Essays on Art Markets:
Insight from the international sculpture auction market

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Akademisk avhandling

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Abstract
The main purpose of this thesis is to investigate the viability of sculpture as a potential alternative investment. This goal is achieved through partly assessing the market quality of the auction market for sculptures and partly by studying their long-run diversification potential. The assessment of the sculpture market quality, together with the long-run co-movement analysis are objectives met through conducting four individual studies.

In Paper I, I find that auction house art experts' relative estimate range positively affects realized prices. The effect is robust across the mid- low- and high-end segments of the international sculpture market. Interpreting the art experts' price estimate range as a proxy for the prevailing divergence of investor opinion in the art market, the findings are consistent with the disagreement model of Miller (1977). This evidence is contradictory to the predictions of the general auction model in Milgrom (1982) and does not lend support to the interpretation of the price estimate range as a proxy only for uncertainty. Moreover, the study gives insight into the price determinants of sculpture using a unique large dataset of over 65,000 sculpture sales at international auctions.

Paper II is the first study to find evidence of a home bias in prices of art sold at international art auctions. All else equal, art prices are higher when they are auctioned in the home country of the artist compared to outside of the artist's home country. Moreover, the home bias in prices is more pronounced in the low-end sculpture market segment than in the high-end segment, indicating that familiarity can be a potential explanation of the bias. Furthermore, the home bias is found to be partly related to patriotism. The findings indicate that the home bias in prices increases as the relative level of patriotism rises in the home country of the artist, and that patriotism is a more persistent source of the home bias in art prices than familiarity.

Paper III examines the absolute and time-varying weak-form market efficiency of the international sculpture auction market. The results indicate that the sculpture market efficiency varies over time lending support to the Adaptive Markets Hypothesis. Moreover, I find that the times of peaking relative market inefficiency coincide with distress in the wider economy and financial markets. Additionally, I find evidence that auction house art experts' pre-sale estimate accuracy Granger causes developments in time-varying market efficiency, highlighting the importance of art experts.

Paper IV analyzes the dynamic relationship between the international sculpture market and the traditional financial investments during the period 1985-2013. Three international sculpture price indices are constructed to proxy for the general sculpture market price movements along with the low- and high-end segments of the international sculpture market. The results show that price development in the sculpture market does not move together with government bond prices in the long run. When it comes to equity markets, I find significant cointegrated dynamics between sculpture indices and the world equity markets. On the other hand, there is no such relationship when the S&P 500 is considered. Furthermore, cointegration is detected when analyzing the sculpture markets with the world GDP per capita. Granger-causality tests reveal that sculpture prices, in general, are Granger-caused by GDP per capita. Moreover, the Granger-causality tests indicate that sculpture price developments follow the world equity price movements, but not those of the S&P 500.

Keywords
Art markets, art finance, art economics, art auctions, sculpture market, art as alternative investment, art pricing