

A Predictive Model for Contemporary Art Investment: Integrating Geopolitical Risk Factors through Artificial Intelligence and Machine Learning Techniques

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Abstract. The global art market has become increasingly complex and volatile, particularly in regions affected by geopolitical conflicts. This research aims to develop a novel approach to art investment strategies by leveraging artificial intelligence and machine learning techniques. The study focuses on contemporary art from geopolitically sensitive regions, including Ukraine, Russia, Israel, Palestine, Azerbaijan, Armenia, and Georgia. Utilizing a comprehensive contemporary art prices database (Artsy), we employ advanced AI methods to extract relevant data and apply machine learning algorithms to analyze market trends and generate predictive models. Our primary objective is to investigate the extent to which an artist's nationality and other factors associated with conflict zones influence art price fluctuations in the global market. The research seeks to create a robust decision-making model to assist potential investors in evaluating artwork as a financial asset. By incorporating geopolitical considerations into the investment analysis, we aim to provide a more nuanced understanding of risk and potential returns in the contemporary art market. This interdisciplinary project combines computer science, management, and art history expertise to address the growing need for sophisticated investment tools in an increasingly uncertain global landscape. The findings of this study have the potential to inform individual and institutional investment strategies and contribute to the broader discourse on the intersection of art, management, and geopolitics.