The Economics of Art Series

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South Africa Cultural Conference
Disempowering institutional behaviour by exploring the risks associated with investing into the 'fine art' market.

Presented by Peter Baur
Comparing S&P 500 and Art Price Index

Evidence of Structural Breaks, indicating changes in market behaviour between 1998 and 2017.
However, does ‘Fine Art’ have any real ‘Value’?

The ‘Value’ of ‘Fine Art’ is highly subjective:

- Auction Pricing (irregular, inconsistent).
- Inefficient market mainly due to inefficiency in Information.
- Inelastic supply function…. (museum factor).
- Lack of Liquidity.
- Unregulated market.
- Random effects.
- Tastes and Preferences.
- Remember: Price and Value are not synonyms for each other.
Uncertainty and the Role of Information

- The sensitivity to uncertainty would determine the steepness of the slope to such a relationship.
- The positive slope also implies a supply side relationship. In other words, it is not the demand for information, but the supply of information that determines the sensitivity relationship.
- Art institutions hold information, and it’s through the supply of this information that affects the choice to invest into art.
- The more useful the information is for the investor, the higher the value of that information, and the more likely it is to have a higher price.
- Information that an investor may require could possibly have a time limit.
- The expected value of perfect information at this point in time unimportant to the long run decision.
Deriving the ‘Value of Information’ using the CAPM approach

The associated relationship would be in the format of \((r_a - r_f)\) and \((R_m - r_f)\), with a 56% correlation.
Bringing in the role of Institutions

The asymmetrical distribution of information

Proposes a new line of investigation towards the return to investment.

Structural Change
- Modernisation
- Changing tastes and preferences
- Type and nature of available data
- Impact of evolving Technology
- Ease of finding new information
Bringing in the role of Institutions

*What contributes to Cost of holding information:* Spending on the Global Art Trade (TEFAF, 2011)

Costs Include
- Professional Fees: 7.19%
- Hospitality and Travel: 9.49%
- IT: 8.80%
- Packing and Shipping: 8.20%
- Insurance and Security: 9.56%
- Restoration and Conservation: 9.65%
- Art Fairs: 15.29%
- Advertising and Marketing: 31.82%

The public sector seeks out new information, causing the cost of holding private information to increase.
So: If the cost of holding private information goes up, the quantity of private information held goes down.
Risk: Calculating a Beta Value for S&P 500 and Art prices
Using the Capital Asset Pricing Model (CAPM)

\[ \beta_p = \frac{Cov(R_p, R_m)}{Var(R_m)} = \frac{Cov\left(\sum_{i=1}^{n} w_i R_p, R_m\right)}{Var(R_m)} \]

\[ \sum_{i=1}^{n} w_i Cov(R_i, R_m) = \sum_{i=1}^{n} w_i \beta_i^2 \]
Risk: Calculating a Beta Value for Art. Using the Capital Asset Pricing Model (CAPM) between 1998 and 2017

The adjusted $R^2$ value 0.31 implies that only 31% of the assets performance is explained by the risk exposure. The alfa ($\alpha$) value, indicating the performance of the asset indicates that the art market underperformed ($\alpha = -150.84$)
Introducing Tobin

- The average value of Beta (β), between 1998 and 2016 was negative implying that art is a ‘Store of Value’. (-0.2817)
- 52% of the time beta is greater than 1, it implies that the art market is riskier than the general market, but potentially more profitable than the S&P 500
- Only 19% of the time the art market is less risky, but with lower returns to the S&P 500
- A negative Beta occurred 48% of the time.
Structural Breaks
1998 to 2008, 2008 to 2013, and 2013 to 2017,
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Tobin Explaining post 2013:
Conclusion

- How objective is the value of ‘Fine Art’, really?
- Considering the aesthetics of Fine Art, without further consideration of the emotional, psychological and cultural factors of the respective investors, is only one small part of the entire analysis.
- There exists political and social motives for such co-ordination, but with the aim of maintaining higher value for the investments.
- These indexes are not necessarily reliable, making derivative trading near impossible to establish and making risk instruments difficult to quantify.
- The development of art price indices are often a blanket used to camouflage the institutions hold over information.
- The growth of information technology and the use of the internet to distribute increasing volumes of information, has allowed the market to experience an increase in the supply of art.
- This benefits the market and frees the artist from the claws of the institution
- This may mean lower returns for the few ‘privileged artists’.
- However, as a whole, it may mean greater future prosperity for the art world.
Thank You