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Determinants of Return in the Art Market: Evaluating Art as an Alternative Investment Class

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ABSTRACT

The art market is concerned with the buying and selling of art. The price of art, unlike most other goods, is not set i.e. the price of art is dictated by a plethora of factors with individuals assigning varying values to a piece. Over the last few years, art has grown in popularity as an investment choice. This research paper aims to analyse the art market and further evaluate the unique characteristics of art, such as its low correlation, exclusivity and cultural richness, that make it different to other investment choices. The paper also extensively evaluates the determinants of returns on art investments. The aforementioned is supported by relevant theories and findings from existing literature.

Key Words: Art Market, Art Investment, Investment Value, Price Determinants

Introduction

The art market is a physical or figurative place where art is bought and sold (Howard, 2024). Artists present their work to sellers who are willing to pay a price for it. Most artwork, unlike other goods, does not have a set price, meaning the value of a piece is the price someone is willing to pay for it. Besides being aesthetically pleasing, art also proves itself as a distinct investment class. Art possesses many unique characteristics that usually are not found in investment classes such as low correlation and being exclusively and culturally rich (Mamarbachi, Day and Favato, 2008). The global art market is growing rapidly at an estimated compound annual growth rate (CAGR) of 4.2%, leading it to reach a valuation of $682.08 billion by 2027 (Business Research Company, 2024). Christie's, a British auction house that is one of the largest in the world, reached an annual sale of $8.4 billion in 2022 making it the highest annual earnings in art market history (Christie's, 2022). Art's popularity as an investment is only going to rise from here. This paper explores the determinants of returns in the art market while evaluating art as an alternative investment class.

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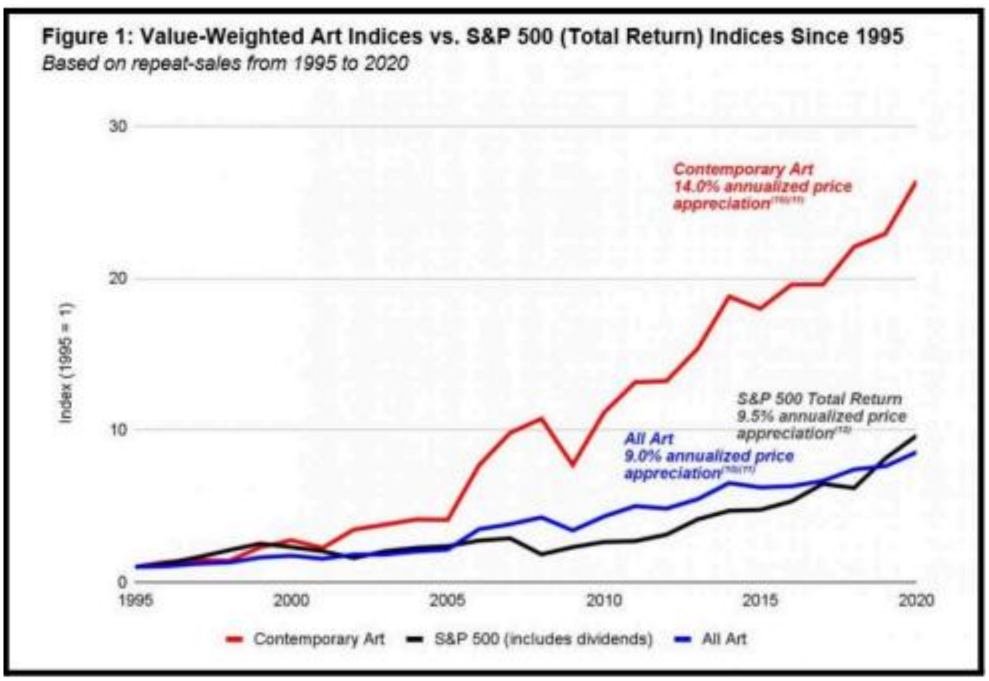
Literature Review

Investing in art goes back a long time. People choose to invest in art over the more traditional investment classes like bonds, shares, and mutual funds. This may be a smarter call as contemporary art specifically fits the description of a healthy investment class based on its total return. From 1995 the S&P 500, including dividends has shown a 9.5% annualised price appreciation. At the same time, contemporary art has shown a 14% annualised price appreciation, 4.5% more than the S&P 500. However, Impressionist and Modern art has only shown a 5.7% annualised price appreciation, substantially lesser than both the S&P 500 and contemporary art. Contemporary art also experienced the lowest loss rate of 8% from other investment classes such as the S&P 500, Global equities, US holdings and gold (Khalid, 2021). Low transaction volumes under bad market conditions can partially explain these low loss rates.



(Parsons, 2021)

In order to know if a particular piece of art is a good investment, one must evaluate the expected returns of a piece via a price index. There are three primary reasons why a price index is constructed, according to the Handbook of the Economics of Art and Culture. First, is to measure the financial performance of the art in comparison to the other investment classes. The second is to see whether adding art to a portfolio will lower the risk and increase the rate of return. And third is to take note of the general trends of the market (Ginsburgh and Throsby, 2006). There are many types of price indexes which can be used when evaluating the value of an artwork. One of

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them is the repeat sales regression. This uses prices from previous sales of the same painting, which lets the exact return be calculated (Duthy and Abdey, 2023). In this index, the quality, size and medium of art do not have to be measured (ANDERSON, 1974). It does not change over time as well. Ginsburgh, in The Economic Handbook of Arts and Culture, says that repeat sales regression should not be used in time periods shorter than 20 years as the number of observations may not be large enough to get reliable results (Ginsburgh and Throsby, 2006). A Deloitte report states that over the past 20 years, the average yearly return on 800 repeat sales in Poland has been 25.7%, compared to just 8.7% for equities returns during the same period as measured by the Warsaw Stock Exchange Index WIG20. Artworks held for more than 15 years yielded an annual return of 46.6%, whilst investments with a duration of less than 5 years only yielded a profit of 0.2%.

As a result, the length of investment is essential to the returns realized (Kompa and Witkowska, 2014).

The Hedonic Price Index can be created when doing an economic regression, in which the dependent variable is the price of the work and the independent variables are characteristic of the work such as the size of the work or technique used (Miró, 2018). The main benefit of this method is that it allows the researcher to use all information available about the transactions. However, the main disadvantage is that the selection of the variables used is more complex so that the regression does not present problems and robust results are obtained. The Hedonic Price Index has the following equation (Miró, 2018).

$$lnP_{kt} = \alpha + \sum_{m=1}^{M} \beta_m \, x \, X_{mkt} + \sum_{t=1}^{T} Y_t \, x \, D_{kt} + \varepsilon_{kt}$$

Where:

1. lnPkt: Price, expressed in natural logarithm and in nominal U.S. dollars, of painting k auctioned at year (or semester) t (including the "buyer's premium" or commission paid by the buyer). This is the dependent variable of the model.

2. Xmkt: Value of the attribute or characteristic m of artwork k auctioned at year (or semester) t.

3. Dkt: Dummy variable that takes the value of 1 if artwork k is sold in year (or semester) t and 0 otherwise

4. $\beta\beta mm$: Price of attribute m.

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5. Yt: Coefficient with respect to the year-dummy (or semester-dummy) variable.

A study by Renneboog and Spaenjers (2013) is the most study comprehensive to date about the application of the hedonic pricing model to estimate the determinants of art returns, as they studied more than one million sales of paintings at auction between 1957 and 2007. They found that art prices are higher when a painting: is sold at Sotheby's or Christie's compared to other auction houses, has a larger area, is signed, is dated, is executed in oil, depending on the topic of the painting, and also depending on the month and year of the sale. They also found that art prices increase at a decreasing rate as the area of the artwork increases.

Native price indexes are made using the averaged and median auction prices. In this method, a basket of represented artworks is created and tracked over time. In the basket, the paintings that are not sold in the subsequent period are periodically revalued by experts or swapped out for near substitutes, which are preferred to be paintings by the same artist and of the same quality and size (Bialynicka-Birula, 2021). A key rule of creating a basket is that the art must be selected by experts. A drawback of this index is that the choices of samples in the basket may not be a fit representation of the whole art market. In fact, the size of the sample depends on the investigated period, which is the time span in which the artworks are sold (Witkowska, 2014).

Determinants of Art Returns

As mentioned, Native price indexes do have some limitations. The choice of artwork may not always represent the whole art market correctly. There are, however, some crucial factors which the Native price index cannot capture, one of them being an Artist's reputation. A prime example of the influence an artist's reputation has on the value of their works is one of the world's most celebrated post-impressionist artists, Vincent Van Gogh. During his lifetime it is said that Gogh lived in poverty and only sold one painting, The Red Vineyard at Arles, and that too for roughly 400 francs (Marder, 2018). His other masterpieces like "The Starry Night" and "Sunflowers" did not sell and even if they did it would not have sold for much. Still unknown by the mainstream art world, Van Gogh's reputation was nascent. However, with Van Gogh after his death, in the late eighteen hundreds, the prices of his works skyrocketed. His pieces started resonating with a much larger audience and started gathering a lot of attention. His reputation soared to being what it is today, one of the finest artists to ever live. His prices broke records. "Orchard with Cypresses" sold for $117 million in 2022. His other works like "Portrait of Dr Paul Gachet" sold for $82.5 million in 1990 (Bailey, 2022). Van Gogh's case fluently showcases the influence an artist's reputation can have on the prices of work, reiterating its importance as a key determinant of art.

Along with the reputation of an artist, the medium and genre of an artwork can also influence its

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investment potential. It is a known fact that some mediums are more expensive than others. For instance, oil paintings are more expensive than acrylics. In the same way, bronze sculptures are more expensive than clary or terracotta ones. This is because of two reasons. One because it is more expensive to make, and two because they last longer. Genres also play a role. Celebrated and established genres, like Impressionism and Renaissance, can command more money than relatively newer genres, like street art. This is because older and more renowned genres have a rich history with a strong collector base whereas newer genres pose the risk of not gaining much attention.

However, one name has challenged this notion: Banksy. He is one of the world's most famous street artists. He rose to prominence by spray painting his now iconic stencils on walls in Bristol during the 1990s (BBC, 2024). Even by being one of the biggest names in art right now, he has kept his identity anonymous. He disrupted the entire scene with his unique and uncongenial mediums of art, which were walls and a canvas that shredded itself after being purchased. The rebellious nature of street art, which was once frowned upon, is now celebrated with Banksy's art. Banksy's most expensive work, titled "Love Is In The Bin", fetched 18.6 million GBP (Andipa, 2023). After the work was purchased at Christie's evening sale, it shredded itself halfway, which ironically only increased the value of the work. This example showcases how a popular artist can completely disrupt the traditional art market by experimenting with new mediums and genres. It also emphasizes how crucial it is to take into account collectors' changing preferences as well as the reputation of the artist when assessing the investment potential of art.

Being aesthetically pleasing is not the only purpose of art. Some worlds hold a lot of cultural and historical significance. Let us take Jacques Louis David's 1801 painting masterpiece, "Napoleon Crossing the Alps". This stunning work showcases Napoleon Bonaparte comfortably sitting on his horse on a mountain while pointing upwards. However, knowing the historical context of this painting reveals a deeper message. This painting is idealised and not an actual scene. The point of this powerful image was to record Napoleon's army crossing into Italy on a campaign which led them to a series of victories. Napoleon was aware of the impact of this image and commissioned David to paint him in such a powerful light (Zaczek, 2023). This was one of the many images that established him as a heroic and extraordinary leader of men. A religious painting would hold devotional significance but later it may gain value for its artistic merit or historical importance. This is seen a lot with Renaissance religious paintings.

The Art Market: Unique Characteristics and Investment Dynamics

Art as an investment possesses some unique characteristics that traditional investment classes lack, primarily due to their non-homogeneity and aesthetic value. Unlike bonds and fixed

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deposits, each work is unique. This non-homogeneity means that every painting is unique and you cannot find an exact copy of any painting. This also connotes that art is influenced by other external factors, if an art has a lot of historical significance, for instance, it can command a lot more value. An excellent example of this is Leonardo da Vinci's Salvador Mundi which was sold for a record $450.3 million, breaking the record for the world's most expensive painting (Christie's, 2017). This work is a perfect example of how a piece with historical significance can ask for much more than traditional asset benchmarks.

Prices of artwork can rise much above their intrinsic value due to a personal perception of the aesthetic or emotional sentiments of a piece. Collectors and investors appreciate unique perspectives and ideas brought out by the artwork which connects with them, meaning that works like these would always have a buyer base due to the personal connection it has (Clark, 2023). Mark Rothko's paintings fetch millions even though some of his work may be simple and too abstract, to some, they are something that resonates with them. Mark Rothko once said, "I'm interested only in expressing basic human emotions—tragedy, ecstasy, doom, and so on" (Kedmey, 2017). These subjective emotions are what appeal to buyers making them purchase works like this without looking at the material value.

Unlike traditional investments, whose value depends on factors like economic health and market demand, art presents a uniquely challenging characteristic which is subjectivity. This subjectivity in art is based on one's taste, feelings and opinions rather than set facts (Jones, 2019). A timeless neoclassical work, like the Coronation Of Napoleon, may be less significant and valuable in today's time in comparison with Marcel Duchamp's controversial installation "Fountain" which broke artistic norms and really challenged the question "What makes something a work of art?" (Artland, 2019). Subjectivity makes art high-risk and high-reward since its value is always changing according to trends, cultural significance, and taste. But if this is understood properly it can help in achieving a good return on investment.

There are however ways that investors can use to mitigate subjectivity. Provenance research is one of them. According to the Yale University Art Gallery (2023), it is "the study of an object's history of ownership, from the time of its creation to the present day". Provenance research provides information on the condition, function, and value of a work. It can also highlight broader historical narratives like details about former owners, histories of the art market, and collectors' tastes. The Sotheby's Mei Moses index is another tool that takes into purchase prices of the same painting at two distinct moments in time to measure the change in the value of the works of art. It is based on 60,000 repeat sales from 1810 to the present. It can compare the performance of art subcategories, and identify trends and internal dynamics of the market. It can also understand the art market's relation with economic and social factors (Sotheby's, 2016).

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Market Trends and Demand-Supply Dynamics

While the global art market reached a value of 22 $557.49 billion in 2024, it is important to take a look at the trends that led to this (Business Research Company, 2024). The ART MARKET REPORT 2024 published by Art Basel and UBS identified some of the most interesting trends for the year 2024. The year 2023 saw a 4% decline in global art sales, possibly due to inflation and rising interest, to $65 billion. High interest rates would connote that investors are allocating their funds to investments other than art. This decline could indicate reduced demand in the art market which may put downward pressure on prices, specifically for lower-end artworks (McAndrew, 2024).

China has also emerged as the world's second-largest art market, making up for 19% of all global art sales, beating The United Kingdom which accounts for 17% of all global art sales (McAndrew, 2024). This could be due to an increase in more art-encouraging activities like fairs, exhibitions and new museums. This surge in demand could potentially drive up prices for artworks that appeal to Chinese collectors and investors, especially contemporary Chinese works with cultural or historical significance. However, even with China's increase in sales, the number one spot still lies with the United States which accounts for 42% of all global art sales (McAndrew, 2024). This dominance strongly suggests that trends and economic conditions in the US significantly influence the art market. Strong demand from US collectors continues to support rising prices for high-quality artworks.

Another change was that online art sales increased by 7% to $11.8 billion, accounting for 18% of the art market's profits globally (McAndrew, 2024). However, the highest-priced art purchases did remain offline. This trend increases the reach of the art market globally and makes artworks more accessible to a larger audience. The impact on pricing here is subtle as while online sellers may cater to a broader market, collectors may prefer to see their purchases properly in person which may lead to the high prices that accompany offline settings.

A 7% fall in public auction sales, primarily due to a lack of high-end art coming into the market, was also witnessed in 2023 (McAndrew, 2024). This trend evidently showcases a shortage of high-quality artworks for sale. This scarcity can increase competition among buyers when premium artworks do come to market which might drive up prices for such works.

In summary, there is no one relationship these trends have with the demand and pricing of artworks. Economic conditions, shifts in global art market leadership, like China's rise, changes in sales channels, such as online platforms, and supply dynamics, and shortages in high-end art, all play crucial roles. Artworks that fit current market trends or appeal to newer growing markets may see increased demand and therefore higher prices, while economic unpredictability could

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reduce prices for lower-end pieces.

There are also some supply-side factors that come into play in the art market. Rarity plays a crucial role in determining the market value of artworks which usually increase in value with regard to their uniqueness or limited availability. A more limited edition or unique work will be more valuable than a common work. Taking Leonardo da Vinci's "Salvator Mundi" as an example, there are only twenty known works of Da Vinci, which are attributed to their exclusivity and therefore rarity. This work fetched a record $450 million in 2017 (DiMarco, 2023). This masterpiece being one of twenty known works of Da Vinci contributed significantly to its historic sale price.

The scarcity of artworks in circulation has a huge influence on their market value. For example, Vincent Van Gogh made more than 2100 artworks and 860 oil paintings (Burgess, 2023). Most of Van Gogh's works are at home in The Van Gogh Museum in Amsterdam which has over 200 paintings and almost 500 drawings (Van Gogh Museum, 2020). Meaning, only a limited number of works are up for sale since a lot of his works are in private collections as well. This scarcity drives his prices up when his works are on sale.

Strengthening this claim is one of Van Goghs most recent sales, “Cabanes de bois parmi les oliviers et cyprès”, which sold for $71.4 million in 2021 from the private collection of, American businessman, Edwin L. Cox (Tarmy, 2021).

These examples illustrate how rarity and availability are critical factors influencing the market values of artworks while shaping perspectives of their desirability among collectors.

Economic Indicators

Inflation has traditionally been seen as a friend to the art market as art acts as a store of value during periods of inflation. However, the equation becomes more complex when interest rates come into the picture.

According to a survey by Art Basel, a global art platform, only 12% of respondents’ decision to purchase art in 2022 and 2023 was alerted due to fluctuating interest rates (Spaenjers, 2023). This may suggest that the people who are buying art are majorly not too worried by the cost of borrowing and are likely not resolving to art loans. However, higher interest rates would have a higher opportunity cost of holding art. We conclude that art prices may drop when real rates go up.

Looking at it from a borrowing perspective the low interest rates of 2020 led to a 30% increase in art loan requests compared to 2019, according to the Fine Art Group and Bank Of America

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(Frank, 2021). Since the cost of borrowing was close to nothing, collectors were encouraged to invest in their art collections to benefit them both personally and monetarily. Access to affordable debt also made owning art more affordable. Therefore, low interest rates paired with an increase in the money supply helped in the growth of the overall art market during the pandemic.

While art seems to have a negative relationship with interest rates, it is believed to have traditionally performed well in times of rising inflation, according to the Founder and CEO of Arthena, Madelaine D'Angelo (Carbonell, 2022). Looking at historic auction data recorded by the Mei Moses Fine Art Index since 1950, art object prices have followed an upward trend over long periods of inflation. Hence, art has been considered a store of value as it provides a hedge against the reduction of real income due to inflation.

Risk and Diversification Benefits of Art Investments

Stocks, for instance, are known for their potential high returns, historically the average stock market return is about 10% per year, as measured by the S&P 500 index, but that 10% average rate is reduced by inflation so investors can expect to lose the purchasing power of 2% to 3% every year due to inflation (Royal and O'Shea, 2018). This also comes with a prominent risk due to the markets being very volatile.

Bonds, on the other hand, are considered a safer investment than stocks as even though they offer lower returns, they do not fluctuate in regard to the market. If a portfolio is built completely out of bonds, keeping in mind it has different types of bonds, historically this would generate a 5.33% average return (Reed, 2023). Bonds are predictable but a constant investment class. Real estate investments have income generation through rent and potential appreciation of property value. Returns are based on factors such as location and market conditions. According to the S&P 500 Index, the average annual return on investment for residential real estate in the United States is 10.6 percent. These do have some risks in them due to market cycles.

Art as an investment, on the other hand, depends on more subjective factors like the ones stated above. The returns on art can vary a lot and can be influenced by a variety of factors that are often impossible to predict correctly. According to a report by Art Market Research (AMR), contemporary art has delivered an average annual return of 7.5% over the past 25 years (Tboy Studios, 2024). This figure outperforms traditional investment classes like bonds but lags behind stocks' and real estate's average returns. However, these figures can be a bit faulty as they may not take into account the whole art market and market conditions.

With art, since the market is so fragmented and unpredictable, the risk is different. People cannot predict pricing patterns and movements like they can in stocks. The value of a piece changes due

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to factors like where it has been sold to the status of the artist. Liquidity is also an issue in the art market as it is tricky to buy and sell works without impacting their value.

Despite these challenges, art as an investment class has many benefits. Art unlike other classes provides an aesthetic pleasure. It also has tax benefits linked with it. Blue-chip can command very high prices and can appreciate substantially over time. Examples of blue-chip artists are Andy Warhol, Jean-Michel Basquiat, Keith Haring, Pablo Picasso, Banksy, and Claude Monet just to name a few (Hedonova, 2024).

Conclusion

Throughout this paper, key determinants of art such as market returns, including artist reputation, medium, genre, historical significance, and market trends, have been examined. Historical data shows that art is not only an aesthetic investment but acts as a store of value and can be a crucial part of portfolio diversification. Methods and frameworks like price indexes, repeat sales regressions and hedonic pricing models help in putting value on artworks while taking into account their nuanced factors. Despite its growth and resilience, investing in art does come with its own challenges.

In conclusion, while art investment has great investment opportunities for both diversification and potential returns it does require a lot of research and risk assessment. As global demand for art increases, there will soon be a surge in investors looking at art as a unique alternative investment class.

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