CONCLUSION AND FUTURE DIRECTIONS

If a Picasso painting fetches a high sum at auction, will a similar painting by Dali also sell for more? In this research, we set out to examine the existence of these anchoring cross-effects by, building upon the original anchoring work of Beggs & Graddy (2009). To accomplish this, we developed a more general model to control for similarity between art pieces, effectively allowing us to consider related goods instead of past sales of an item. With computer programming techniques, we also constructed a new dataset consisting of 500,000 recent auction sales of assorted art (including 250,000 paintings) spanning the years 2006-2015. This is itself a major contribution to the art economics literature, much of which has relied on the same Impressionist and Contemporary auction data compiled in the 1990's.

We were able to replicate the general findings of Beggs & Graddy (2009) on their original dataset, despite not knowing exactly which observations they used. This included the discovery of significant anchoring effects across the resales of Impressionist and Contemporary art pieces, as well as various other results (similarly high R^2 values, insignificant time coefficients, etc.). Such replication work ensured we were applying their model correctly before modifying it for our substitution work.

Our model, which generalizes the original model of Beggs & Graddy (2009), allows one to test for anchoring cross-effects across sales of similar art pieces. For our model, we introduced two quantitative measures of similarity (substitution) between

art pieces, drawing upon insights from our interviews with experts and specialists in the art world. Quantitative measures of artistic similarity, to our knowledge, ha~~ve~~s not previously appeared in the art econometric literature. Running our model on our three datasets, we were able to find significant evidence of anchoring cross-effects. Furthermore, in our experiment with three known pairs of similar artists, we identified strong and significant anchoring between Picasso and Chagall, who are often showcased together at auctions and exhibitions.

Overall, our discovery of anchoring cross-effects was surprising given that the similarity measures we constructed were considerably different, broadly applied, and admittedly imperfect. Measuring similarity across art pieces is an enormously difficult challenge, even for art experts. In our interviews, we sometimes received very divergent opinions on the relative importance of various hedonic characteristics. Yet assessing artistic similarity is vital to properly appraising works, and according to Mark Best, something that those in the field must continually address. Hence, there are a myriad of directions for future work.

First, the exact mechanism by which past price can bias current price is still a black box. The mere observation of this sufficed for our definition of anchoring, but it would be worthwhile to dig deeper into this ~~regard~~ issue in order to understand how price signals flow~~s~~ across auction sales. To better understand how past price biases

current price, it may be useful to conduct further interviews with buyers, auctioneers, and sellers to understand how they formulate their estimates of pieces.

Second, one could further develop measures of similarity between art pieces. While in this research we have optimized for breadth and generality, one should examine the art market more closely to understand how similarity is defined for different styles, artists, and price points. It is well-known that many artists pass through multiple artistic phases during their careers, and their styles can often change dramatically. Hence, future research may wish to take a complementary approach to our general survey by focusing on several artists in depth, and studying how anchoring cross-effects between them change based on different points in their careers.

Finally, one could examine other applications of anchoring. While we have only focused on the impact of anchoring on sale (hammer) price, Beggs & Graddy (2009) also discuss how it can impact auctioneer presale estimates for a piece, as well as the probability of even selling the work. As in their paper, our regression model can easily be adapted for these variations by changing the dependent variable or by applying a probit transformation. One could also test for asymmetric anchoring cross-effects between similar pieces, i.e. whether gains in the price of a substitute affects a good's sale price differently than losses do. However, when Beggs & Graddy (2005) examined this for resales of the same work, they found no significant evidence of asymmetric effects.