDRESS ONE OF THE ART MARKET'S BIGGEST PROBLEMS – TRANSPARENCY OF INFORMATION AND TITLE.**

Top distinct advantages to using blockchain technology in art market:

1. It offers an avenue for secured transactions.
2. It provides public access to information about an artwork's authorship, provenance, and ownership.

**NEW TECHNOLOGIES LIKE BLOCKCHAIN CAN ALSO HELP SHAPE FUTURE PHILANTHROPIC MODELS THROUGH THE 'GREAT WEALTH TRANSFER'**

Source: Deloitte and ArtTactic Art & Finance Report 2019

Technology could provide an ecosystem around art philanthropy and help develop new engagement models for museum patrons infrastructure to create a more trusted relationship between donors and charitable causes

**$68tn**

Estimated transfer of wealth from Baby Boomers to Gen X and Millennials.

**$1.74tn**

Art & Collectibles held by ultra-high net worth individuals.

**Social Impact vs. Social Influence**

The impact of philanthropic activity preferred by Millennials vs. the 'feel good' factor of Baby Boomers.

# Contents

# Art as an Asset Class in Investment Portfolios

# Art in Investment Portfolios

**Steven Wieting**
Chief Investment Strategist,
Citi Private Bank

**Dominic Picarda**
Global Head of Content Strategy,
Citi Private Bank

Since ancient times, many of the world's wealthiest individuals and families have collected great works of art. They have done so primarily for reasons of pleasure. Identifying, acquiring, and then displaying artworks can create enormous personal satisfaction. Collecting art can also help wealthy individuals and families give back to society and perpetuate their legacies, by lending or even gifting their artworks for the appreciation of the public. Citi Private Bank therefore approaches art first and foremost from the perspective of the private collectors whom we serve.[1]

At the same time, however, we recognize that art's potential benefits extend well beyond the enjoyment of ownership and appreciation. Works of art can be valuable assets that deliver financial as well as emotional rewards to their owners. Over longer periods, art has often acted as a store of wealth, increasing its value ahead of U.S. consumer price inflation. Many of those who collect art therefore do so with an eye upon its investment potential as well as its aesthetic appeal. Put simply, art can be considered an asset class.

## The Returns on Art: An Historic Perspective

Admittedly, the concept of art as an asset class is a relatively modern one. In recent decades, investors have increasingly categorized art as a type of 'alternative' asset class alongside hedge funds, private equity, and real estate. Such 'alternatives' can complement allocations to 'traditional' asset classes such as equities and fixed income. Amid the inflationary crisis of the mid-1970s, for example, the pension fund of the U.K.'s former state railway operator allocated 3% of its holdings to art and collectibles. It remained invested for more than two decades and with some success. That said, formal portfolio allocations to art remain the exception rather than the rule.

Despite this, there is reasonably good evidence of the long-term performance of art as an asset class. Various indices derived from art sales at auctions allow us to track prices consistently going back for more than a century. For our purposes here, we have used the Masterworks.io Total Art, Impressionist, and Post War & Contemporary Art Indices. Masterworks is a platform that allows anyone to invest in shares in blue-chip works of art (see www.masterworks.io). Their indices are built from data sourced from auction sales from Sotheby's, Christie's, and Phillips, the leading global auction houses. Based on the Masterworks.io Total Art Index, we believe the value of the art market as whole has risen at an annualized rate of 9% since the series' beginning in 1962.

Of course, the art market as a whole is very broad. The Masterworks.io Total Art Index includes Old Masters, Impressionists, Post-War and Contemporary Art, and 19th Century artwork. Thanks to their sub-indices, we are able to drill down to the performance of specific categories, albeit over a shorter period. Here, we find notable differences in performance. Between 1985 and 2018, the art market as a whole produced an annualized return of 5.3%, Impressionists 5.0%, and Post-war and Contemporary Art 7.5%.

[1] The authors would also like to extend their thanks to The ART MARKET CONSULTANCY LLC for their assistance in relation to this piece. The ART MARKET CONSULTANCY LLC was established to give art market participants access to the most comprehensive analysis of the true financial performance available in the repeat sale auction market in general and for the top 400 liquid artists in particular. This information is made available through artasaninvestment.com.

In Figure 1, we compare this rise to our estimates of long-term returns for the ten asset classes that our strategic asset allocation methodology addresses.[2]

We can infer, therefore, that art performance may be linked to the relative recency of the category in question. In other words, more recent works have tended to perform better. We also note that the Post-War & Contemporary Art segment presently commands the largest share of annual transaction volume and appears to attract the most demand from new entrants to the market. These new capital inflows have likely bolstered the performance of Post-War & Contemporary Art relative to other categories of art.

Figure 1. Long-term Asset Class Returns

| | Estimated annualized returns 1985-2018 |
|---|---|
| Global Developed Market Equity | 9.8% |
| Global Emerging Market Equity | 10.8% |
| Global Developed Investment Grade Fixed Income | 6.5% |
| Global High Yield Fixed Income | 8.1% |
| Global Emerging Fixed Income | 8.7% |
| Cash | 3.3% |
| Hedge Funds | 8.9% |
| Private Equity | 13.9% |
| Real Estate | 8.2% |
| Commodities | 3.0% |
| Total Art | 5.3% |
| Contemporary Art | 7.5% |
| Impressionist Art | 5.0% |

Source: Art represented by the Masterworks.io Total Art, Contemporary Art, and Impressionist Art Indices; returns estimated in U.S. Dollars. Past performance is no guarantee of future returns. © 2019 Masterworks.io LLC; All rights reserved. Indices revised as of November 2019

The performance of the art market as a whole and that of the contemporary segment are closest to two other asset classes: developed investment grade fixed income (+6.5%) and high yield fixed income (+8.1%). The former consists of high quality bonds issued by governments and corporates in advanced economies. The latter comprises bonds issued by lower quality issuers also in advanced economies. Art's returns were below those of the other 'alternative' asset classes of hedge funds, private equity, and real estate.

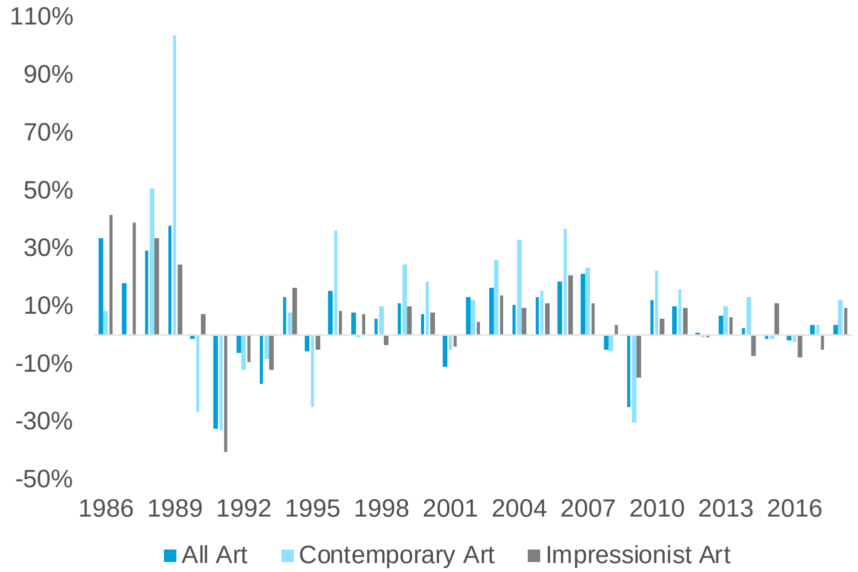
## A Portrait of Art's Risks

While art's returns overall may have resembled those of developed investment grade and high yield fixed income, its riskiness was greater. The volatility of art's annual returns since 1985 — as measured by standard deviation or how much returns tend to vary from their average — has been 14.9% across all art categories and 25.8% for contemporary art. By contrast, developed fixed income's volatility was just 5.2% and that of high yield fixed income was 15.9%. Contemporary art's volatility was comparable to that of commodities, although the latter produced a lower return.

[2] Adaptive Valuation Strategies (AVS) is Citi Private Bank's strategic asset allocation methodology, which we use to develop long-term core allocations for clients. Using valuations to estimate future returns and risks, AVS makes potentially greater allocations to lower-valued asset classes and smaller allocations to richly valued ones. See Adaptive Valuation Strategies 2019 - https://www.privatebank.citibank.com/home/fresh-insight/adaptive-valuation-strategies.html.

Art may also have experienced some significant drawdowns at times of turmoil. Looking at the broad market since 1962, its worst calendar year decline has been 38.1%, similar to that of developed equities, real estate, and commodities. In total, it suffered three calendar year declines of more than 30% over that period. By comparison, private equity experienced four such declines and commodities three. However, its worst annual performance during the Global Financial Crisis of 2008-09 — a decline of 24.5% for art overall and 29.9% for contemporary art — was rather less severe than the sell-offs in other risk asset classes such as equities, which mostly saw calendar year drops of more than 40%.

Figure 2. Art's Annual Returns Since 1985




Source: Art represented by the Art represented by the Masterworks.io Total Art, Contemporary Art, and Impressionist Art Indices;© 2019 Masterworks.io LLC; All rights reserved

## Art as a Portfolio Diversifier

Perhaps art's most attractive investment quality over the long run has been its diversification potential. Figure 3 shows the correlations between art and the ten asset classes from our strategic asset allocation methodology. Strikingly, the broad art market's highest correlation with any other asset class was 0.34, which was with cash. It has showed low or even negative correlations with many others, including the fixed income asset classes, whose return profile was similar. Adding art market exposure to a portfolio of other assets, therefore, would have helped improve diversification over time.

The obvious comparison here is with gold. Like art, the yellow metal has had a low correlation with many other asset classes over time. Its returns have been slightly lower than the broad art market. Since 1985, Gold has annualized returns just over 4.2%. Over the same period, the art market has annualized returns of 5.3% and contemporary art 7.5%. The volatility of both asset classes' annual returns was around 15.0%. Interestingly, art and gold have only a moderate correlation of 0.12 with one other. In other words, adding both asset classes to a portfolio could have helped diversify risk better than adding just one of them.

Figure 3. Art's Correlation with Other Asset Classes

| | DM eq | EM eq | IG | HY | EM | Cash | HF | PE | RE | Commod | Art |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Developed Equities | 1 | 0.69 | 0.25 | 0.72 | 0.31 | 0.13 | 0.78 | 0.84 | 0.61 | 0.19 | 0.13 |
| Emerging Market Equities | 0.69 | 1 | -0.04 | 0.62 | 0.54 | 0.08 | 0.66 | 0.74 | 0.55 | 0.47 | 0.14 |
| Developed Investment Grade Fixed Income | 0.25 | -0.04 | 1 | 0.32 | 0.10 | 0.34 | 0.45 | 0.14 | 0.28 | -0.23 | -0.15 |
| High Yield Fixed Income | 0.72 | 0.62 | 0.32 | 1 | 0.45 | -0.13 | 0.71 | 0.78 | 0.66 | 0.21 | -0.37 |
| Emerging Fixed Income | 0.31 | 0.54 | 0.10 | 0.45 | 1 | -0.06 | 0.46 | 0.43 | 0.53 | 0.57 | -0.03 |
| Cash | 0.13 | 0.08 | 0.34 | -0.13 | -0.06 | 1 | 0.43 | -0.14 | -0.16 | 0.05 | 0.34 |
| Hedge Funds | 0.78 | 0.66 | 0.45 | 0.71 | 0.46 | 0.43 | 1 | 0.71 | 0.49 | 0.27 | -0.11 |
| Private Equity | 0.84 | 0.74 | 0.14 | 0.78 | 0.43 | -0.14 | 0.71 | 1 | 0.75 | 0.21 | -0.08 |
| Real Estate | 0.61 | 0.55 | 0.28 | 0.66 | 0.53 | -0.16 | 0.49 | 0.75 | 1 | 0.14 | 0.01 |
| Commodities | 0.19 | 0.47 | -0.23 | 0.21 | 0.57 | 0.05 | 0.27 | 0.21 | 0.14 | 1 | 0.21 |
| Art | 0.13 | 0.14 | -0.15 | -0.37 | -0.03 | 0.34 | -0.11 | -0.08 | 0.01 | 0.21 | 1 |

Source: Citi Private Bank Global Asset Allocation Team, as of 31 Oct 2018. Correlations are measured on a scale of 1 to -1, where 1 = two asset classes move in the same direction all of the time; -1 = two asset classes move in the opposite direction to each other all the time. Art represented by the Masterworks.io Total Art, Contemporary Art ,and Impressionist Art Indices © 2019 Masterworks.io LLC; All rights reserved. Indices revised as of November 2019

## Challenges of Investing in Art

Based on the historical data, there has been a solid case for allocating assets to art over time. There are, however, several caveats. While broad-based art indices like the Masterworks.io Total Art Index may be a good representation of the art market as a whole, investors could not easily have gained such generalized exposure in their portfolios. Gaining exposure to the art market requires the purchase of physical artwork, with the 'blue-chip' segment of the market typically exceeding multi-million dollar price points. Consequently, the performance of individual art collections is likely to be different to that of the market as a whole. And, unlike in traditional asset classes, there are no established investment tracking products for art indices and platforms offering securities tied to artwork are only beginning to emerge.

Although the art market may have achieved similar long-run returns to public market asset classes like fixed income, its liquidity profile is closer to that of real estate or other illiquid assets. Whereas many financial assets can be liquidated with little delay — even in larger quantities — artwork tends to require a longer transaction timeline. Sourcing buyers or awaiting a suitable auction takes time, although the proliferation of art fairs and the year-round calendar of auction sales are improving liquidity for the asset class. Transaction costs tend to be materially higher for art than for financial assets.

## Contemporary Art Continues to Outperform Other Art Categories

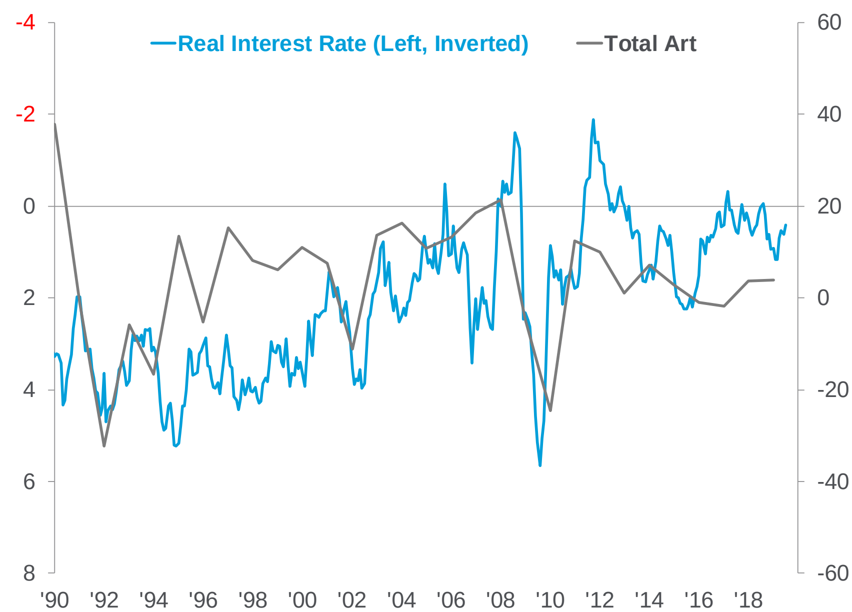
As a whole, art prices have shown modest growth over the last few years. From the time of our previous Citi GPS Art report in November 2015 to the end of 2018, we estimate the overall art market has risen by around 2% per year, with the contemporary art segment returning approximately 4% annually, including a 12% return in 2018. By comparison, we estimate that developed market equities and high yield fixed income returned an annualized 7%, and real estate 4.3% over the same period.

While the relationship has been far from perfect, art prices have tended to move in line with broad shifts in real interest rates. Figure 4 shows the art market's movements over time against interest rates adjusted for inflation. Periods of falling and/or low real rates have coincided with rising art prices. This relationship is rooted in the nature of art as an investment. Art, of course, does not pay any income stream to its owners. Instead, it has a slightly negative income stream, with owners faced with costs such as insurance, storage, transportation, and maintenance.

When real interest rates are going up, art also has a higher opportunity cost: its owners are foregoing the returns that they might have earned had they invested in interest-bearing assets. By contrast, in an environment of low real rates, art's opportunity cost diminishes, hence its typically stronger performance in such times.

In this respect, the art market overall is similar to gold. However, gold has done somewhat better than art since 2015, rising by an annualized 6.4%. One possible explanation for the gold's stronger performance of late may lie in both asset classes' price action in prior periods. Art and gold rose strongly starting in 2002, with both markets hitting record highs in 2011. Subsequently, gold suffered a peak-to-trough decline of more than 40% by the end of 2015. By contrast, the art market grew by around 10%. Gold's recent strength may therefore be correcting a previous overreaction.

Figure 4. Lower Rates, Stronger Art Market – Until Recently

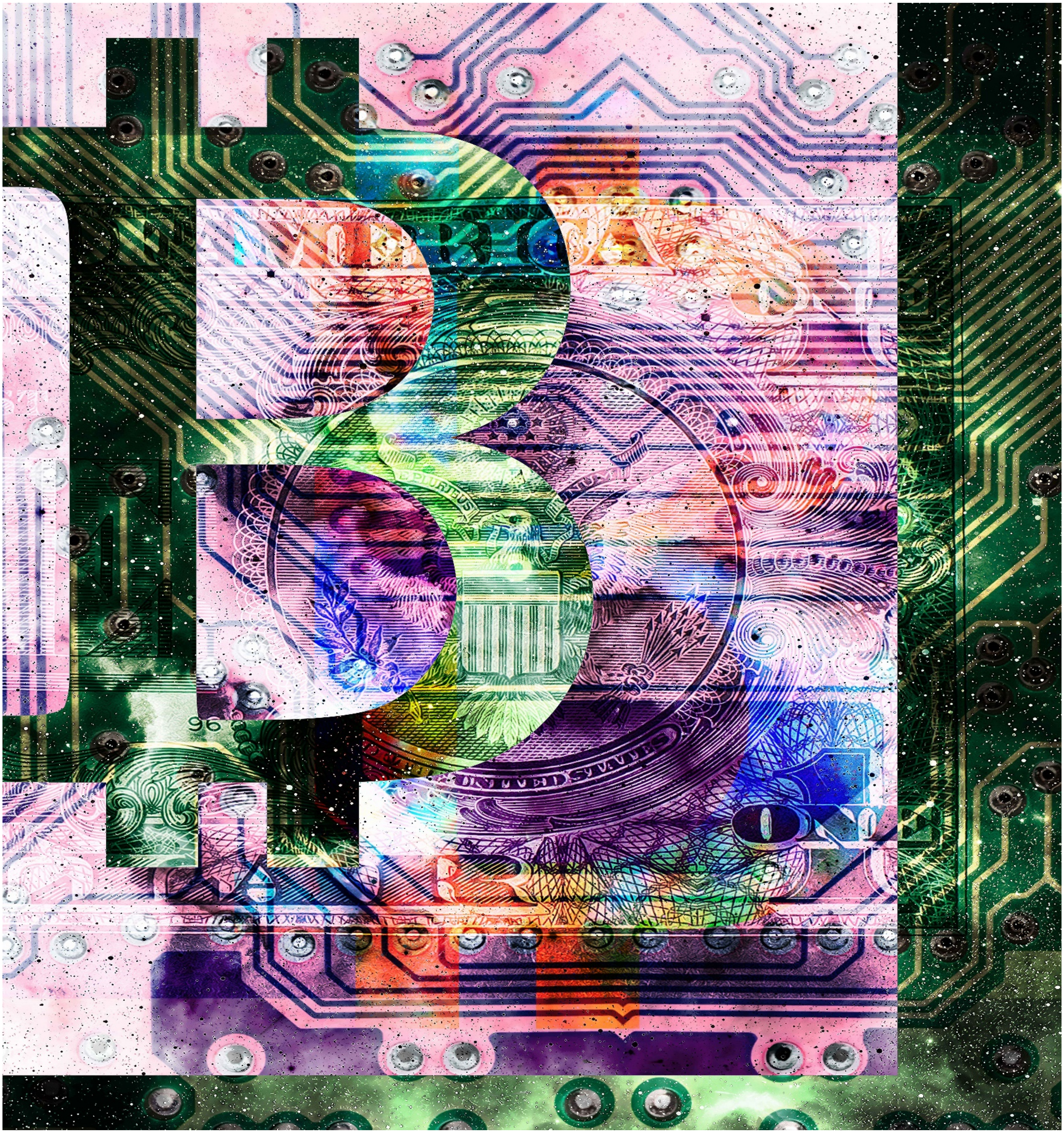



Source: Haver Analytics; Art represented by the Masterworks Total Art Index © 2019 Masterworks.io LLC; All rights reserved. Index revised as of November 2019

What might the future hold for art returns? Since 1962, annualized art returns have run well above inflation. As with certain assets like gold, we don't have an objective valuation anchor, such as discounted cash flows with which to assess its value. The Citi Private Bank Global Investment Committee does not offer tactical recommendations as to when to buy and sell art. However, we recognize the possibility that renewed monetary easing from central banks may keep real interest rates low and perhaps drive them lower still. Sooner or later, it is possible that art prices begin to reflect this more. Like all asset classes, in a lower inflation, higher valuation environment, we expect future nominal returns to be lower.

We believe art can gain increasing recognition as an investment asset class over time. New technologies could be instrumental to this recognition. Specifically, digital technologies such as blockchain could help automate vital processes, including establishing authenticity and performing valuations, as well as enabling share-based investment in individual works and collections. More transparent pricing, more readily available data on sales, greater market liquidity, and lower transaction costs could result. If realized, such efficiencies would make the art market more attractive for collectors and investors alike.

# Blockchain and the Art Market



# Blockchain and the Art Market

**Nanne Deking**
Founder and CEO of Artory, Inc.

In collaboration with:
**Louise Carron**, Executive Director of the Center for Art Law.

Even though we in the arts sometimes use the phrase "chain of title" as a synonym for "provenance," the fact is, no title registry for artworks has ever existed. But if it could do so much good for the buy and sell sides of the business, why hasn't it?

Art is no stranger to ever-changing trends and technology. Blockchain, the not-so-new kid on the block, is promising to address one of the art market's biggest problems: transparency of information and title. As a company leveraging blockchain technology, Artory has envisioned a Registry of artworks and transactions in collaboration with trusted art institutions, providing a unique solution for both artists and collectors through its ability to simultaneously guarantee privacy, authenticity, and proof of ownership. Like any technology, blockchain does not solve every problem and has its own challenges. Blockchain must be used responsibly and the art market would benefit most from companies working with leaders in the space to ensure its success as a tool which benefits artists, collectors, and the art market overall.

## Part 1: What is Blockchain?

Blockchain is the technology underlying cryptocurrencies. The technology was extracted to be used across industries, to record not only digital transactions, but also data sets which become immutable. While the words 'blockchain' and 'cryptocurrencies' are often used together, not all transactions recorded on a blockchain involve cryptocurrencies.

**Definition and process:** A simple way to understand blockchain is to see it as a database or a record book, where many users have the exact same copy of the record book, or "distributed ledger." In that record, every 'block' contains information about a particular transaction, which can only be validated by the rest of the ledger solving complex math problems through computer science. Sets of information are connected to the prior and next blocks, thereby making the data immutable. Each block that has been approved is added to the 'chain'. One of the many benefits of blockchain technology is that data is kept in different locations, rendering cyber-attacks virtually inefficient, and if a computer were to be destroyed, the data would still survive thanks to the other computers maintaining the ledger.

Main features of blockchain technology.

1. **Decentralization:** The first characteristic of blockchain technology is decentralization: recorded data is shared so that the users of the ledger, instead of third-party intermediaries, can verify, update, and approve transactions appearing on the blockchain as soon as they occur. As opposed to many other networks, blockchain technology does not rely on a single entity to approve the data, but rather on the collaboration of the community of people who have access to the record book. If a 'bad actor' tried to fabricate information, the rest of the ledger would detect the fraud and discard the changes. Records are therefore transparent, irreversible, and unencumbered by third-party verification from entities such as the government, banks, or a corporation.

2. **Encryption:** The second feature is encryption at two levels, guaranteeing privacy and relying on public and private keys: the user's public identity is protected behind a string of random numbers or 'public key', which corresponds to the profile they used for transactions. At the individual level, each user has access to a digital vault protected by a private key, where they store digital assets, such as cryptocurrencies. When a user accesses their vault to engage in a transaction, an immutable record is left behind.

3. **Transparency:** The final elements of blockchain technology, linked to the second one, are the transparency and traceability of transactions: each block contains encrypted information about previous ownership of the exchanged value.

There are many blockchains in operation and while it is possible to use an existing platform — such as Ethereum — it is also feasible to build a private blockchain, with the proper computer science skills. Ultimately, it is not imperative to understand everything about blockchain; rather, what matters is understanding its benefits and how companies can provide better services to the general public by using the technology in meaningful ways.

## Part 2 – Blockchain Technology and Its Benefits to the Art Market

When it comes to the art market, the advantages of blockchain technology are two-fold: it offers an avenue for secured transactions and it provides public access to information about an artwork's authorship, provenance, and ownership.

**Secured transactions and art investments:** Art has grown into an alternative asset class, encouraging a new wave of investors into the art market.[3] A growing trend today, 'fractionalization' of artworks allows multiple investors to own shares of an artwork. The company Masterworks leverages blockchain technology by purchasing paintings, issuing shares compliant with the Securities and Exchange Commission, and providing investors with monitoring tools allowing them to own and sell secured interests in a piece fine art. In September 2018, the platform Maecenas successfully orchestrated the first tokenized-sale of a multi-million dollar painting by Andy Warhol entitled 14 Small Electric Chairs (1980), using the Ethereum network and providing buyers with a digital certificate for each fraction of the painting they purchased. Owners of the artwork fractions can sell their certificates on the Maecenas marketplace. Additionally, blockchain is often associated with alternative payment methods, and people who have invested in cryptocurrencies may be interested in purchasing art and transforming their investment — although auction houses may choose not to accept cryptocurrencies due to fear of the potential for money laundering.

**Facilitated due diligence and access to records:** The art market could undeniably benefit from more transparency, especially when it comes to sale prices and ownership. Parallel to that are recurring problems of provenance, fakes, and forgeries, which can only be addressed through unfettered access to trusted information. The art world lacks a standardized set of best practices, especially when it comes to systemizing data — something that Artory hopes to resolve.

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[3] Doug Woodham, "Why Investing in Fine Art is Different Than Investing in Traditional Asset Classes", Artsy, Apr. 9, 2018. https://www.artsy.net/article/artsy-editorial-investing-fine-art-investing-traditional-asset-classes.

For example, The Art Loss Register's database on lost and stolen artworks has become an invaluable tool used by arts sellers and collectors before entering into a transaction to make sure that the artwork has not been flagged. While this database is a great resource, it only accounts for reported lost or stolen artworks, and does not include illegally traded artworks, fakes, or forgeries. Due diligence on provenance, authenticity, and ownership requires long and sometimes expensive research, due to the multiplicity of sources ranging from auction records to artists' archives and catalogue raisonnés — only a portion of which exist in digital, easily accessible form. Furthermore, provenance history tends to be incomplete, as much of the information may have been lost due to the passage of time, wars, and lack of records.

Blockchain technology is a promising solution for across-the-board data on the life of an artwork verified by trusted entities. By recording a chain of transactions pertaining to a specific work of art on a blockchain that is subsequently vetted by the rest of the ledger one creates an unalterable record of ownership and provenance, providing time-stamped records and anonymity for art collectors. Having this information certainly adds to the value of the artwork, a thought which undeniably crossed the mind of Christie's auction house at the time of their $300 million sale of the Barney A. Ebsworth Collection in November 2018. Setting a record for thirteen artists and two media, the highlight of the sale was Edward Hopper's Chop Suey (1929) which sold for $91.9 million (including buyer's premium). In addition to record prices, Christie's took a great leap forward by making the Ebsworth sale the first auction recorded on blockchain, via a secure digital registry administered by Artory, the leading database in the art and technology industry. The platform provided digitally encrypted certification for each of the 94 artworks, thereby creating a record that will follow the artworks as they change hands.

## Part 3 – Spotlight: Artory's Blockchain Title Registry for the Art Market

**Mission:** Founded in 2016 by Nanne Dekking, current Chairman of the Board of Trustees of The European Fine Art Fair (TEFAF) and former Sotheby's Vice Chairman and Worldwide Head of Private Sales, Artory is the first object-oriented database for the art and collectible market. Relying on the Ethereum blockchain, Artory uses double encryption to register millions of art records in which verified historical information is securely saved. No cryptocurrencies are involved and rather than being a digital gallery or providing a marketplace to sell and buy artworks, Artory is a database of immutable records of art transactions from buyers and trusted entities.

**Objectives:** With teams in New York, Berlin, and Bangkok, the Artory Registry (the "Registry") went live in September 2019. The primary objective of Artory is fostering confidence and peace of mind to buyers and collectors through the use of blockchain that the information they are transacting upon is the latest and most accurate information available, by providing an immutable proof of ownership. Ultimately, Artory aims to make the Registry a matter of standard practice and collaborate with international trusted art institutions that will register the artworks owned by their clients and guarantee the accuracy of the data each time they engage in the sale or inspection of an artwork.

**Partnerships:** Blockchain technology does not rely on a single entity to set standards and verify information. Artory uses this technology by entrusting power in what Artory calls "Registration Partners," a network of trusted artworld institutions, forming a distributed ledger from which Artory has been collecting information following strict guidelines to build a database of clean and credible information.

In April 2019, Artory acquired Auction Club, a comprehensive database of fine art auction records that has served as one of the main data sources in the Art Basel and UBS Global Art Market Report authored by Dr. Claire McAndrew, founder of Arts Economic. The Artory database now includes sales information from 4,000 auction houses and 250 businesses across 40 countries, for over 22 million records that are now publicly available, while guaranteeing purchasers' anonymity. Artory is engaged in ongoing partnerships with Arius Technology, the Contemporary and Digital Art Fair ("CADAF"), with the digital art galleries Kate Vass Galerie, Khora Contemporary, DADA, and Artxcode, as well as the digital art marketplace OpenSea and the creative technologists Larva Labs. Together, they have pledged to register artworks in the Registry, solidifying Artory's position as the unparalleled repository using blockchain technology for verified information.

**Solutions and benefits.** Artory offers wide-ranging solutions to serve all parties in an art transaction, relying on a two-sided platform to benefit collectors and art market players such as auction houses, galleries, and living artists.

- On one side, Collectors have access to the Collector's Vault where their artworks are stored along with relevant digital documentation and where collectors can request artwork vetting from Registration Partners, e.g., auction houses, galleries, and certified appraisers. Once a Partner has recorded the sale, the Registry provides an irrefutable proof of ownership that promises to become the standard across the industry, especially since trusted provenance and transparency have been proven to increase resale value and confidence from other entities. The services are free and collectors remain unknown to Artory and the public throughout the process. When collectors sell their artwork, they can transfer title for a low-cost, one-time fee. Other subscription-based services will soon include asset management tools and analytics.

- On the other side, Market players can use the Registry not only as a way to promote transparency and security of information, but also as a powerful tool to grow their businesses.

  - Dealers and auction houses can easily add records to the Registry, creating a new avenue of engagement with clients while conducting their business in a completely secure environment. The database, which contains publicly available information, is easily searched to conduct due diligence and provenance research, along with spotting and correcting inconsistent records—though data on the blockchain can never be changed, a new record can be added with the corrections made clear.

  - Living artists and estates can claim authorship through vetted galleries and estates, thereby reducing the incidence of forgery. By creating an encrypted record as soon as the artwork leaves the studio, artists can establish provenance at origin and be traced as the original maker. Additionally, the Registry aspires to simplify payment of royalties through the creation of smart-contracts to oblige sellers on the secondary market to award a percentage of that sale to the artist who recorded his artwork on the Registry. This promises to be an interesting alternative to state-mandated royalties, which are a topic of divergence between the U.S. and European countries: by making them a matter of contract and not a matter of law, there would be a possibility to opt-in or out of the royalty system along with added flexibility regarding the amount of the fee.

- Banks, insurers, and other service providers gain access to credible information on artworks from trusted sources. There is a growing number of loans taken by collectors against art, and fine art insurance has become a matter of common practice. According to a 2018 TEFAF study, art dealers are afraid of the risks associated with loans against art because of volatile art prices.[4] Having access to publicly available and trusted information on the artwork will undoubtedly make the process easier for both the collector and the service provider having to evaluate risks and liabilities when negotiating on a loan or an insurance policy.

- Museums and researchers can confidently source artworks for exhibition and research trusted provenance and digitally archived material shared publicly for free. As mentioned above, very few archives are readily and digitally available, and those that are, are not necessarily updated. By relying on a distributed ledger, Artory envisions collaboration between trusted entities to ensure that records are accurate and up-to-date, thereby facilitating provenance research.

For these reasons, Artory undertakes to record significant events in the lifecycle of artworks and collectibles, to offer public records and anonymity of Collectors, created and vetted by trusted art world institutions in a secure environment.

**Process:** First, a Registration Partner performs their due diligence processes that are in line with the code of ethics of their profession, including Know Your Customer research. Next, with their unique access key, the Partner digitally records the data about the transaction or inspection and submits it to Artory for registration on the blockchain. With that, Artory provides the Partner a blockchain-secured certificate that the Partner then gives to their client, the owner, who automatically can store it in their secure, encrypted Collector's Vault. The Vault is protected by a private key, owned by the Purchaser, giving them access to secured storage and a private, encrypted messaging platform. On the other side of the platform, the Registry displays a publicly visible record about the transaction and the artwork, which is associated with a fingerprint or "hash" that has been secured on the public blockchain. No personal information is displayed publicly or stored on the blockchain.

## Part 4 – Challenges of Blockchain Technology and Artory's Approach

**Blockchain regulations:**[5] Blockchain technology relies on self-regulation: as a global system, it tries to stay clear from consolidation of power into a single entity. Designed as an alternative currency system, cryptocurrencies have been the focus of attention from international organizations and from countries across the globe. In the United States, not all aspects of blockchain technology are regulated. Federal agencies such as the Securities and Exchange Commission (the "SEC"), the Commodities and Futures Trading Commission (the "CFTC"), the Federal Trade Commission (the "FTC") and the Department of the Treasury, through the Internal Revenue Service (the "IRS") and the Financial Crimes Enforcement Network ("FinCEN") have enacted *rules* pertaining to cryptocurrencies, but there are no federal *laws* focusing specifically on cryptocurrencies or blockchains — which explains the absence of uniform legal definitions.

[4] The European Fine Art Fair, *Art Dealer Finance 2018*, https://amr.tefaf.com/assets/uploads/tefaf_digital_report.pdf
[5] Global Legal Group Ltd., *Global Legal Insights – Blockchain & Cryptocurrency Regulation 2019*, First Edition. https://www.acc.com/sites/default/files/resources/vl/membersonly/Article/1489775_1.pdf

At the U.S. state level, several governments passed legislations, either encouraging their use by exempting cryptocurrencies from taxes or securities laws (e.g. Wyoming), or on the contrary, by restricting its dealership (e.g., New York).

**Money laundering:** Additionally, there are growing concerns over the origin of the funds used in secured transactions recorded on a blockchain, as international money exchanges may facilitate money-laundering schemes.[6] At the international level, the United Nations has set forth Anti-Money Laundering ("AML") obligations, which require that states criminalize money laundering, along with monitoring transactions (also known as "Know Your Customer") and cooperating with foreign governments. From the art market perspective, art is said to be an ideal vehicle for money laundering:[7] the most notorious case happened in 2008 when the U.S. Department of Justice unraveled a scheme whereby *Hannibal*, a 1981 painting by Jean Michel Basquiat worth $8 million was acquired through illegally obtained funds and smuggled into the U.S. under a declared value of $100.[8] Therefore, Artory's Trusted Partners will have to perform proper due diligence and follow "Know Your Customer" guidelines to ensure that the recorded artwork was not used to "mask, move, and leverage ill-gotten proceeds."[9]

**Incorrect or outdated information:** One of the major risks of blockchain is having incorrect information recorded in a verified block. Despite diligent research, recorded data may be out-of-date when new information comes to light. While blocks are immutable and cannot be deleted, it is perfectly possible to create a new block with correct information overriding the preceding one, which will be validated by the rest of the ledger. Artory is a firm believer in the concept of "garbage in, garbage out," i.e., the quality of the output is determined by the quality of the input. It is important to update erroneous information to encourage progress and transparency of information.

**Security and privacy:** Another vulnerability of blockchain-based transactions pertains to privacy: someone could lose their digital keys, and control of the user's assets would be lost to everyone; additionally, if someone gets a copy of a user's cryptographic key, they can impersonate the owner and have access to his or her vault and digital values, if any. These problems can easily be fixed through secured storage of the user's keys.

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[6] David Adler, "Blockchain and Money Laundering", *Fordham Journal of Corporate and Financial Law*, Dec. 15, 2017. https://news.law.fordham.edu/jcfl/2017/12/15/blockchain-and-money-laundering/.

[7] Deloitte, *Five Insights Into The Art Market And Money Laundering*, 2018. https://www2.deloitte.com/content/dam/Deloitte/us/Documents/finance/us-five-insights-into-the-art-market-and-money-laundering.pdf.

[8] Eileen Kinsella, "Bad Banker's $8 Million Basquiat Smuggled With Shipping Invoice for $100 Returns Home", ArtNet News, Jun. 19, 2015. https://news.artnet.com/market/smuggled-basquiat-returned-brazil-309813

[9] E.g., see Responsible Art Market's *Guidelines on combatting Money Laundering and Terrorist Financing*. http://responsibleartmarket.org/guidelines/guidelines-on-combatting-money-laundering-and-terrorist-financing/.

## Disrupting the Status Quo

Blockchains and cryptocurrencies were initially designed to circumvent central banks and encourage the development of an alternative payment system, leading to the general perception that they are disruptive tools. However, blockchain as used by Artory will not interfere with the art market, as it does not purport to create an alternative marketplace relying on cryptocurrencies. Rather, Artory aims to revolutionize the market and be a factor of trust by encouraging collaboration between parties involved in art transactions while relying on digital technology.

These challenges only illustrate the need for cooperation within an industry, if not *across* industries: companies are constantly working to improve data reliability, integrity, and procedures to ensure that self-regulation is effective. To that end, there is a growing number of consortia within the banking, life science, and healthcare industries, that agreed to develop voluntary, self-imposed standards to offer solutions to global challenges and avoid forced legislation.[10]

## Concluding Thoughts

Lack of understanding of the benefits of blockchain is one of the biggest challenges that innovators face today, in the art world and elsewhere. Through greater education and access to information, young and established art collectors, along with market players can start believing in the insurance, transparency, and reliability that blockchain can offer to the art market. Artory's branded, blockchain secure certificates provide collectors with an endorsement on their artworks from respected, trusted dealers, thereby contributing in building confidence in the market. Ultimately, Artory is encouraging art market players to become Partners: by uniting collectors, auction houses, dealers, museums, appraisers, and other trusted experts across the globe, Artory hopes to deliver what the art market will benefit from the most: transparency.

[10] Tanvi Virmani, "18 Blockchain consortia you should know about", Medium, Nov. 20, 2018. https://medium.com/blockchain-blog/18-blockchain-consortia-you-should-know-about-6262b6a30ba9

# NextGen Art Philanthropy: New Priorities & New Models

# NextGen Art Philanthropy: New Priorities & New Models

**Anders Petterson**
Founder, ArtTactic

Anders Petterson is the founder and managing director of ArtTactic, a London-based art market research company, which he set up in 2001. Over the last 18 years, ArtTactic has been a leading provider and pioneer in the origination of new art market data, intelligence and research for the global art industry, and is working with major global partners on regular publications such as the Deloitte Art & Finance Report, Hiscox Online Art Trade Report and JLT NextGen Artist Report. In 2018, ArtTactic launched its first Art Philanthropy research initiative, with the publication of the India: Art & Philanthropy Report 2019 and the Africa: Art & Philanthropy project, which was launched in Venice during the Africa Art Forum in May 2019.

Last year, philanthropic giving in the U.S. amounted to $428 billion.[11] An estimated $292 billion, was donated by individuals, up 21% from 2008.[12] One of the beneficiaries of the increase in private support has been the arts and cultural sector, which received an estimated $19.5 billion in 2018, which was an inflation-adjusted increase of 36% over 2008. A recent report for the U.K.[13] found that 91% of arts and culture organizations received some form of private investment in the 2017/18 financial year, with individual giving accounting for 43% of private investment in arts and culture.

The increasing reliance on individual giving comes on the back of a challenging funding landscape for the arts and cultural sector. Large and small arts organizations in Europe and the U.S. have been facing cuts in public funding in recent years. A U.K. report by the County Councils Network stated that almost £400 million has been stripped out of annual local authority spending on culture and the arts since 2010, and public spending on museums has declined by 13% in real terms over a decade, from £829 million in 2007 to £720 million in 2017. In the U.S., President Trump announced in the 2019 budget plans to reduce National Endowment for the Arts' (NEA) budget to $29 million from around $150 million.[14] As governments around the world tighten their budgets, and with the arts set to lose against what is perceived as more pressing needs, arts organizations will have to increasingly rely on a new generation of philanthropists for future support.

## Strategic Shifts in Philanthropic Giving

While the act of philanthropy is as old as mankind itself, societal changes, new priorities and needs have triggered increasing diversity in philanthropy and encouraged new models and approaches in the last 20 years, also in the narrower field of art philanthropy.

Philanthropy is often associated with the romanticized and altruistic idea of giving as an act of 'love of humanity', however the reality is that motivations are often more varied and complex, ranging from tax benefits and other fiscal incentives to the use of philanthropy to gain power, influence, and status. One of the main trends in philanthropy in recent years has been the growing focus on social impact investment, and where philanthropic activities are expected to be measured in both financial as well as social returns. This has triggered a more strategic approach to individual giving, incorporating business practices, innovation, technology, and improved measurement and evaluation models. The increasing focus on outcome-based philanthropy is likely to shape philanthropy in the not-for-profit art world over the coming decades too, and could have a fundamental impact on fundraising models for public museums, art organizations, and artists.

[11] Giving USA 2019: The Annual Report on Philanthropy for the Year 2018. Researched and written by Indiana University Lilly Family School of Philanthropy. Sponsored by Giving USA Foundation, a public service initiative of The Giving Institute.
[12] The figure is an inflation-adjusted calculation. The nominal increase was 37%.
[13] The 2019 Private Investment in Culture Survey (PICS), Arts Council England
[14] http://www.artnews.com/2018/02/12/trump-administration-proposes-cuts-nea-neh-funding-2019-budget/.

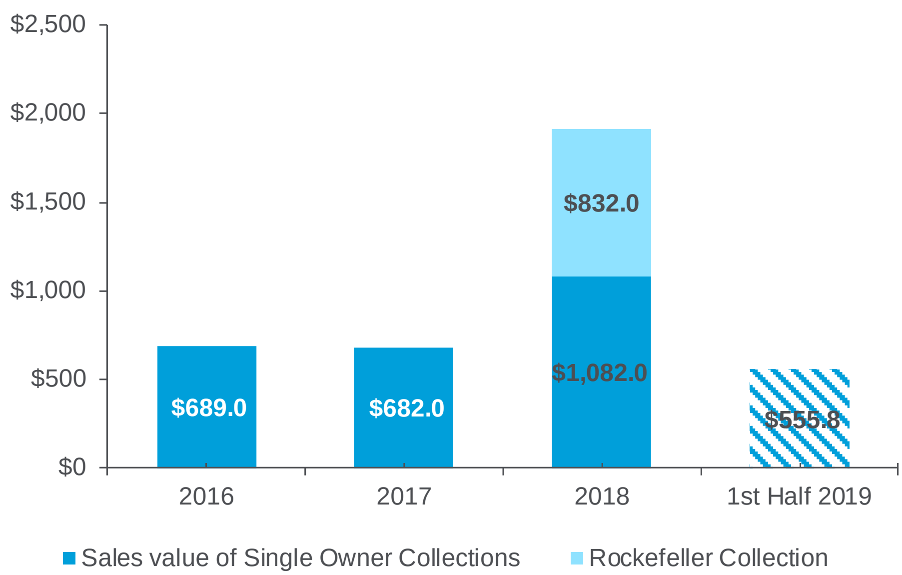
## From Baby Boomers to Millennials – Changing Priorities?

Today, the Baby Boomer generation plays a significant role in philanthropic giving, with recent research[15] showing that this generation is responsible for 41% of all individual giving in the U.S., with Gen X accounting for 23% and Millennials currently contributing 14% to total giving. With the emergence of a new generation of younger philanthropists, we are likely to see significant changes in the level of giving from the Gen X and Millennial cohorts, as we are currently entering the early phase of what has been defined as the "Great Wealth Transfer", whereby baby boomers will pass an estimated $68 trillion to their children in U.S. alone[16] — the biggest generational wealth transfer in history.

This global wealth transfer could also have a significant impact on the landscape of art philanthropy, as parts of an estimated $1.74 trillion[17] of art and collectible ultra-high net worth individual (UHNWI) wealth could be passed down over the next two decades. Of collectors surveyed for the Deloitte Art & Finance Report 2017, 67% said that they intended to pass their collection to their family, with 15% saying the art will be sold and 13% said it will go to a foundation).

It is not entirely clear if the next generation will continue where their parents left off, or if art-related wealth will be sold off and distributed to charities' and not-for-profit organizations, as we have seen with recent single-owner collection sales, such as the Rockefeller collection sold at Christie's in 2018 for $832 million.

Figure 5. Generation Shift: Single-Owner Collections, 2015-1H 2019, @ Sotheby's, Christie's and Phillips




Source: ArtTactic

The increase in single-owner collection sales at Sotheby's, Christie's, and Phillips between 2016 and 2018 could be an early sign of a major transfer of art related wealth from an older generation of collectors to younger baby boomers and Gen X'ers. However, will these collecting patterns continue as Millennials and even the younger generations gradually take over as the dominant consumer group?

[15] Source: Blackbaud – "Next Generation of American Giving", 2018.
[16] Source: Cerulli Associates, Nov 2018.
[17] Source: Deloitte and ArtTactic Art & Finance Report 2019.

Will they collect objects in the same way as their parent and grandparents, and will ownership of art mean the same to this generation? What are the implications for the structure and value of today's art market, and how could this effect the way art philanthropy evolves over the next decades? Is the private museum boom a thing of the past and what models of philanthropy and art patronage will Millennials embrace?

## Social Influence vs. Social Impact

Art philanthropy has long been the domain of the wealthy Baby Boomer generation but the profile of today's philanthropists is changing. Increasingly, Millennials (and Gen X'ers) are reinventing what it means to be an art philanthropist. While many in their parents' generation are about the 'feel good' factor of giving, as well as social status and access to the right social circles,[18] the new generation of philanthropists are more concerned about the impact of their philanthropic activities. They want more than just their name on the museum wall; they want to see real impact and measurable results and they want to be more pro-active and involved with their donations. According to recent research[19] of Millennials living in London — one of the hallmarks of giving among millennials is the desire for 'deep engagement' – which means contribution to good causes goes beyond donations of money, and increasingly also involves donating time and skills.

The changing motivations of donors will translate into new challenges for the leaders of arts organizations. The next generation of philanthropists wants to be more hands-on, and work closely with an organization, rather than just donating money. Arts organizations will need to adapt and find new models that engage and attract new donors if they want to ensure future growth and sustainability.

## Technology and New Art Philanthropy Engagement Models

Future art philanthropy models are likely to be driven by different donor motivations and interests combined with rapid development in technology. Below are two possible scenarios on how art philanthropy — aided by technology — could evolve in the next decade.

### *Blockchain technology could enable a new ecosystem around art philanthropy:*

Today's $4.64 billion[20] online art market and the increasing influence of social media have broken down geographical hurdles and provided a new generation of art buyers with an alternative channel to discover, engage with and buy art. At the same time, this has given artists the opportunity to build a market and fan base outside the traditional gallery system. It is likely that a similar evolution takes place in the art philanthropy sector.

Already, online giving is gathering pace, and a recent report from Blackbaud,[21] registered the largest share of fundraising from online giving ever, accounting for 8.5% of total giving in 2018, with arts and culture organizations accounting for the highest growth rate in online giving. 79% of charities overall said they have seen social media as a successful channel for fundraising in the past year.

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[18] Source: *Generation Impact: How Next Gen Donors Are Revolutionizing Philanthropy*, Sharna Goldseker & Michael Moody
[19] More to Give: London Millennials Networking Towards a Better World' By Professor Cathy Pharoah and Dr Catherine Walker.
[20] Hiscox Online Art Trade Report 2019.
[21] Charitable Giving Report 2018, Blackbaud.

Also, the success of crowdfunding platforms, such as Kickstarter and IndieGoGo, particularly among the younger generation (64% of Kickstarter's audience are under 35 years old[22]), is already evidence of the appetite the younger generation of donors and supporters have for supporting art and cultural projects.

Rapid developments in blockchain technology could also pave the way for an entirely new ecosystem for patrons and philanthropists in the art and cultural sector. The advantage of blockchain-based technology is that you can radically improve transparency around giving, i.e. trace donations, set up protocols (smart contracts) to release money as the project or organization reaches certain milestones, collect and gather project and impact data, and use this to make it easier for funders and philanthropists to identify interesting projects and art organizations to support.

For arts organizations operating in developing art markets —where infrastructure is lacking and where transparency might be a problem — blockchain technology could ensure that the money ends up where it is supposed to. Higher levels of trust could result in a more global marketplace for philanthropic giving to the arts. Similar types of initiatives already exist in the wider non-for-profit world, such as GiveTrack and AidChain, platforms that provides an ecosystem of services, connecting the not-for-profit community while allowing full transparency and traceability of donations.

### *Museum Patrons 2.0 – New Engagement Models*

It is questionable if today's museum patron schemes will remain attractive enough for the next generation of young philanthropists and art patrons, particularly in a world faced with so many pressing issues— from poverty to climate change. While most patron schemes evolve around events, networking, and education, and appeal to a 'feel good' factor alongside status and access to certain social circles, a different engagement model could emerge in the future.

This model would preserve the best of existing art patron programs (such as events and education), but in addition could provide deeper engagement and more involved role for the patron. This would include greater choice of projects to support. Therefore, instead of making individuals become stakeholders in the museum itself, one could make individuals stakeholders in specific projects within the museum, whether this is an exhibition, outreach project, or an acquisition of new artwork. By giving patrons more choice, one can redefine the scope of what it means to be a museum patron, and maybe in the future, patrons will no longer be tribally linked to one or two art institutions, but will instead support specific projects from many different institutions across the world.

Technology could play a critical role in the development of a new museum patron infrastructure and will evolve from existing initiatives in the charity sector. For example, the emergence of blockchain technology being trialed as a way of creating more trusted relationships between donors and charitable causes. Other technologies such as virtual and augmented reality can enable new forms of engagement that could create powerful emotional links between supporters and the institutions they decide to support.

[22] Source: Quantcast.

## Future Challenges

Although art and culture have seen a real increase in philanthropic support in the last few years, the Art Philanthropy sector is facing a few headwinds in the upcoming years, and although technology might ease some of these challenges, there is the risk that technology could amplify the problems faced by the art sector today.

*Reputational risk associated with donations will not go away:* In recent years, there has been increasing scrutiny around donations from individuals and corporations linked to companies that might raise ethical concerns. This issue has become particularly relevant in the wake of the recent controversy with the Sackler family, and the opioid crisis and their wide-ranging philanthropic support for the arts. There is a rapid change in attitudes with regards to what kind of donations are acceptable and what are not. While blockchain technology is fundamentally centered on the issue of 'creating trust' – particularly in tracking donations, there is still a big question mark around the issue of where the origin of the money is coming from. Some would argue that with advent of a blockchain-based art philanthropy ecosystem, the transparency around the origin of the funding might become less rather than more. With owners of cryptocurrencies remaining confidential, how do we know that the funds are not coming from criminal activity, money laundering, or are related to other unethical behavior?

***Could more data and increasing focus on measurement lead to less diversity?***

The rationale behind the rough sketch of a new art philanthropy ecosystem outlined earlier; was to democratize giving to the arts, making it globally accessible to donors and arts organizations in different parts of the world, by promoting transparency and engagement, and focusing on both the outcome and impact of the projects that receive support. The latter, could present a real challenge for the arts, as the indirect and direct impact of art-related activities are often hard to measure, beyond observable figures, media coverage, and maybe ticket sales. Better evaluation methodologies and clearer objectives are likely to raise awareness of the role of arts in education, as well as the economic and the social benefits of art. However, with new technologies assisting us in capturing data and potentially measuring the impact (where possible), there is a real risk that we might end up supporting and funding art projects that have an immediate demonstrable and quantifiable output. Meanwhile projects that have a strong intrinsic value (the enjoyment value and the feeling of being challenged) are not measured and therefore not prioritized. This could lead us to an art philanthropy ecosystem (maybe driven by Artificial Intelligence in the future) that focuses on easily measurable projects ("blockbuster" projects and exhibitions) rather than funding projects with longer impact horizons. In this case, we might end up with significantly less diversity than we currently have.

In conclusion, there is no doubt that the art market and its institutions are standing in front of what could be a seismic shift over the coming two decades. Changing demographics are triggering different behaviors and motivations around giving, and the art world that increasingly relies on private support, will need to anticipate and adapt to these changes. We have outlined two scenarios where change could happen and where technology could play a transformative role. But as with anything new, it will also bring on its own set of challenges. We therefore stress the importance of carefully considering both the benefits and challenges now, before we embark on the designing the architecture for new philanthropic models for the arts over the coming decades.

# Artist Liquidity & Financial Performance

# Artist Liquidity and Financial Performance

**Jianping Mei and Michael Moses**
Co-Founders of artasaninvestment.com

Jianping Mei is Professor of Finance at the Cheung Kong Graduate School of Business and Michael Moses is a retired NYU Stern School of Business Professor as well as a Board member of ARTBnk LLC. They are the original creators of the Sotheby's Mei Moses Family of Art Indexes and are currently founders of Art Market Consultancy© and artasaninvestment.com.

The artasaninvestment.com website is designed to give art market professionals, individuals, and financial institutions access to the most comprehensive analysis of the true financial performance available in the repeat sale auction market both in general and for each of the top 400 liquid artists in particular. In addition to summary information on returns, return expectations, risk-adjusted returns, market-adjusted returns, percent sold, percent sold at a loss, etc., for these artists, the site will also portray return as a function of purchase year, purchase price, and holding period for every current repeat sale transaction.

The site will also allow the user, via a patent-pending methodology, to create their own artist investment potential ranking score for the artists noted. In addition, the site makes available a forecasting tool that allows the user to develop a current price estimate for a work of art based on a prior purchase price and date and a user-selected portion of the artists historical return distribution (for example 'mean of the top 25%', 'median of the middle 80%' etc.).

The information in this section is intended for individuals and institutions who have already decided to include art as an asset in their wealth management goals and are trying to decide on which artist to invest and what price to pay for individual works.

The beauty and uniqueness of art as an investment is that it gives the opportunity of gaining pleasure and excitement from its ownership in three distinct ways. The first beauty of art is the obvious one of emotional appeal obtained from the visual image of the object. The second beauty of art is the enjoyment most owners obtain from the process of its acquisition. The third beauty of art is its longevity and financial performance. Over the last three millennia there has never been a time when art was not important and appreciated somewhere in the world. In general, arts relative performance is based on the historical time period under consideration and the artist being analyzed.

In this section we ignore the first two beauties of art not because we feel they are unimportant but because there are others more qualified to address these issues than ourselves. Here we will address the topic that might be of interest to neophytes and sophisticates alike about the financial characteristics of individual artists and groups of artists based on their relative liquidity level. Therefore, we deal only with financial performance and all derivatives based on these facts rather than individual or summary information on all art auction market transactions.

We also point out that most collectors/ investors are neither interested in buying broad collecting categories nor are there vehicles currently available that allow for this type of investment. Everything is currently conducted on an artist-by-artist basis. Since there are tens of thousands of artists to pick from there must be an organizing approach that allows for some summary reporting. To come up with such an approach, we decided to describe the repeat sale auction market in terms of artist liquidity rather than the more traditional approach which utilizes collecting categories. In addition we report in depth on the individual financial performance for each of the almost 400 individual artists in the top three liquidity levels.

Our analysis is based on data from over 13,000 works of art that have sold since July 2016 at three of the world's largest fine art auction houses— Sotheby's, Christies, and Phillips — and also at auction at a previous time at any auction house in the world. Repeat sale pairs are required to study the historical performance of art as an investment since only these works have sufficient price transparency to guarantee the determination of true financial returns. Knowing the public sale and purchase transaction prices, as well as the time interval between sales, provides sufficient data to compute a compound annual return (CAR) for each object. This information can then be used to produce a distribution of returns for each artist and liquidity group.

We currently define artists as liquid (i.e., at least seven occurrences of repeat auction sales per year), active (at least four but less than seven), inactive (at least two but less than four) and illiquid (artist with less than two repeat auction sales per year). There are over 2,500 artists in the last liquidity category and each has so little information that we choose not to portray their results individually and instead illustrate all their information as a group. Currently there are about 75 liquid artists, 90 active artists, and 235 inactive artists in our database.

We analyze the mean CAR for all of the repeat sale pairs we have found for each auction season. (Note: We exclude 85 works with a CAR in excess of 100% because they are few in number, held for a very short period of time, and would add a significant upward bias to our results). Most investors are not only interested in a measure of the return of an asset but also in the risk inherent in that return. Risk can be measured by the variability in the return values. We therefore report the standard deviation of the returns and a measure of the risk per unit of return, which is the standard deviation of the individual returns divided by the mean of the individual returns, or coefficient of variation (COV), for each artist and liquidity category. Assets with small positive COV values are considered to be less risky than assets with larger COV values. The COV can also be negative if the mean CAR is negative. Most investors would prefer a positive COV but the tradeoff between a small negative COV and a high positive COV is left up to the risk preference of the investor.

Figure 6 below summarizes the financial performance per auction season of the entire repeat sale auction market since the end of spring 2016. It is clear from this data the repeat sale auction market has been stagnate for the last six auction seasons, with a slight decrease in COV over time. The returns however are almost half of their historical values. This information is followed by Figure 7 showing financial performance as a function of auction interval i.e., years from purchase date to sale date. The table is broken into five holding period categories. This is followed by a graph of the data for holding periods less than 50 years. Next we show in Figure 8 the financial performance as a function of five purchase price levels.

Taken together, these charts show from a mean and risk adjusted ratio basis, the longer an item is held the lower its risk. This is very important for those collectors interested in a family legacy or wealth preservation since over the longer term, the return far exceeds inflation. Works held over 25 and 50 years have the second and third-highest average return and the lowest two levels of risk per unit of return. This is in contrast to works held between 5 and 10 years, which have the lowest return and the highest risk per unit of return. It is interesting to note that many art investment products use this later holding period as their benchmark.

In addition, except for moderate purchase prices, between $50k and $250k, there is no advantage, on a return or risk-adjusted ratio basis, to buying expensive art. The best performing price point from both a return and risk per unit of return basis consists of works purchased for less than $50k. This confirms our long held and reported position that there is a painting for every purse and there is no disadvantage from a return perspective to having a small purse.

Figure 6. World Repeat Sale Auction Market Financial Performance Through June 2019

| Sales Year Season | Mean CAR | Standard Deviation | Coefficient of Variation |
|---|---|---|---|
| Fall 2016 | 3.48% | 11.66% | 3.35 |
| Spring 2017 | 3.16% | 11.39% | 3.61 |
| Fall 2017 | 3.66% | 10.76% | 2.94 |
| Spring 2018 | 4.40% | 10.54% | 2.40 |
| Fall 2018 | 4.07% | 9.88% | 2.43 |
| Spring 2019 | 4.40% | 12.69% | 2.88 |
| All Pairs | 3.77% | 11.30% | 3.00 |

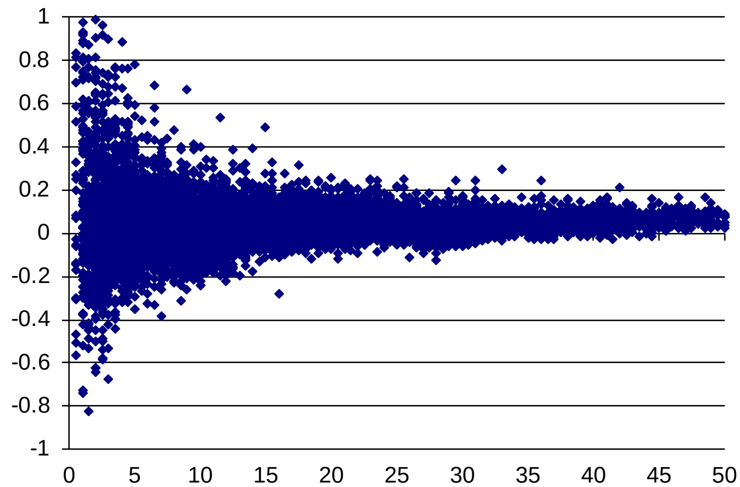
Source: artasaninvestment.com©

Figure 7. Auction Interval (AI) and Financial Performance

| Auction Interval Rank | Mean CAR | Standard Deviation | Coefficient of Variation | Count |
|---|---|---|---|---|
| < 5 Years | 6.48% | 23.94% | 3.69 | 1,739 |
| 5 to < 10 Years | 2.09% | 11.28% | 5.40 | 2,562 |
| 10 to < 25 Years | 3.28% | 6.98% | 2.13 | 5,325 |
| 25 to < 50 Years | 4.20% | 4.35% | 1.03 | 2,949 |
| >= 50 Years | 5.79% | 2.98% | 0.51 | 466 |
| Grand Total | 3.77% | 11.30% | 3.00 | 13,041 |

Source: artasaninvestment.com©

Figure 8. World Repeat Sale Pairs Through Spring 2019, Auction Interval Less than 50 Years and Return©




Source: artasaninvestment.com©

Figure 9. Purchase Price (PP) and Financial Performance

| Purchase Price Rank | Mean CAR | Standard Deviation | Coefficient of Variation | Count |
|---|---|---|---|---|
| < $50,000 | 4.61% | 11.25% | 2.44 | 7,422 |
| $50,000 to < $250,000 | 2.08% | 11.36% | 5.47 | 3,708 |
| $250,000 to < $1 Million | 3.64% | 11.08% | 3.04 | 1,422 |
| $1 Million to < $10 Million | 4.42% | 10.87% | 2.46 | 457 |
| >= $10 Million | 2.52% | 7.11% | 2.82 | 32 |

Source: artasaninvestment.com©

Figure 10 summarizes information on the financial performance of each of our four artist liquidity levels since the end of the spring 2016 auction season. The chart clearly shows that there is no liquidity premium in the repeat sale auction market. Normally assets with low liquidity require a return premium over similar assets with high liquidity. Our data shows that the best performing market liquidity level from both a return and risk per unit of return basis is liquid artists followed uniformly by active, inactive, and then illiquid artists. It is also clear the difference between liquid and active artist is negligible.

Figure 10. Liquidity Rank and Performance, 2016 to Spring 2019

| Liquidity Rank | Mean CAR | Standard Deviation | Coefficient of Variation | Count |
|---|---|---|---|---|
| Liquid | 5.74% | 11.09% | 1.93 | 3,596 |
| Active | 4.91% | 9.77% | 1.99 | 1,502 |
| Inactive | 4.03% | 10.74% | 2.67 | 2,045 |
| Illiquid | 2.19% | 11.73% | 5.36 | 5,898 |
| Grand Total | 3.77% | 11.30% | 3.00 | 13,041 |

Source: artasaninvestment.com©

We have tried other liquidity level designations which yield similar results. Figure 11 is for five levels with an average auction frequency of ten, seven, four, one, and less that one per year. Again the first three levels, which average greater than or equal to four pairs per year, are almost equivalent. However the artists with activity below this level have dramatically weaker performance, 50% to 300% weaker, on a risk per unit of return basis.

Figure 11. Liquidity Rank and Performance, 2016 to Spring 2019

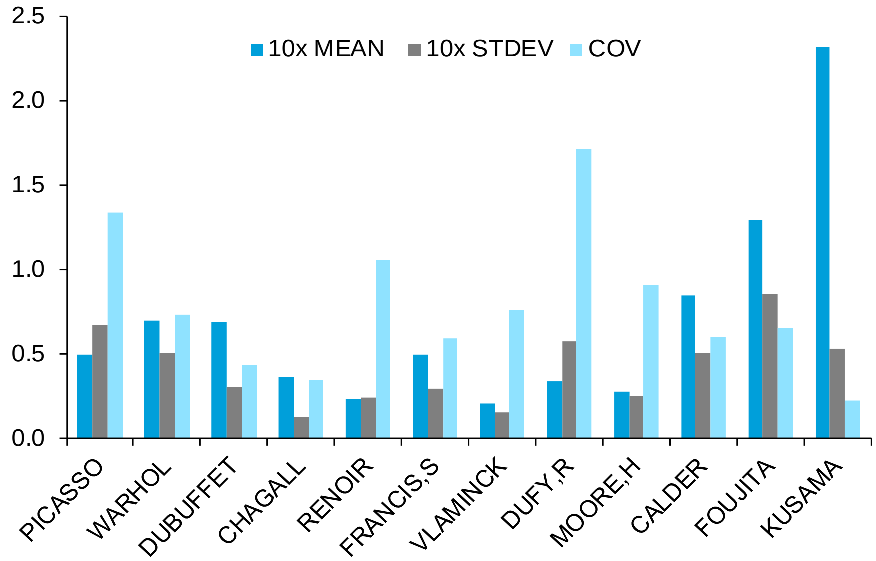
| Liquidity Rank | Mean CAR | Standard Deviation | Coefficient of Variation | Count |
|---|---|---|---|---|
| >= 10 | 5.34% | 10.74% | 2.01 | 2,595 |
| >= 7 to < 10 | 6.49% | 11.96% | 1.84 | 1,066 |
| >= 4 to < 7 | 5.50% | 10.52% | 1.91 | 1,545 |
| >= 1 to < 4 | 3.68% | 10.89% | 2.96 | 3,600 |
| < 1 | 1.57% | 11.66% | 7.41 | 4,235 |
| Grand Total | 3.77% | 11.30% | 3.00 | 13,041 |

Source: artasaninvestment.com©

We have also investigated the average financial performance by liquidity level, per auction season, and per the previously mentioned five auction interval and purchase price categories. The results are almost identical to those reported above for the entire repeat sale auction market — more liquid categories have stronger financial performance in every auction season. The risk per unit of return value is the lowest for the holding period of over 25 or 50 years for every liquidity category. In addition, except for moderate purchase prices of $50-$250k, there is no advantage on a return or risk-adjusted return basis to buying the most expensive works within a liquidity class.

We should point out that the results for artists within each liquidity category are not uniform — extreme variability is present. As an example if we take the dozen most active artists within the liquid group we find dramatic differences. In Figure 12 we plot the return results where for presentation purposes we have multiplied the mean and standard deviation by a factor of ten. The bar chart clearly shows Kusama, Dubuffet, and Chagall — the top performers — outperform Dufy, R, Picasso, and Renoir — the weakest performers — by a factor of three based on the COV performance measure.

Figure 12. Relative Performance of Top 12 Liquid Artists

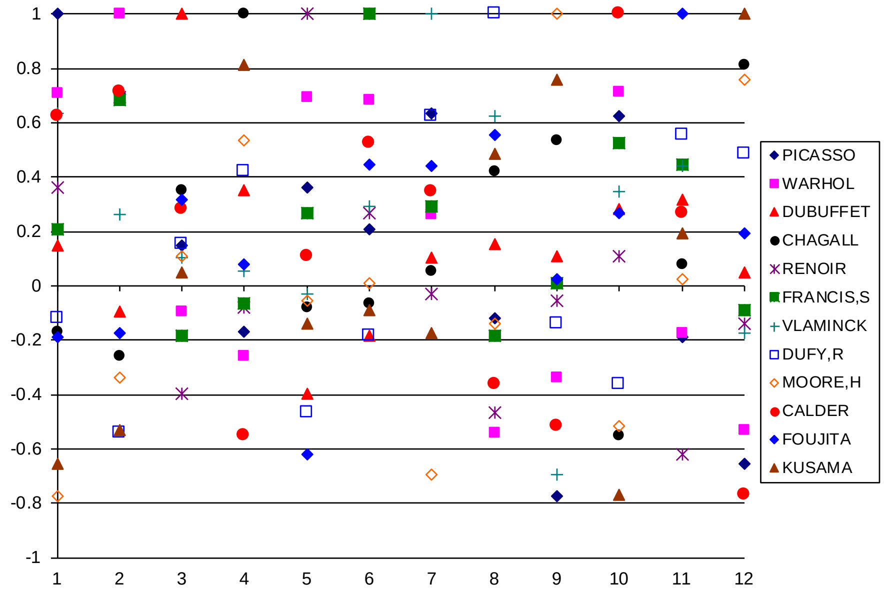



Source: artasaninvestment.com©

In putting together a portfolio of investments the correlation among the various assets plays an important role and we have sufficient information to compute the correlation of the top 12 liquid artists over the last six auction seasons. The results are given in Figure 13 where the "y" values are the correlation and the "x" values are the top 12 artists in order. Thus the "x" value of '1' is for Picasso, '2' is Warhol etc. For Picasso we see there are artists who have both high and low correlations — Warhol and Calder have high positive correlation and Kusama and Moore have high negative correlation. For Dubuffet however none of the eleven artists have either high positive or negative correlation.

The information contained in Figure 12 and Figure 13 implies a collector of Picasso who is interested in optimizing their financial return, might do well by holding some works by Kusama, even if not exhibited, given their low COV and high negative correlation.

Figure 13. Correlation of Top 12 Liquid Artists Last Six Seasons

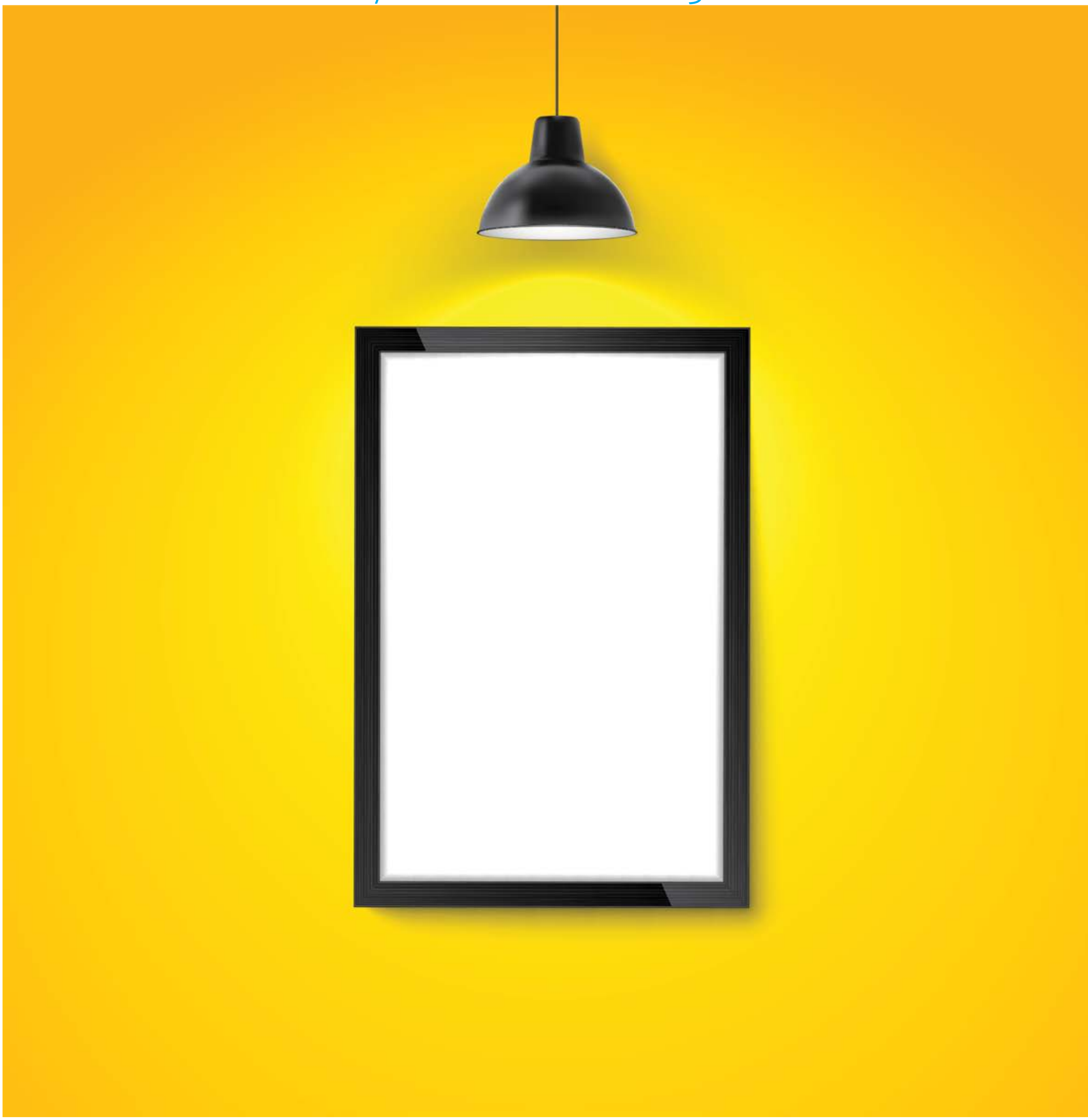



Source: artasaninvestment.com©

Our research over the last 20 years shows there are periods of time when art, on a financial basis, has underperformed and outperformed other asset classes. The last decade has been a period where stocks have clearly outperformed art. Unfortunately, we are still unable to predict when those periods will occur. In addition, art continues to be uncorrelated with other assets. What we can say is that art has proven to be an excellent store of wealth over all time periods, easily exceeding inflation, and that the longer it is held the better its risk adjusted performance. Also if financial considerations are important, investors should favor higher liquidity artists. Finally, what is also clear is there is sufficient variability in the financial data available on the true returns achieved by individual higher liquidity artists such that optimal investment portfolios can be organized which include art.

Chapter 5

# Citi Private Bank Art Advisory & Finance: A 40-Year History in an Evolving Market



# Citi Private Bank Art Advisory & Finance: A Forty-Year History in a Constantly Evolving Market

**Betsy Bickar**
Art Advisor, Citi Art Advisory & Finance

In 1979, the Private Banking Division of Citibank formed an in-house art advisory service, and began lending against art as collateral a few years later. At the time, the art market was beginning its trajectory into a new era with climbing auction prices and an explosion of galleries on the scene. In 1986, a year before Andy Warhol's death, one could buy a Warhol *Triple Elvis* painting for just over $200,000; another Warhol *Triple Elvis* realized $81.9 million at auction in 2018. While the art market overall has seen a marked evolution and expansion since, it remains an opaque, inefficient, and unregulated market yet significant changes in transparency are on the horizon.

The last two years have been an extremely active period not only for the auction houses, but also for the private sector of the art market, which continues to expand across the globe. Many art galleries have established brick and mortar outposts in Asia, though the focus remains primarily on New York, London, and Hong Kong. Art fairs in Europe, the Middle East, Asia, and the Americas are a major draw for collectors worldwide. Postwar and Contemporary art continues to dominate the market with robust sales and growth across the board. In the past few years, museums and dealers have turned their focus more than ever to issues of social justice, diversity, and inclusion, giving the spotlight to artists of color and women, with increased exposure in museum and gallery exhibitions. All of this has led to a new demographic of global collectors who are creating an uptick in market demand for a diverse and multicultural artist base.

Technology has facilitated the flow of information around the world, and buyers are able to see images instantly from practically any location on the globe. Information is disseminated at exponential speeds, and has greatly affected the way in which buyers make decisions about which artists and artworks to follow. Online auction sales, social media, blockchain and Artificial Intelligence (AI) are part of the changing landscape.[23]

[23] The views expressed herein are those of Citi Private Bank Art Advisory & Finance and do not necessarily reflect the views of Citigroup Inc. or its affiliates. All opinions are subject to change without notice. Neither the information provided nor any opinion expressed constitutes a solicitation for the purchase or sale of any artwork.

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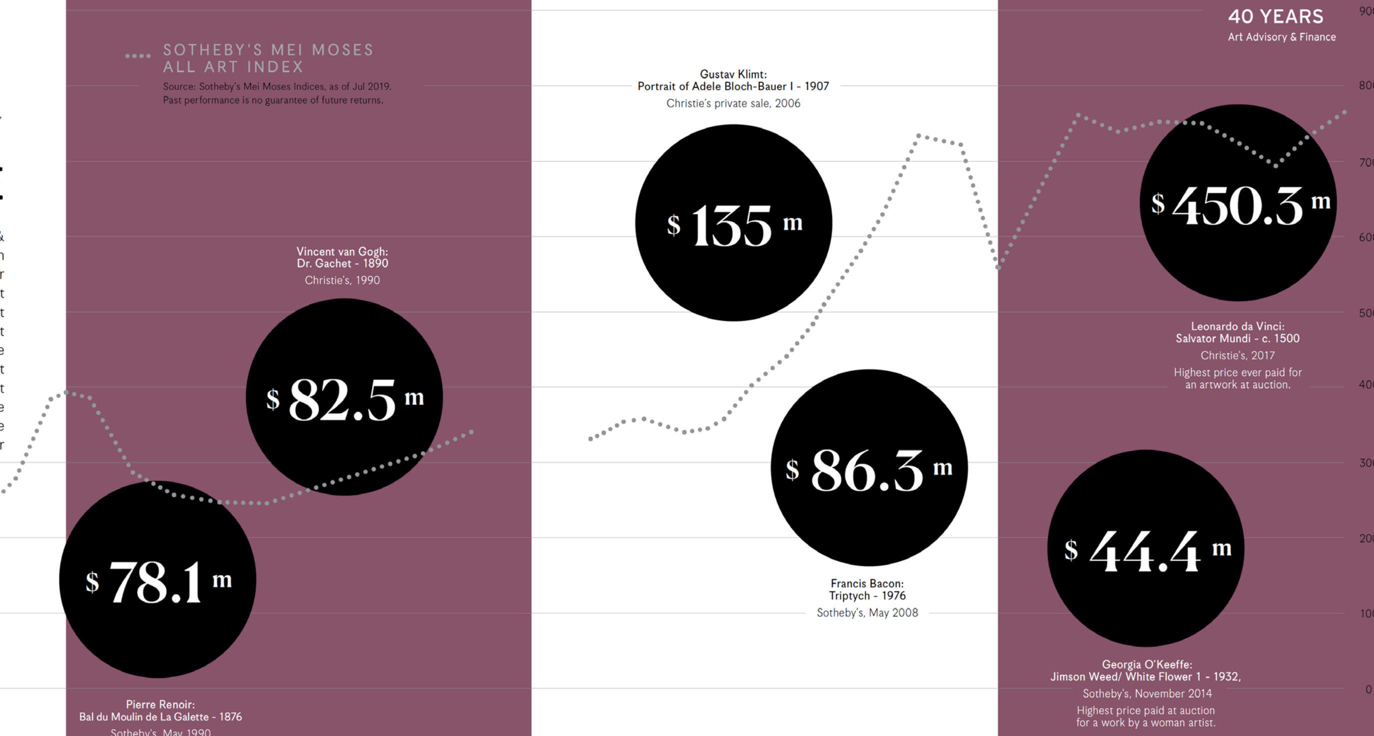
# 40 YEARS IN ART ADVISORY & FINANCE

Citi Private Bank's Art Advisory & Finance service celebrated the fortieth anniversary of its foundation in September 1979. As one of the world's first art advisories – and as the originator of art lending as we know it today – it has been at the vanguard of the major trends that have dominated the international art mar-ket. At every juncture, the Private Bank's Art Advisory was there. In this graphic, we revisit some of the landmark sales that the market has seen during the last four decades.




## 1980s

Auction houses evolve from establishments for art dealers into fashionable places for the growing number of private collectors advocating for art as an investment

The art market booms towards the end of the decade; auction sales skyrocket as art market becomes increasingly global; Japanese collectors dominate, focusing on masterpieces of Impressionist and post-Impressionist art

## 1990s

Contemporary art begins its ascendency in the market

The internet becomes publicly available and has significant impact on art creation and art marketing

Art biennials around the world became central modes of artistic production and transmission, from Johannesburg to Montreal to the South Korean city of Gwangju

## 2000s

The art fair becomes a new global model for art commerce

Private museums open around the world, offering new and influential platforms for contemporary art

## 2010s

Social media, and especially photo-sharing platforms, revolutionize the art market and become commercial game changers

Chinese buyers have a significant impact on the art market

Ascendency of the international mega-gallery: Gagosian, Hauser & Wirth, Pace and David Zwirner

Source: Citi Private Bank

## Global Trends

This globalization of the art world has led to prosperity for the auction houses and large galleries, but it is a more complicated state of affairs for smaller and mid-sized galleries. The consolidation of artists and clients by larger galleries is unparalleled; these 'one-stop shops' have taken on representation of large numbers of artists and artists' estates, and they have the marketing and business savvy to compete on a truly global level, unlike their smaller competitors. The mega-galleries now look and feel like museums, with restaurants, lending libraries, and performance spaces engaging audiences in a quasi-institutional setting. The underground and unstructured business model still thrives; yet in market terms, the disparity between large and small seems to be ever increasing. Some of the largest galleries report annual revenues in the neighborhood of a billion dollars per year.[24]

2018-19 has seen tremendous growth in the top end of the private sector of the Contemporary market, as measured by gallery expansion. It is difficult to capture accurate statistics relating to the art market, as a significant portion of transactions happen privately, with no public record of price paid or to whom a work of art has been sold. Clare McAndrew has reported for Art Basel/UBS that roughly 53% of transactions by volume occur privately.[25] For this reason, the statistics of this unregulated market are just one tool we use to interpret information and trends.

Sotheby's acquired The Mei Moses Art Indices now known as Sotheby's Mei Moses, in 2016, and also acquired Thread Genius in 2018, covering both approaches to market analyses: Mei Moses captures repeat auction sales in various categories, and Thread Genius is an AI platform which attempts to predict taste based on user's preferences for certain artworks.

Technology came into play in other areas of the market as well: Christie's partnered with Artory, an independent digital registry, to encrypt registration of works sold in its Barney A. Ebsworth Collection sale using blockchain technology. Blockchain can be used to track ownership of individual pieces of art from the point of encryption forward. Each work's history could be stored digitally, including data about changes of ownership; new information can be added from others who subsequently encountered the work. Records maintained via Blockchain could make it much faster and less expensive for art experts to confirm a particular work's provenance, authenticity, and current whereabouts. Buyers could thus have greater confidence in their acquisitions, while sellers would have confidence in marketing their works to potential buyers.

## Statistics and Auction Data

2018 was a record year in terms of sales volume; Postwar & Contemporary art remained the leader, followed by Impressionist & Modern. Christie's reported its highest grossing year ever, with $7 billion in total art sales for 2018, as compared to $6.6 billion in 2017. Private sales at Christie's totaled $653.3 million, up 7%, while 88 online-only sales totaled $86.6 million, up 20%. Online sales brought new buyers (41% of new buyers joined Christie's through online sales). The auction results were due in no small part to the success of the David and Peggy Rockefeller estate sales.

[24] Shnayerson, Michael. "Boom: Mad Money, Mega Dealers and the Rise of Contemporary Art", Public Affairs, 2019, pp.4.
[25] Dr. Clare McAndrew, Founder of Arts Economics, "The Art Market 2019, an Art Basel and UBS report."

Elsewhere, Sotheby's total consolidated sales including aggregate auction sales, private sales, and sales from inventory in 2018 increased 16% from the prior year to $6.4 billion. Private sales in 2018 were up 37% to a total of $1.02 billion, a five-year high. Sales to online buyers (including wine and real estate), totaled $220.4 million, a 24% increase over 2017. Last but not least, Phillips also reported its best year on record in 2018, with $916 million in art sales worldwide. This was due to a focus on selling more Modern art and the company's expansion in Asia. Phillips has also attracted some top talent from other auction houses in the past couple of years. Earlier this year, French telecom magnate Patrick Drahi offered $57 per share to take Sotheby's private. The house's largest shareholder, Taikang Life Insurance Company, did not outbid Drahi, and 91% of shareholders have approved the move. Sotheby's two largest competitors in the art market, Christie's and Phillips, are both privately held companies.

May 2019 was the start of the main auction season, where Christie's sold $1.07 billion in Impressionist and Modern and Postwar and Contemporary art, as compared to $959.6 million in May 2018. Sotheby's May total was 16% lower than last year at $842.3 million, and Phillips total sales declined 13.5 percent at $134.6 million. (These are gross totals, and do not account for guarantees which may significantly affect profit margins). Interestingly, there was an overall drop in guarantees, which applied to roughly 39 percent of the three auction houses' presale numbers in May 2019, relative to 56 percent in May of last year.

## Breaking Records

Several auction records were set in 2018 and 2019. Sotheby's sold its most expensive work of art in the auction house's history in 2018: Amodeo Modigliani's largest painting, a nude for $157.2 million, sold in New York in May. A year later, Robert Rauschnberg's *Buffalo II*, 1964, sold for $88.8 million, a record for the artist at auction. (The previous auction high for Rauschenberg was $18.6 million, set in 2016). However, it is believed that works had also been selling privately above auction records.

The Collection of Peggy and David Rockefeller, sold at Christie's in 2018 to benefit charities was epic – several sales offered a breadth of Impressionist and Post-Impressionist works of art, American paintings, English and European furniture, Asian works of art, European ceramics, Chinese export porcelain, silver, and American decorative arts and furniture. This reflected the family's lifetime of collecting, including works handed down from previous generations. The collection was highly personal and provided excellent provenance for the works of art sold. The total amount sold was $835.1 million.

In addition to the multiple sales from the Rockefeller estate, the Barney A. Ebsworth estate sale drew attention at Christie's in the following auction cycle. A rare Edward Hopper painting, Chop Suey, of 1929, sold for $91.9 million in November 2018. A 1954-55 gestural de Kooning, Woman as Landscape, which had previously been owned by actor Steve Martin, was also sold in the same auction, achieving a record price for the artist at $68.9 million.

The other big news of 2018 was the record price achieved at auction for a living artist, David Hockney. The pool scene with two male figures sold for $90.3 million dollars at Christie's New York in November 2018. The work was sold without a reserve or guarantee, ostensibly a risky approach for such a major painting. The standing figure in Hockney's final version is Peter Schlesinger, Hockney's muse and romantic partner. The record was short-lived: in May 2019, Jeff Koons's *Rabbit*, 1986, sold at Christie's New York for over $91 million.

Just as a painting by a male artist of his partner shook the market, so did a nude self-portrait of a fleshy and corpulent female form, created by an artist who has made her mark by painting plastic surgery and liposuction patients, trauma and deformity victims, diseased bodies, hermaphrodites, and transgender patients. Jenny Saville's work stands in contrast to traditional idealized female nudes, making her a favorite in the feminist and avant-garde art community. Her painting, *Propped*, sold for £9.5 million in October 2018 at Sotheby's London, a record for a living female artist.

New price benchmarks for African American artists were set in the same period, at Sotheby's New York in November 2018. Jack Whitten's *Ancient Mentor I* sold for $2.2 million, solidifying his presence in a strong market for artists of the African diaspora. (Whitten's own record was later surpassed in 2019 when a work by the artist sold for $2.6 million at Sotheby's New York). Works by Jacob Lawrence and Henry Taylor also reached new auction highs, demonstrating interest for black artists working in both the 20th and 21st centuries. The record for a Latin American artist was also broken, with Diego Rivera's *Los Rivales*, selling at Christie's on May 5, 2018 for $9.76 million. In Asia, Zao Wou-Ki's massive painting, *Juin—Octobre 1985* sold for $65 million at Sotheby's Hong Kong in October of 2018, a new auction record for the Chinese-French artist. The painting sold in Sotheby's Modern and Contemporary sale, totaling $200 million, a record for an evening sale in Hong Kong.

February of 2019 in London started with a flurry of activity around the Impressionist sales. Christie's London sold a rare Signac painting of a sailboat for £17 million, setting a record price for the artist at auction. Sotheby's had relatively few lots in its February 2019 Impressionist and Modern sale, 91% of which sold, for a total of £63 million. Sotheby's same total in 2018 was £136 million, and the 2017 total was £194.7 million, a record for the house. The total pre-sale estimate this year was lowest in 10 years and perhaps an indicator of concerns over whether the works would continue to achieve record prices with a backdrop of uncertainty around Brexit and shaky global financial markets.

In addition to May 2019's big-ticket Contemporary works like Koons and Rauschenberg, the Impressionist market also saw large numbers for rare and special works. A Monet "Haystack", Meules, 1890, sold for $110 million at Sotheby's in May 2019. This work last sold at auction in 1986 for $2.5 million.

Not all records were in the top-grossing categories; however, Sotheby's achieved the highest price paid for a pre-Modern era female artist in January 2019 with Elisabeth-Louise Vigée Le Brun's 1788 *Portrait of Muhammad Dervish Khan, Full-Length, Holding His Sword in a Landscape*. This painting sold for $7.2 million. Although the Old Master market is not as robust as the Contemporary of Impressionist markets, there were strong sale results for rare and special works, evidence of the market's selectiveness.

## Regulatory and Tax Issues

While the art market is greatly expanding, it still lacks transparency and oversight. Because there are relatively few major players, it is often still considered a handshake business and it is a 'buyer beware' environment. As the market climbs higher, regulators and governments are looking more closely at art as an asset, subject to taxes when the asset transfers.

President Trump's U.S. tax overhaul eliminated the use of the United States Section 1031 Exchange as it relates to art, whereby art collectors could defer the capital gains on the sale of an artwork by reinvesting the proceeds in a 'like kind' artwork within a specific period of time. A trade deal between U.S. and China reached in 2019 will create a 25% tariff on '"all artworks that originated in China, regardless of how they entered the United States". The deal includes original paintings, drawings, sculptures, and antiques over 100 years old.[26]

In major U.S. markets such as New York and California, enforcement of tax collection on art is of particular focus. Each state may have different laws pertaining to sales and uses tax, and buyers must keep careful records of how much they paid, where and by whom the work was shipped, and other key factors, in addition to engaging a qualified tax expert on the matter. Collectors, along with gallerists, are required to comply with new laws. Galleries in the European Union are now facing the challenge of complying with the Fifth Anti-Money Laundering Directive, brought about by the discoveries in the 'Panama Papers'. This includes, but is not limited to, extending certain anti-money laundering and counter-terrorism financing rules to art dealers.

Without the resources to perform proper research into who is purchasing art, galleries and small independent dealers may have to outsource this undertaking, which could prove costly and difficult for small businesses which rely on selling artwork to new clients at art fairs in cities around the world. At the time of this publication, similar legislation has been introduced by the United States Congress to apply the Bank Secrecy Act to dealers of art and antiquities.[27]

The issues surrounding the purchase and sale of art around the world can be complex; keeping up with a fast-paced complex market and changing regulations can be challenging, especially as the focus on art as a highly valuable asset continues to sharpen.

[26] Eileen Kinsella/Artnet News, " A Newly Increased Trump Tariff on Chinese Goods Will Rattle the Art Market in America, Trade Experts Say", August 29, 2019 https://news.artnet.com/art-world/china-tariffs-trump-art-market-1637782
[27] H.R.5886 — 115th Congress (2017-2018), https://www.congress.gov/bill/115th-congress/house-bill/5886/text?q=%7B%22search%22%3A%5B%22H.R.+5886%22%5D%7D&r=1&s=4

Figure 14. Untitled (Fatal Group), 2004 Signed and dated "KAWS..04" on the reverse Acrylic on canvas 68 1/8 x 68 1/8 in. (173 x 173 cm.)

Note: Estimate $700,000 - 900,000 sold for $2,716,500 including buyer's premium Phillips 20th Century & Contemporary Art evening sale, New York, November 15, 2018 Property from the Over Holland collection
Source: © KAWS. Courtesy of the artist and Skarstedt, New York.

## Expectations for the Coming Year

As the art market continues to expand and evolve across the globe, issues of ownership, intellectual property, regulation and taxation become increasingly complex. New explorations of technological advances are shaping the market and even the art itself. This year has seen strong momentum with strong economic indicators, record prices, and sales volume, despite global economic uncertainty and volatile equities markets. The continuation of growth in the global art market, in particular within the Postwar & Contemporary sector, faces headwinds of new regulations and a complex global economy in the new territory of interconnectedness and fast-paced technological developments.[28]

[28] All dollar amounts are denominated in U.S. dollars unless otherwise specified. All credit products are subject to credit approval. Citi Private Bank Art Advisory & Finance is a comprehensive fine art consulting service that provides collection administration, estate consultation, philanthropic planning and art financing.

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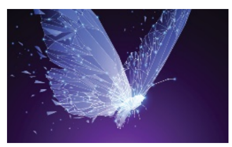

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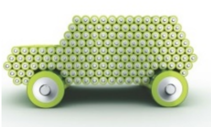

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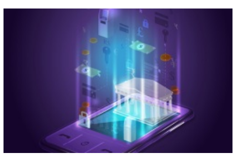

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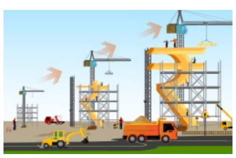

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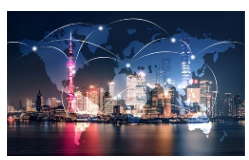

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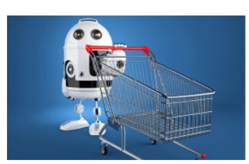

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