In the recent years, prices of art have repeatedly broken records, and the interest in investing in fine art photography has been growing. Although there is plenty of research dedicated to studying prices of paintings, fine art photography has been largely overlooked. This thesis aims to shed light on identifying price determinants for this particular medium. A new data set is collected from sold lot archives of Sotheby's and Phillips auction houses, which also provide images of some of the sold items. These images are then used to create new variables describing visual attributes of the artworks. In order to inspect the effect of color-related predictors on price, four different methods are discussed. Color is found to be significant in OLS model, but the effect diminishes when model averaging is applied. Machine learning algorithms - regression trees and random forests - suggest that the importance of color is relatively low. The thesis also shows that expert estimates can improved by incorporating available information and using random forests for prediction. The fact that the expert estimates are not very accurate suggest that they either do not use all the available information or they do not process it efficiently.