IS ART AN ASSET OR AN INVESTMENT?

2018



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Investing in the Finer Things of Life

Bonds, shares and Treasury bills are just pieces of paper ...

... you cannot hang them on the wall or display to admiring neighbors ...



Investing in the Finer Things of Life (cont'd)



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James Stephen George Boggs





The Investment I Never Made ...





Salvator Mundi



Christie's press view of Leonardo da Vinci's Salvator Mundi © i-Images / eyevine



Leonardo da Vinci





Timeline: From £45 to \$450 Million in 59 Years

- Around 1500 Leonardo da Vinci paints Salvator Mundi
 - Likely for King Louis XII of France and Anne of Brittany, shortly after the conquests of Milan and Genoa ...
- 1625 Salvator Mundi accompanies Queen Henrietta Maria to England
 - ... when she marries King Charles I
 - Henrietta Maria also brings along an engraved copy of *Salvator Mundi* (Wenceslaus Hollar), who wrote on it: "Leonardus da Vinci pinxit"
- 1651 Salvator Mundi used to settle part of Charles I's massive debt
 - Covering an outstanding position worth £30
 - King Charles I beheaded in 1649 (Monarchy abolished / Commonwealth / Cromwell)
 - Months after his execution, the King's collection scattered across Europe by his successor Cromwell: Offered for sale and as diplomatic gifts to foreign states
 - Many of the pieces were regained by Charles II following the restoration of the monarchy in 1660
- After remaining in the Royal family's collection for years, the painting goes missing



- Late 19th century Salvator Mundi enters collection of Virginia-based Sir Frederick Cook
- 1958 Salvator Mundi pops up at a Sotheby's London auction
 - Attributed to Boltraffio, a pupil of Leonardo's and who worked in da Vinci's studio
 - Sells for **£45** to someone named "Kuntz" and taken to America
- 2005 The canvas surfaces again at an American estate sale in Louisiana
 - New York art dealer Alexander Parish, member of an investment consortium together with Robert Simon, purchases it for \$10,000
 - Simon asked his friend Dianne Modestini to restore it
 - Her 6-year restoration and research work on the piece eventually led to the discovery that it was Leonardo da Vinci's *Salvator Mundi*
- 2013 Authenticated the work as a bona fide Leonardo, Parish sells *Salvator Mundi* to "freeport king" Yves **Bouvier** in a private Sotheby's sale for \$75–80m
- 2013 (cont'd) Later that year, Bouvier turns around and sells it for \$127.5m to Dmitry Rybolovlev
 - ... whereupon the canvas got embroiled in a lawsuit between the two men



- 2017 Rybolovlev puts the painting up for sale at Christie's. It fetches \$450.3m
 - The buyer is a little-known Saudi prince, Bader bin Abdullah bin Mohammed bin Farhan al-Saud, it later emerged that he had been acting as a proxy for Crown Prince Mohammed bin Salman
 - The underbidder is thought to be **Qatar**, which is opening a new Jean Nouvel-designed national museum in 2018, and is also in the middle of a spat with Saudi Arabia and United Arab Emirates ...
 - Following, slowly though, the leaps in bidding, the final slam dunk bid increased by \$30m ...



• *Salvator Mundi* is possibly the first painting bought for \$30m or more that has ever been resold at a profit ...

Observation: How "Real" is Salvator Mundi?

- ... the sheer amount of damage and restoration have led many people to question whether scholars are right to claim the picture as "by" Leonardo at all
- Respected American scholar David Nolta has said he thinks it is "still a wreck" and will only speak of Leonardo's "involvement with" the Salvator Mundi
- Michael Daley, director of Artwatch UK: "The frame at least might be authentic ..."





Has the Leonardo generated a good return since the master painted it?

- The painting sold for **£45** (about \$125 at the time) in **1958**
- No record how much King Louis XII and Queen Anne of France, the presumed first owners, paid for Salvator Mundi
 - Assume it was around the price **Francis I** paid for the **Mona Lisa**
 - King Francis I of France bought the Mona Lisa from Leonardo (died 1519) or his heir,
 Francesco Melzi -, around that time for 4,000 gold ducats
 - Ducats from the late 15th / early 16th century weigh approximately 3.5 grams apiece
 - A troy ounce of gold contains 31.1 grams
 - Hence, 4,000 gold ducats would weigh approximately 14,000 grams: **450.1 ounces**
 - On 8 March 2018 price for gold in New York of \$ 1320 per ounce would indicate a bit over \$595,000
 - Gold's purchasing power has remained relatively constant over the centuries ...



Has the Leonardo generated a good return since the master painted it? (cont´d)

- Assuming the original estimated price of about \$595,000 was invested in Nov 1519 without interruption over a 498-year period ...
- ... at a continuously compounding rate, ...
- ... exiting this investment at a price of \$450,312,500 in Nov 2017 ...
- ... would have resulted in an average return of slightly under 1.35% annually
 - ... your money and that of your descendants, something like your great-

Has the Leonardo generated a good return since the master painted it? (cont'd)

- Art prices have tended to go through long **boom-and-bust cycles** ...
- ... but in the long run, fine art has tended to **outperform cash**, **bonds** and **gold**
 - but underperformed equities
 - Leaving aside "psychic return" of art, measured in **units of pride or pleasure** ...
- Elroy Dimson / Christophe Spaenjers estimated that fine art produced a **2.4%** average annual return after inflation (from 1900 through 2012)
 - Cash 0.9%
 - Gold 1.1%
 - UK bonds 1.5%
 - Italian stocks 2.0%
 - French stocks 3.3%
 - UK stocks 5.2%
 - U.S. stocks 6.4%



THE WALL STREET JOURNAL.

A Guesstimation (cont'd)

Has the Leonardo generated a good return since the master painted it? (cont´d)

- Alternative benchmark approach
 - Leonardo was paid 250 florins for his altarpiece The Madonna of the Rocks in 1483
 - A large altarpiece would bring a higher price than a small portrait like *Salvator Mundi*
 - However, by 1500 Leonardo was "much more famous" ...
 - The florin was a coin struck in Florence from 1252 to 1533 with no significant change in shape or weight during that time



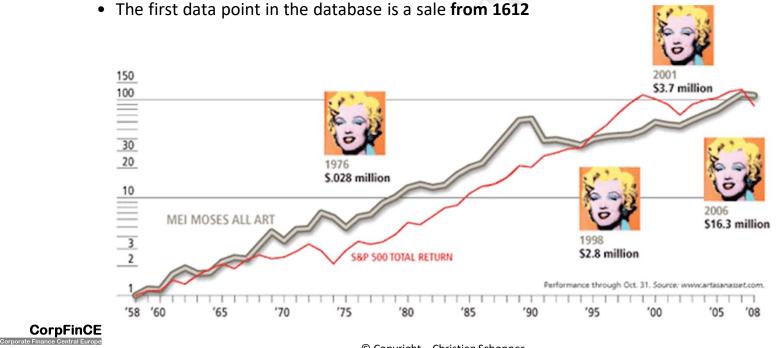
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Has the Leonardo generated a good return since the master painted it? (cont´d)

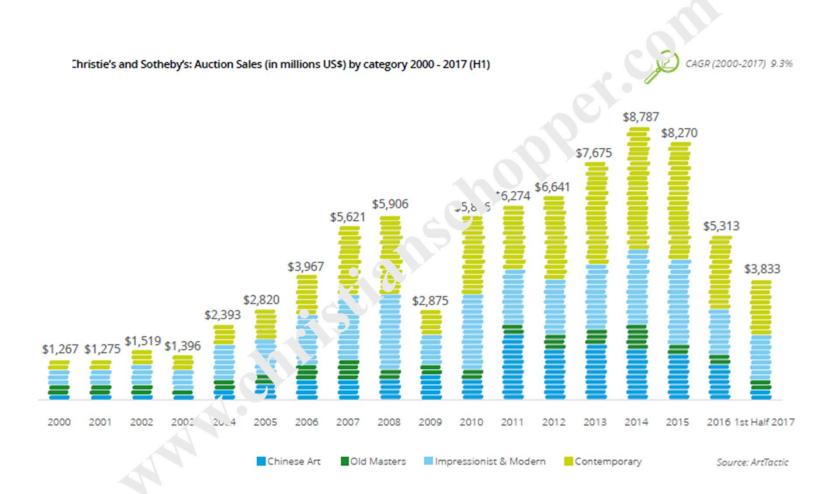
- Alternative benchmark approach (cont´d)
 - Art prices in Renaissance Florence compared to the pay of unskilled construction workers at the time
 - Those wages remained extremely stable between 1350 and 1527
 - 250 florins would have bought 12 years of labor by an unskilled construction worker in Florence around the time Leonardo painted *Salvator Mundi*
 - The mean annual wage for a construction laborer in the U.S. in October 2017, according to the Bureau of Labor Statistics, is \$37,890
 - Hence, 12 years of labor equal approximately \$454,680
 - That's today's equivalent in U.S. labor earnings to 250 florins in Italy around 1500

29 October 2016 - Sotheby's Acquires Mei Moses Art Indices

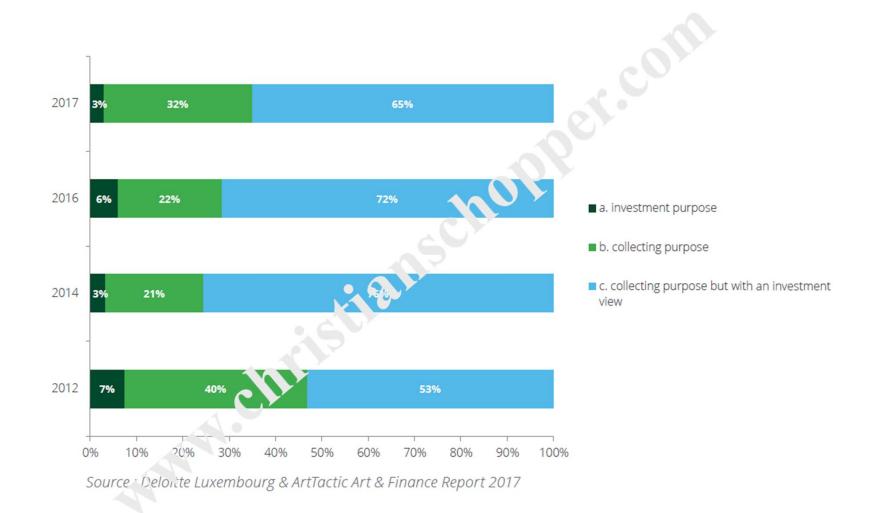
- Sotheby's continuing diversifying its services with the purchase of the Mei Moses Art Indices
 - Analytic tool based on price information for objects that have come to auction
 - Jianping Mei and Michael Moses (NYU) developed methodology in 2000
 - Comprises a database of 45,000 repeat sales of works in eight art-historical categories, about 4,000 of which are resold each year



Auction Turnover as per Art Categories



Observation: Why Do You Buy Art?



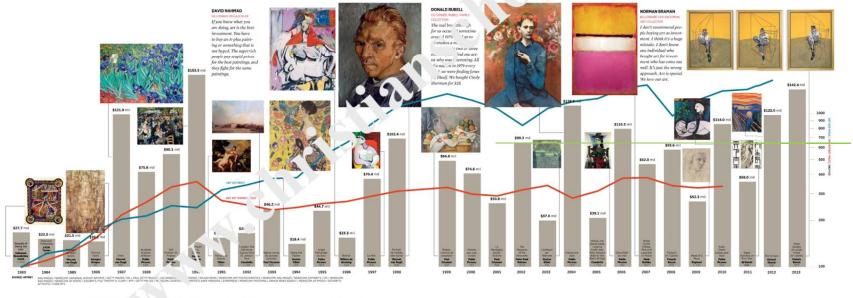
Observation: Why Would You Spend \$120M on Art?

You don't spend \$120 million to show that you're a savvy investor

- ... who's hoping to flip a Munch for \$130 million ...
- On ... Apollo Global Mana, m. + chairman Leon Blac was the bidder ...

New York billionaire and

 ... - You're spending \$120 million on something that car'τ possibly be worth that much in any marketplace ...



Index of 21,000 wo. compiled by Stanford finance professor Arthur Korteweg

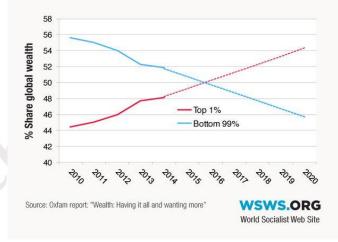


Observation: Asset Allocation of UHNIs

Very rich people have an astonishing amount of available money ...

- After 2008, the billionaire class has not only grown, but in many cases also expanded its disposable income
 - If a couple has a net worth of \$10bn
 - They might decide to put 10% of that into trophy art: \$1bn of art ...
 - In this context, \$40m for a Picasso doesn't seem much
 - And, with blue-chip art, there is always the lure of **possible profits** in the future, ...
 - ... which is not the case with private jets or yachts or other depreciating purchases ...

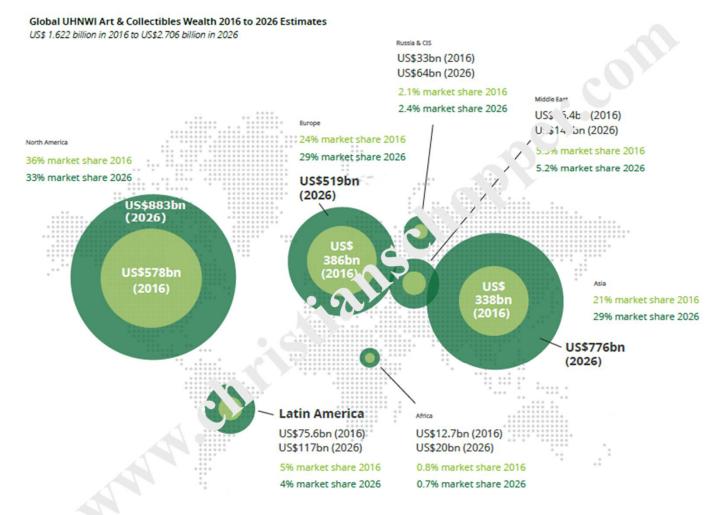
Share of global wealth of the top 1 percent and bottom 99 percent respectively; the dashed lines project the 2010-2014 trend. By 2016, the top 1 percent will have more than 50 percent of total wealth







Map of Wealth Distribution



Source: Deloitte Lu. embourg & ArtTactic Art & Finance Report 2017



Observation: So Why Would <u>You</u> Invest in the Arts?

The art market seems a proxy for the fate of the superrich ...

- Investors who believe that incomes and wealth will return to a more equitable state should ignore art and invest in assets that grow alongside the overall economy, like telecoms and steel
- For those who believe that the very, very rich will continue to grow at a pace outstripping the rest, there's no better investment than art ...

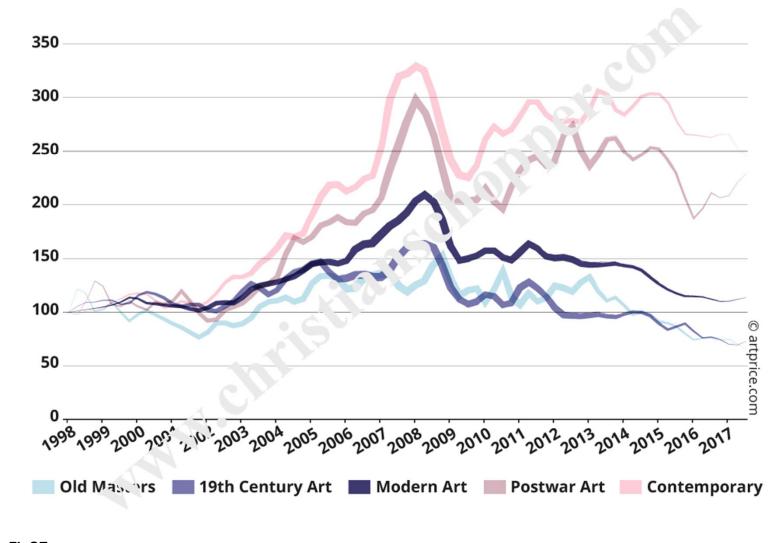


In reality, this proxy assumption seems more complex, though

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Price Index by Period of Creation





Observation: The 'Winner Takes All' Art Market



25 Artists Account for Nearly 50% of All Contemporary Auction Sales

- In 1H2017, work by a small group of elite artists sold for a combined \$1.2bn
 - 44.6% of the \$2.7bn total generated by all contemporary public auction sales worldwide
 - Increasingly wealthy buyers
 compete for a shrinking supply
 of name-brand artists

| Ranking | January–June 2017 Artist | tal Sales |
|---------|-----------------------------|-----------------|
| | | |
| 2 | Andy Warhol | \$123 million |
| 3 | Roy Lichtenstein | \$84 million |
| 4 | Gerhard Richter | \$81 million |
| 5 | Cy Twombly | \$74 million |
| 6 | Francis Bacon | \$52 million |
| 7 | Peter Doig | \$47 million |
| 8 | Cui Ruzh o | \$46 million |
| 9 | Yayol is ta | \$43 million |
| 10 | Rudo Sing i | \$41.1 million |
| 11 | va. Dubuffet | \$41 million |
| 12 | Ch. Istopher Wool | \$35 million |
| 13 | Lucio Fontana | \$31.9 million |
| 14 | Mark Grotjahn | \$31.7 million |
| 2 | Alexander Calder | \$31.1 million |
| 16 | Sigmar Polke | \$27 million |
| 17 | Robert Rauschenberg | \$24 million |
| 18 | David Hockney | \$23 million |
| 19 | Philip Guston | \$21.7 million |
| 20 | Keith Haring | \$21.76 million |
| 21 | Damien Hirst | \$19 million |
| 22 | Willem de Kooning | \$18.4 million |
| 23 | Zeng Fanzhi | \$18.1 million |
| 24 | Norman Rockwell | \$17.6 million |
| 25 | Agnes Martin | \$17.2 million |

Observation: The Insiders' Arts Markets

- You can have a transaction where the seller is listed as 'private collection' ...
- ... and the **buyer** is listed as **'private collection'**
 - In any other business, no one would be able to get away with this ...
- 1. There is in fact not a single art market ...
 - ... but a range of markets ...
 - ... and loosely connected **networks** by the (odd and awkward?) fact they all deal in unique cultural objects ...
- 2. There is no transparency, **almost no regulation** and a culture of almost **obsessional secrecy**
 - We don't usually know the names of either buyer or seller in auction transactions, ...
 - ... and in private sales not even the price ...
 - ... or whether a sale has taken place at all ...
 - **No register** of transactions, or of ownership of works
- 3. The term "insider trading" does not apply
 - In fact, all art trading depends on insider knowledge ...

Observation: The Insiders' Arts Markets (cont'd)

- In favor of secrecy ...
 - Family sellers looking a way out of debts without public embarrassment
 - Museums seeking to quietly dispose some of the arts from their collection without drawing the attention of the public
- It's believed that as much as 80% of the world's art is in storage
 - Works are now regularly bought and sold without even emerging from their wellguarded racks
 - "Freeports"
 - Established in Switzerland and elsewhere ...
 - ... not only offer specialist long-term care of works ...
 - ... but also tax havens, and lavish facilities for viewing and trading works on-site, unobserved ...



Observation: What Kind of Market is This ...?

- Chandelier Bidding
 - Imaginary bids by auction houses
- Auction Strategy for a Young, yet to be Established Artist
 - Disclaimer: The following what I am telling you is actually not illegal ...

• Guarantees for Auction Lots

- An unknown third-party guarantees a price at auction ...
 - So the work is effectively pre-sold, keeping the seller risk-free
- ... in exchange for a slice of the upside if the work should sell for more
- Not only the guarantor is unknown, ...
- ... but also the reserve price is usually secret
- The guarantor can also participate in the auction joining the upward bidding ...
- Therefore: If a \$100m guarantor of the Salvator Mundi had also been the successful bidder, she would have scored a big payback on the eventual price ...



The Arts Market – General Characteristics

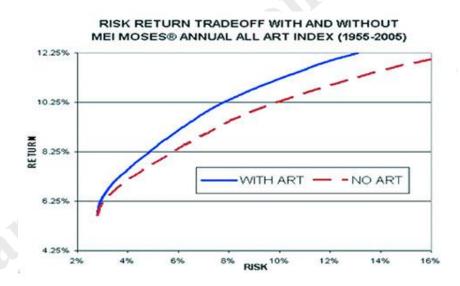
- Art is a **unique**, **heterogeneous** asset (stocks can be substituted)
- For dead artists, **elasticity** of supply is equal to zero
- Monopolies with art do exist mainly for owners of art
- No dividends or interest paid
- Market liquidity low
- Weak **equilibrium** process (compared to securities)
- Objective evaluation basically impossible (compared to an NPV approach)
- Market transparency low
- Transaction costs high

- Art markets are **unregulated**
- In general, large differences in expertise between buyer and seller
 - Substantial time required to acquire specialized knowledge
 - Limited chances for quick profits for investors who are not informed
- Psychological benefits of owning arts are not calculated in the case of owning other financial assets
- Risk of fraught and forgery



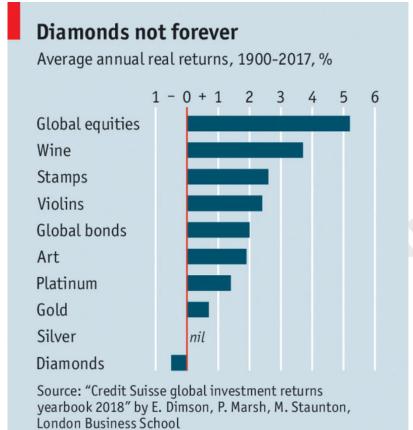
The Arts Market – Financial Benefits

- Hedge against inflation and currency devaluation
- If wisely purchased, risk of losing principle may be limited
- No minimum investment required
- Sometimes favorable **tax** treatment
- Low correlation with other asset categories
- Additional revenue potential by lending out works
- No geographical risk as can be moved relatively easily
- Can be insured





Estimated Returns from Collectibles



Economist.com

- Estimating the returns from these assets after cost is tricky
 - Indices covering art or musical instruments are much less / not comprehensive
 - Upward bias inherent in collectible returns, as successful works are more likely to survive
 - Transaction costs
 - Insurance costs
 - Tax as a potential advantage
- Gold did substantially outperform T-bills during high-inflation periods, but this hedge comes at a longterm cost
- (... and how about the MRP???) ③



Ai Weiwei: According to What?





So What to Do?





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