Low Starting Price vs High Starting Prices: Which one generates Higher-End Prices?

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M.Sc. Economic Psychology

2023/2024

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April 7, 2024

Abstract

This inquiry explores the auction mechanics of FIFA's Ultimate Team (FUT), specifically focusing on the FC24 Transfer Market. This study focuses on the correlation between the starting prices set for auctions and the ultimate selling prices, which is a topic that has sparked considerable discussion in the digital economy. The study utilizes web scraping techniques to examine more than 6,000 transactions and determine the effects of low versus high starting prices on the outcomes. The psychological phenomena of anchoring and the sunk cost fallacy contradict traditional wisdom and give new insights into virtual marketplace pricing tactics.

Experiment 1 revealed a positive correlation between higher initial prices in auctions and higher final selling prices, indicating a significant anchoring effect where the starting price influences the ultimate outcome. The analysis reveals that the initial price categories explain almost 50% of the variation in final prices, indicating that the starting prices have a significant impact on auction outcomes. In contrast, Experiment 2 demonstrated that although lower initial prices effectively increase the number of bidders, they do not always result in higher final prices. This highlights the intricate relationship between initial pricing, bidder behavior, and auction results.

These findings challenge established ideas and improve understanding of digital market auction dynamics, exposing cognitive variables that affect auction behavior and benefit players. In FUT's FC24 Transfer Market, do low initial prices lead to greater selling prices than high initial prices?

Keywords: anchoring, bidding, starting price, high vs. low, final price

Proposed Hypotheses & Research Questions

Research Question: How do different initial price settings in a virtual auction environment impact the final sale prices and bidding activity for high-value items?

Hypothesis 1: The presence of lower initial prices in virtual auction settings results in higher final prices for high-end items.

Hypothesis 2: Decreasing the initial costs leads to an increase in the number of bids put, resulting in more traffic.

Introduction Master Thesis: Low Starting Price vs High Starting Prices: Which one generates Higher-End Prices?

The understanding of the market dynamics of virtual auctions poses a complex problem in accurately anticipating the behavior of participants. The intricate nature of this situation might generate disagreement between theoretical frameworks that are founded on different causal principles, resulting in contradictory forecasts and recommendations. For example, Ritov's research in 1996 revealed that in an auction setting, higher initial prices lead to higher final prices. However, a study conducted by Ku et al. (2006) discovered the reverse result ten years later. They observed that low initial prices actually lead to higher final prices. Therefore, in the context of economically dynamic decision-making during auctions, it is preferable to use low anchors rather than higher ones. This discrepancy gives rise to fundamental inquiries regarding the circumstances in which these effects take place. Various possible reasons can be taken into account for these contrasting results. The disparity could be attributed to shifts in market dynamics over the past ten years, potentially influenced by the increasing expertise of bidders and the impact of online auction platforms on the relationship between beginning prices and final prices. Moreover, the nature of the products being

auctioned can also have an impact; virtual goods, which are frequently the focus of online auctions, may provoke distinct bidding tactics in contrast to tangible goods.

The divergent outcomes may also be ascribed to the auction's circumstances. Physical auctions, as an illustration, may exhibit distinct dynamics as a result of the immediate social pressures and physical presence of bidders, which are not present in online environments. Moreover, the composition of participants in the experiments may have had an impact on the results; those who are skilled bidders or have extensive experience with auctions might be less vulnerable to the influence of anchoring effects compared to casual participants or those who use auction platforms infrequently.

The varied findings may be attributed to the methodological differences between the two research. Ritov's previous work in 1996 may have lacked access to advanced data analytics methods used by subsequent researchers, which could have resulted in varying interpretations of comparable activities.

Gaining a comprehensive understanding of these inconsistencies is crucial for effectively applying auction theory to the digital economy. Reconciling the discrepancies between psychological biases and market dynamics becomes particularly crucial in virtual marketplaces such as FC24's Transfer Market, where these factors are clearly visible. The objective of my study is to examine these interactions, determining if the distinctive setting of online auctions validates the hypothesis that lower starting prices stimulate higher closing prices, or if previous research findings suggest the contrary.

Theoretical Background and Societal Relevance

In the constantly growing online gaming marketplaces, auction dynamics are crucial in determining the economic sustainability and psychological involvement of players. This study examines the dynamics inside FIFA's Ultimate Team (FUT), specifically the FC24 Transfer Market, to see if commencing auctions with low initial prices has a distinct impact on final selling prices compared to auctions with high initial prices. Transitioning into the realm of cognitive psychology, it becomes apparent that my decision-making processes are not solely determined by rational calculations but are also heavily influenced by my mental heuristics.

Anchoring is a cognitive bias that involves using early knowledge as a reference point for making subsequent assessments. It is an important factor to consider while studying auction behaviors (Northcraft & Neale, 1987; Tversky & Kahneman, 1974). This bias indicates that when the beginning prices of products are high, bidders tend to place a higher value on those items, increasing the final prices. Nevertheless, the dynamics of auctions are also influenced by the volume of traffic, as indicated by Smith and Levin (1996). This increased traffic intensifies competition and the perceived worth of items, potentially leading to higher final prices. This phenomenon is especially relevant in online gaming auctions, where setting low initial pricing is believed to stimulate intense competition among bidders. Moreover, the sunk cost fallacy, which refers to the tendency for earlier investments to influence ongoing commitment, may motivate bidders to strive for victory at higher final prices (Arkes & Blumer, 1985). Notwithstanding these hypotheses, the empirical facts continue to be incongruous. Ritov (1996) found a positive correlation between higher starting prices and higher final sale prices. On the other hand, Ku et al. (2006) showed that lower

starting prices often lead to higher final sale prices because they attract more bidders and boost competition.

This research project aims to investigate the impact of low and high price anchoring and social rivalry on auction outcomes in the data-intensive FC24 market. It is situated at the crossroads of behavioral economics and psychology. Comprehending these connections is crucial since they mirror larger patterns in the gaming business, which has expanded into a multi-billion-dollar sector (Grand View Research, 2023). The research is important because it informs effective auction strategies and contributes to the knowledge base on virtual market dynamics, given the industry's economic significance and potential for growth. This is particularly relevant as esports become more mainstream and integrate with traditional sports (KPMG, 2023).

This research aims to conduct a comprehensive analysis of auction dynamics by integrating various elements such as anchoring, traffic, sunk costs, and economic trends. The objective is to provide valuable insights that are both academically significant and practically useful in optimizing the commercial and participatory aspects of virtual economies.

Previous Findings and Current Aim

The findings from my prior research were inconclusive in establishing a direct correlation between lower initial pricing and higher final prices. For a significant proportion of participants, specifically about 50%, the disparity in end prices did not exhibit statistical significance. This implies the presence of a more intricate array of elements influencing these virtual economies (Popescu & Fiedler, 2023). The limitations of my prior work primarily resulted from my approach, which prevented us from obtaining conclusive findings regarding whether a low or high anchor leads to higher-end pricing. My study was constrained by a lack

of funds and an inclination towards experimentation. As a result, I focused on only four football players, each with a total of 40 copies, which I obtained and auctioned off. In addition, the players I chose were of lower value and lacked the same level of popularity as the football players selected for this study. Finally, during my traffic measurement, I overlooked certain bids, particularly those made in the final moments of an event, due to my inability to record them. However, I have now resolved this issue by using the PS5 integrated screen recording system, which allows us to monitor nearly all bids placed. In light of the limitations in my prior research methodology, I have concluded that it is necessary to reevaluate the dynamic auction mechanism of the FIFA game series (formerly known as FC) using a more sophisticated and precise technique. My upcoming work employs a more rigorous analytical approach by examining a bigger dataset consisting of about 20 participants, with each player having around 300 auction listings. The objective of this scale is to offer a more dependable evaluation of the efficacy of pricing methods. In addition, I will utilize a more straightforward and precise approach to data gathering by documenting the auction screen to capture all bids made in real-time. This improvement is anticipated to provide a more profound comprehension of bidder behavior. My research seeks to elucidate the influence of low initial costs on ultimate values in virtual auction markets, utilizing these improvements. I aim to actively participate in the discussion surrounding prices in the digital economy.

Preview of the Present Research

The current study aims to conduct a detailed analysis of auction pricing tactics and their impact on final selling prices, building upon my prior investigations in the FIFA 20 virtual marketplace. My main proposition suggests that commencing auctions with low initial

prices does lead to higher ultimate selling prices inside FC24's Transfer Market, which falls in line with the most recent findings in the existing literature.

To examine this hypothesis, I have significantly enlarged my dataset by including transaction records for 20 highly coveted players on FUTWIZ (FUTWIZ, 2024), a wellknown online FIFA community. In contrast to my prior method which examined 40 ingame football player copies for each of the four players, the present strategy involves over 300 auctions per participant, resulting in a total of 6057 bids. This dataset will offer a thorough overview of bidding behavior and its resulting outcomes.

To strengthen my methodology, I have included real-time screen recording of auctions, made possible by the PS5, the gaming console of my choice to conduct this experiment, screen recording system. This enables us to witness and measure traffic, which is a crucial factor that has often been inferred implicitly in previous studies. This empirical approach allows for the measurement of traffic by directly counting the number of bids put, providing a detailed understanding of the auction dynamics.

The expected results seek to provide a fresh viewpoint to the scholarly discussion on virtual market behaviors, specifically resolving the lack of a conclusive answer from my previous paper. This project aims to use careful recording and analysis of bid data to understand the complex mechanisms in virtual economies. The aim is to offer empiricallyderived discoveries that could have substantial implications for both players and digital market analysts, such as comprehending the process of price anchoring and traffic, and how these factors impact the ultimate pricing of auctions.

Experiment 1

Method

Design

The dataset was generated by utilizing a Python web scraping code to extract information from the FUTWIZ website (FUTWIZ, 2024). FUTWIZ(2024) is an internetbased repository that documents the latest 250-player transactions. Prior transactions are not accessible. To get the required data, the website was systematically scraped every hour for new players' entries for a duration of one week. I specifically focused on selecting 20 players who ranked among the top search results on the site. The players included in this group vary widely in terms of their market value, which provides a diverse sample for analysis. The manual data scraping process was stopped once 300 or more offers were documented for each player, but this criterion was not fulfilled for certain players with greater values. The gathered data included the number of bids made by each player, excluding transactions made through the "buy now" option without any auction. The data recorded both the minimum and maximum number of bids for each player. The bid data collected consisted of the timestamp, initial price, closing price, and mean price.

A total of 6057 bids were documented. Outliers were identified when the final price exceeded the selling price by a factor of 3.5.

For my study on auction behaviors in the FC24 Transfer Market, I deliberately divided starting prices into two categories: "low" and "high". This allowed us to conduct a detailed analysis on how the initial pricing impacts the outcomes of the auctions. This systematic categorization reflects the approaches used in both theoretical and empirical studies on auctions, highlighting the influence of starting prices on bidding patterns and the

ultimate outcomes of the sales. The use of this approach is not just a convenient method, but it is supported by observable patterns in auction environments. In these situations, sellers frequently establish reserve prices to establish the minimum permissible bids.

Through a methodical process of dividing the initial prices, I replicate the strategic factors that exist in real-life auction situations, where sellers frequently establish reserve prices to establish a minimum bidding threshold. The categorization into "low" and "high" groups allows for a focused examination of strategic behaviors as observed in auction research, such as the experiments conducted by Elmaghraby et al. (2017), which manipulated starting prices in real-world trials involving IT equipment, revealing strategies for maximizing auction outcomes. Zhu and Teo (2002) emphasized the importance of median beginning prices in finding a middle ground between the likelihood of a transaction and the anticipated financial gains. This helps inform pricing choices in various auction settings.
My technique, supported by these concepts, aims to determine whether comparable strategic patterns may be observed in the virtual economy of the FC24 marketplace. By utilizing artificial categorization, I develop a framework that effectively captures the strategic relationships taking place. This division is crucial for analyzing auction theories that forecast varied results depending on initial price levels, establishing an empirical connection between theoretical predictions and real auction behaviors.

This technique receives support from influential works in the field. Ritov's (1996) study illustrates the significant knowledge that can be obtained by dividing initial prices in auctions into segments. Following these previous examples, my work employs this classification approach to provide a thorough examination of how starting prices impact ultimate auction prices, thus enhancing my comprehension of auction price dynamics that are consistent with accepted economic and psychological theories. By incorporating artificial

cutoffs into my analysis, I are able to divide auction data into distinct and measurable categories. This stratification allows for a thorough examination of how the original price conditions affect the ultimate selling prices. The utilization of pre-established thresholds, as evidenced in the publications of Deck and Wilson (2003), Hickman et al. (2017), Platania et al. (2016), and Dass and Reddy (2008), supports the methodological framework of my research. These cutoffs allow us to include potential nonlinear effects and threshold phenomena that may be hidden in detailed data, thus justifying my analytical decisions. My methodology, based on scholarly precedent, is crucial for gaining a detailed knowledge of the auction dynamics in the FC24 Transfer Market.

How the Transfer Market in FC24 Works

Following my prior research (Popescu & Fiedler, 2023), the FC24 Transfer Market operates similarly to a responsive and ever-changing market, wherein player cards, symbolizing real-life footballers, are exchanged through purchases and sales. The value of these cards fluctuates depending on real-world performances, rarity, and in-game events. As an illustration, a player who performs exceptionally well in an actual match may be awarded a "team of the week" card, which possesses improved qualities and, as a result, commands a higher market price. With the release of newer iterations of player cards, the value of older ones may diminish.

Every player card, including renowned individuals such as Ronaldo or Messi, might possess numerous varieties with varying costs that mirror their rarity and enhancements in performance. The market exhibits a high level of responsiveness, as prices undergo fluctuations that are contingent upon player demand and in-game developments. Auctions function based on a competitive bidding mechanism, involving initial bids and the availability

of "buy now" choices. Players compete to acquire cards that enhance their teams, so influencing their performance in the game's competitive matches. Figure 1 depicts a print screen of how such an auction looks like.

This research investigates the impact of initial prices on the ultimate auction prices in the FC24 market. The study takes into account several elements that make the FC24 market an ideal platform for investigating economic and psychological theories in a controlled virtual environment.

Figure 1

Listing on the Transfer Market of a Gold Copy of the Player "Becker"

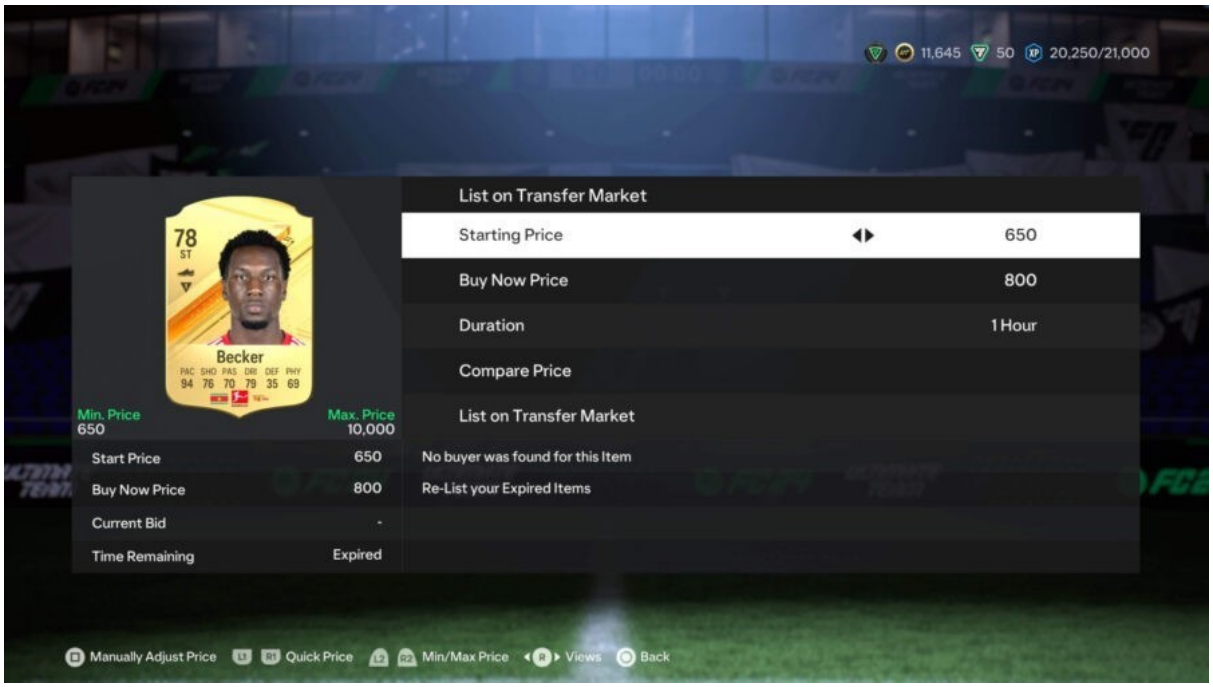


Table 1

Total Number of Bids in the Starting Low and Starting High Conditions

	Total Starting Low	Total Starting High

Aitana	170	156
Alexia	120	183
Cristiano	92	191
Mllitao	142	191
Griezmann	162	204
Ronaldo	92	191
Haaland	113	246
Mendy	152	176
Son	49	98
Cruyff	21	97
Bellingham	158	194
Kounde	168	189
Walker	152	177
Messi	106	224
Rashford	101	208
Neymar Jr.	120	191
Dembele	82	197
Leao	149	175
Lewandowski	89	211
Hernandez	145	183

Van Dijk	76	199

Results

I initiated my regression study by organizing the data into two large CSV files. The initial file merged the aggregated bidding data, providing a concise overview of the auction activity for each participant. The second file comprised comprehensive records of individual bids, arranged initially by player name and subsequently by price category. The implementation of this dual-file system enabled meticulous management of data and provided a thorough analysis of auction dynamics.

My main objective in doing the regression study was to determine the impact of different starting price conditions, specifically defined as low and high, on the final prices obtained in the auctions. The dependent variable I focused on in my analysis was the ultimate selling price of the auction items. The independent variable I manipulated and were interested in was the starting price, which I divided into the two criteria described earlier.

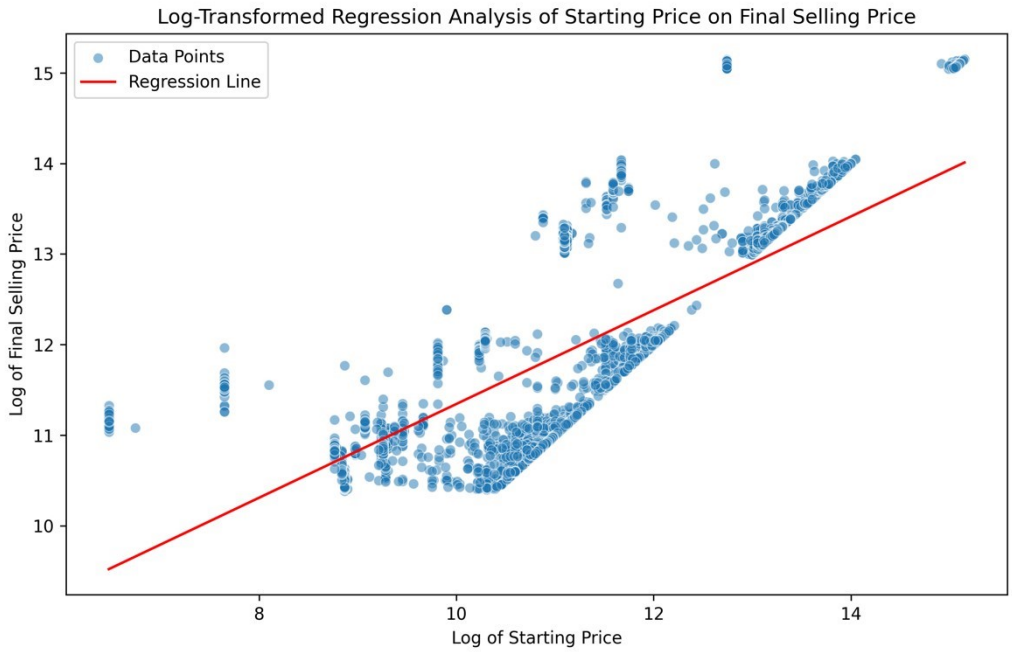
To rectify the mismatch in bid numbers and potential bias, a log transformation was utilized on the final pricing. This method is highly respected for its ability to stabilize variance and normalize distributions. By utilizing this adjustment, I successfully reduced the impact of outlier values, resulting in a more precise representation of the proportionate variations in outcomes that are associated with the initial price conditions.

The regression model I used produced an R-squared value of 0.5693. This number indicates that around 57% of the variation seen in the final auction prices may be directly related to the category of the beginning price. The significance of this conclusion is supported by a strong F-statistic of 8002.2703 and a p-value of less than 0.001, indicating a very

significant effect of the higher beginning price condition on the final auction values. Figure 2 demonstrates the effectiveness of the model in accurately forecasting auction outcomes using starting price inputs.

Figure 2

Log-Transformed Regression Analysis of Starting (IV) and Final Price (DV)



Note. Each auction is depicted as a distinct data point, with the blue dots illustrating the range of final selling prices observed for various beginning price levels. The red line that passes through the data cloud is the regression line, which represents the best-fit line that shows the average trend of final selling prices compared to their starting prices. This line confirms a

positive association between the two variables. The dispersion of data points around the regression line reveals the level of variability in ending pricing that cannot be explained by the starting price alone, indicating the influence of other contributing factors. It is important to acknowledge that my regression analysis was quite precise, resulting in a very small confidence range. This interval is so near to the regression line that it is visually impossible to discern between them. Therefore, I deliberately chose to remove the confidence interval from the scatterplot to prevent any possible confusion and maintain a clear interpretation of the visual. Although this aspect was overlooked, the regression line shown is based on a robust statistical framework, as indicated by the aforementioned F-statistic and p-value, ensuring the credibility of the observed trend.

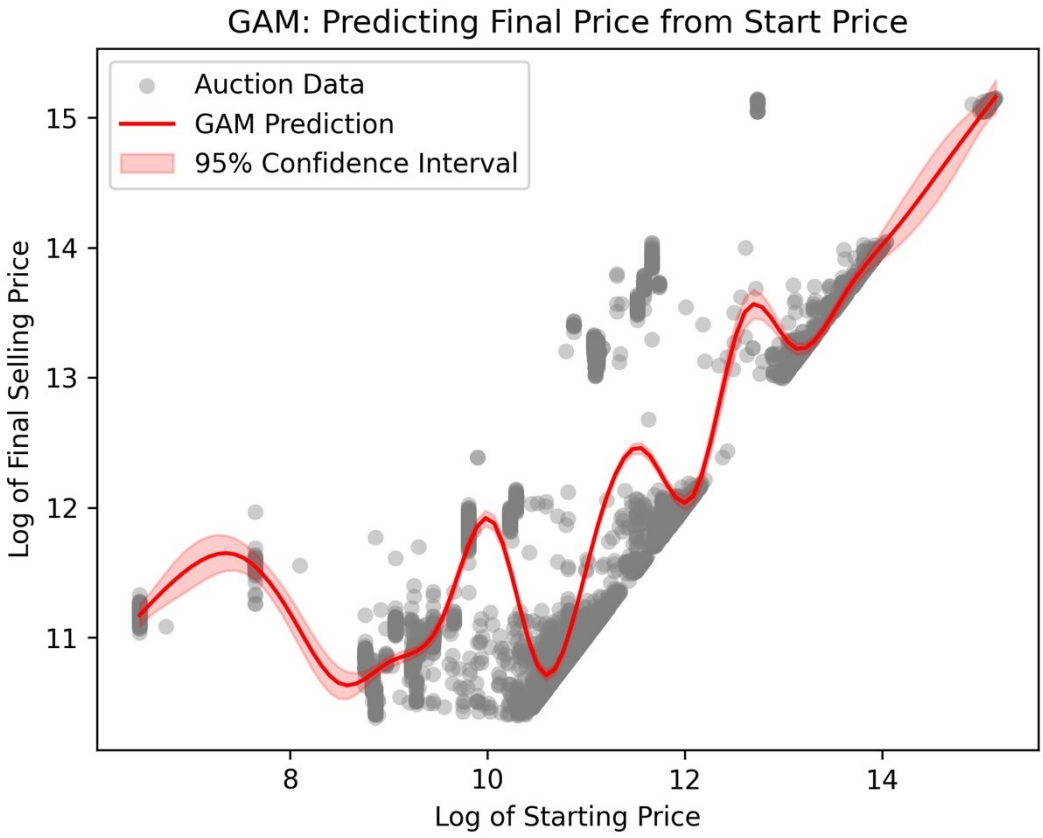
Within the complex FC24 marketplace, characterized by diverse auction dynamics for virtual products, linear regression provides a general overview but lacks the ability to capture the subtle details that can be revealed by a Generalized Additive Model (GAM). I used a Generalized Additive Model (GAM) to explore the possible non-linear patterns in bidding behaviors. This allowed us to examine how initial prices affect final auction prices from different perspectives. Contrary to linear regression, which enforces a constant relationship across all data points, a Generalized Additive Model (GAM) adjusts to the underlying complexities of the data, providing a more accurate depiction of the economic relationships involved.

The use of the GAM's approach is highly beneficial in the FC24 market, which is known for its wide range of virtual player valuations. A linear model implies a consistent impact for each incremental increase in the initial price, regardless of the valuation tier of the auction, whether it is increasing from $1 to $100 or from $100 to $1000. The GAM analysis,

illustrated in Figure 3, reveals the intricate nature of the situation: the effects of these increments are not evenly distributed throughout the spectrum. The model's ability to capture this non-linearity, measured by its Effective Degrees of Freedom (EDoF) of 14.1862, achieves an intentional equilibrium between overfitting and underfitting. This allows us to detect more subtle patterns and points of change in the data that may otherwise be overlooked.

Figure 3

Log-Transformed GAM Analysis of Starting Price (IV) and Final Prices(DV)



Note. The scatter plot portrays the relationship between starting and final selling prices within the FC24 Transfer Market, with the values expressed in coins. The x-axis represents the logtransformed starting prices, while the y-axis reflects the log-transformed final selling

prices. The red line and shaded area illustrate the GAM's fitted values and the associated confidence interval, respectively. This non-linear depiction challenges the assumption of consistent effects across the spectrum of starting prices, providing evidence that the influence of initial price increments on final selling prices is more intricate than previously understood. While the linear regression model suggested a clear predictive power with an R-squared value of 0.5693, the GAM presents a more refined analysis, capturing the subtleties of the auction environment that a linear approach may overlook. As such, the GAM offers a valuable tool for discerning the true complexity of auction price dynamics, underscoring the significance of employing flexible models that can adjust to the intricacies of the data. The Pseudo RSquared value of 0.7966 indicates the level of effectiveness of the GAM. It demonstrates that almost 80% of the variation in the final auction prices can be explained by the model. The improvement in explanatory power compared to typical linear regression models is significant, highlighting the importance of choosing proper modeling techniques in economic research.

I interpret the spline's initial price p-value as a statistically significant correlation cautiously since the projected smoothing parameters may underestimate the p-values. My model's strong Pseudo R-Squared and persuasive F-statistic prove its strength and reliability, boosting my confidence in the outcomes. These statistics show how well the model fits, but they should be considered alongside the model's graphical representation and diagnostic tests to fully comprehend it.The Generalized Additive Model (GAM) research has provided a deeper knowledge of auction price dynamics. This approach provides advantages beyond linear regression. It can depict complex relationships and assess the influence of beginning

prices across the auction's value range. These findings can help players and economists enhance their auction market bidding and theoretical models.

I found that auction beginning prices have a non-linear influence. Models like Generalized Additive Models (GAMs) that can capture these complex relationships provide a more accurate and insightful perspective of how initial valuations affect auction outcomes. Future investigations conducted in comparable economic contexts might be enhanced by integrating non-linear modeling tools, which have the potential to reveal more profound insights into the economic phenomena being studied.

Interestingly, my data revealed that two players, Robert Lewandowski and Virgil van Dijk, had a higher average final price in auctions that started with low initial prices compared to those that started with high initial prices. Subsequent statistical analysis demonstrated that these disparities lacked statistical significance ($p = 0.36$), suggesting that they could be aberrations or driven by unexplained variables.

There were only 3 data entries that deviated significantly from the others out of a total of 6057 records. All three of the bids were documented for the player "Jules Kunde", with two of them falling into the lower starting category. Since outliers did not influence my hypothesis and the overall pattern for this athlete aligned with the findings of my refined regression analysis, I determined that they did not have a substantial effect on my analysis.

Discussion

An in-depth analysis of the auction dynamics in FIFA Ultimate Team's Transfer Market, with a specific focus on FC24, has resulted in a comprehensive study that validates and enhances current theoretical viewpoints. This work, based on a thorough dataset and precise analytical methodologies, highlights the complex connection between starting auction

prices and end results, offering a fresh perspective to examine auction strategy in virtual economies.

The results of my study, which utilized both regression and Generalized Additive Model (GAM) analysis, provide a detailed understanding of the auction behaviors in FC24. The regression study, with an R-squared value of 0.5693, indicates that the starting price categories explain around 57% of the variability in the final auction prices. The presented data, supported by a strong F-statistic and a very low p-value, emphasizes the important influence of beginning pricing on auction results. The regression line demonstrates a positive link between higher starting prices and ultimate selling prices, providing empirical data that highlights the significance of strategic early pricing.

Moreover, the implementation of Generalized Additive Models (GAM) extends beyond this point, uncovering the fact that the impact of initial price increases on ultimate selling prices varies across different value ranges. The model's power to adjust to the nonlinear attributes of the dataset provides a more profound understanding of the auction dynamics, beyond the explanatory capability of linear regression models. The GAM analysis exhibits a notable capacity to comprehend the complexities of pricing behaviors in the market, as evidenced by its Pseudo R-Squared value of 0.7966. This number indicates that the analysis can account for around 80% of the variability observed in final prices. Although the p-values obtained by the GAM should be treated with caution since they may underestimate the true values, the model's power is still apparent in its high pseudo R-squared and large Fstatistic. By combining these measurements with a visual depiction that incorporates nonlinear trends and the diagnostic robustness of the model, I offer a strong case for the dependability of my findings.

The surprising finding that higher starting prices increase final auction prices in FC24's Transfer Market contradicts our first hypothesis that lower starting prices increase final prices, suggesting that psychological and market factors in virtual economies may differ from traditional auction environments. The regression study, in line with Ritov's (1996) previous research, revealed a significant association between higher initial prices and ultimate selling prices, as evidenced by the R-squared value of 0.5693. This suggests the presence of a strong anchoring effect, where higher starting prices create a psychological expectation that impacts bidders' perception of value, leading to an increase in final prices.

In addition, the detailed comprehension provided by the GAM analysis, with its Pseudo R-Squared value of 0.7966, indicates that this impact is not evenly spread throughout various pricing tiers. In the FC24 market, which is driven by digital technology, the first price may serve as an indication of the worth or quality of a product to potential buyers, thereby influencing their willingness to pay. Setting high initial pricing can effectively deter casual bidders, resulting in a more intense competition among dedicated and potentially affluent players who are willing to offer greater bids. This could provide an explanation for the elevated end prices that have been noticed.

These dynamics may be further exacerbated by distinctive features of the virtual world. For example, the FC24 marketplace, which lacks physical limitations, may provide a speedier and more emotionally intense bidding environment. In a virtual situation, the anchoring bias could be intensified, as bidders may feel less restrained and more susceptible to the early price cues compared to a physical auction house. In addition, the anonymity of online bidders can result in more assertive bidding tactics, since individuals experience reduced social pressure and are more likely to engage in risky behavior.

The inclusion of virtual 'collectibles' in FC24 could also have an impact, as these things frequently possess sentimental or aesthetic worth that extends beyond their practical use, a characteristic that may not be as prominent in conventional auctions. These variables may cause bidders to assign a greater worth to objects, hence increasing their inclination to bid more when the beginning prices are high, in their pursuit of what they see as valuable or rare virtual assets.

In addition, my analysis considered outliers, such as the significant bids for "Jouls Kunde," to ensure that these unusual data points did not have a disproportionate impact on the overall conclusions. The continuous trend observed in the larger dataset confirms the reliability of my study, emphasizing the meticulousness of my methodology.

Contrary to past studies, my thorough investigation demonstrates that lower starting prices do not always result in higher final prices in FC24's virtual environment. This discovery contradicts established claims in the literature. These observations have important consequences for those participating in auctions, providing a strategy structure to maximize auction results depending on beginning pricing.

Through my comprehensive analytical approach, I highlight the significance of advanced modeling tools like Generalized Additive Models (GAMs) in gaining a precise and thorough comprehension of the dynamics of auction prices. The results not only assist in developing a strategic perspective for participants in FC24's marketplace, but also serve as a valuable tool for economists and theorists looking to improve their models of auction behaviors. These findings provides a stimulus for additional research in virtual market economies, promoting the incorporation of sophisticated non-linear models to uncover the intricacies of economic interactions.

Experiment 2

Method

Design

The second experiment's approach was painstakingly crafted to determine how different starting prices affected auction traffic in FC24's Transfer Market. There has been much discussion in the economic and psychology literature about whether or not lower beginning prices in online auctions boost bidding activity. The purpose of this experiment was to give empirical evidence supporting this theory. My primary method of data collecting was based on a new approach to real-time auction dynamics capture and analysis made possible by the PlayStation 5 (PS5) gaming console and its integrated screen recording technology.

Chosen Platform and Method of Recording

I needed a data gathering system that could accurately capture the subtleties of bidding behavior without interfering with the natural environment of the online FC24 Transfer Market. The PS5, with its powerful processing and integrated recording features, was the perfect device for the job. With its built-in screen recording feature, I was able to keep a close eye on auctions and record every move made by bidders, guaranteeing that I had a complete dataset from which to draw conclusions. This approach not only made sure my data was accurate, but it also let us watch the auctions go by like a regular customer on FC24.

Criteria for Player Evaluation

Factors such as market value, popularity, and affordability were critical in deciding which 10 players to include in my analysis. I wanted my results to be applicable to a wide range of FC24 users, therefore I picked famous players who were also active traders. The vast sampling of players included here reflects the varying interests of FC24 users. It includes both

young talents like Kira Walsh and Ragnar Ache and established stars like Harry Kane and Bruno Fernandes. This variety was vital for analyzing the impact of beginning prices on auctions in various market categories and with different types of players.

Data Recording and Auction Monitoring

There were 40 total copies made for each player; 20 were marked with a "starting low" price and the other 20 were marked with a "starting high" price. My auction dynamics technique uses artificial cutoffs for identifying price variables, which is debatable but justified by analogous empirical studies. Deck and Wilson (2003) explored the effects of automated pricing rules in electronic markets, drawing a parallel to artificial cutoffs in market pricing methods. Similar to the classification thresholds in this suggestion, this study stresses pricing decisions' importance. Hickman et al. (2017) further stressed the need for predetermined price thresholds for a clear and consistent examination of electronic auction pricing regulations and the complex repercussions of misidentifying them. Platania et al. (2016) stressed the necessity of bid cutoffs in pre-opening market auctions to define participant information patterns. This strategy matches the current study's arbitrary cutoff to distinguish low and high starting costs. Finally, Dass & Reddy (2008) used bid history data to study price swings, like my classification method that uses artificial price thresholds. The analogies from their price formation study show that artificial cutoffs support the study's methodology. It is important to include these cutoffs in the current analysis since they help to divide auction data into distinct and measurable categories. The implementation of stratification allows for a more comprehensive analysis of the influence of initial price conditions on ultimate selling prices. The study seeks to capture the potential nonlinear effects and threshold events that may be obscured by more detailed data by constructing these delineations. The selection of this

methodology is not only justified by existing scholarly works but also crucial for attaining the specific goals of this study, which seek to identify and comprehend the unique psychological mechanisms that occur at various price levels in the FC24 Transfer Market auctions.

I was able to compare the effect of the starting price on auction traffic, which is the total number of bids received, thanks to this bifurcation. Throughout each auction, the screen recording feature of the PS5 was kept on, thus all bids were recorded from the beginning to the end. Unobtrusive data collection was made possible by this real-time recording, which preserved the authenticity of bidder behavior and interactions.

After the auction ended, I went over all the data to find out how much each person had bid beneath both price points. The accuracy of my bid counts depended on this process, which was both labor-intensive and precision-demanding. I was able to conduct the in-depth research needed for this study because my data collection approach was extensive and took advantage of the PS5's capabilities.

Taken together, Experiment 2's methodology utilized the PS5's technological breakthroughs to delve into the complex dynamics of online auction behavior in FC24's Transfer Market. An innovative approach to data collection through screen recording and meticulous player selection lay the groundwork for a thorough investigation of the impact of starting prices on auction traffic. The results may provide theoretical and practical insights for digital marketplace strategy.

Results

The results of the regression analysis performed on the FC24 Transfer Market auctions data revealed a statistically significant relationship between the initial price conditions and the overall quantity of bids. Table 2 illustrates the comparison of total bids

received for each player in the FC24 Transfer Market, highlighting that auction with lower starting prices generally received more bids than those with higher starting prices. The auctions characterized by a "Low" initial price condition exhibited a notable increase in bids compared to those with a "High" initial price, as seen by an F-statistic of 708.66. This statistically significant difference ($p < 0.001$) further supports the findings. This crucial finding provides empirical evidence in favor of the hypothesis positing that reduced initial prices can have a substantial impact on the level of bidding involved in online auctions (Table 3).

Upon doing individual investigations using analysis of variance (ANOVAs) for each of the ten participants in the research, it was observed that there were statistically significant disparities in the overall quantity of bids between the "Low" and "High" initial pricing conditions for each player. The study revealed a statistically significant effect for Kira Walsh, with an F-value of 73.33 and a p-value of 0.001. The results of the study indicate that Ragnar Ache, Hansen, Harry Kane, Alisson, Endler, Irene Parades, Bruno Fernandes, Kobel, and Donnaruma exhibited statistically significant differences, as evidenced by their individual Fstatistics of 65.28, 79.50, 44.59, 87.54, 65.30, 106.03, 53.70, 109.74, and 68.84. Furthermore, all of these F-statistics were found to be less than 0.001 (Table 3).

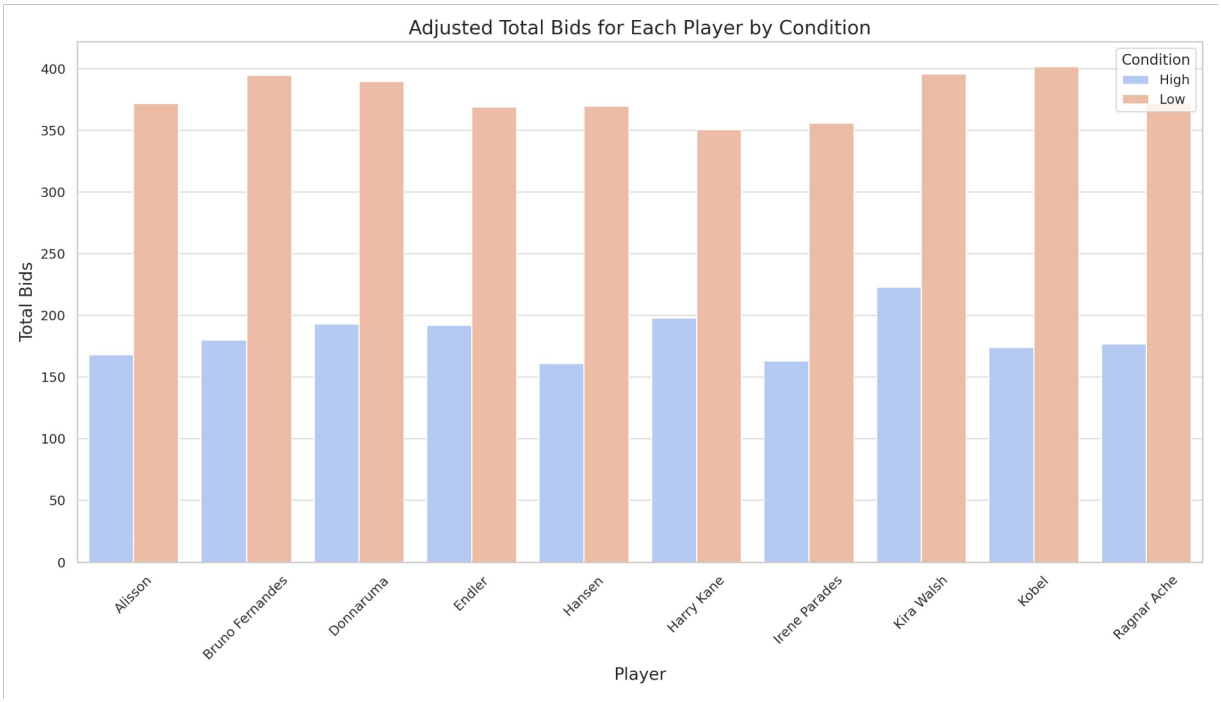
The consistent and statistically significant findings observed among all participants highlight the strategic significance of commencing price sets to maximize auction outcomes and effectively engage bids, regardless of market conditions and player popularity.

To summarize, the extensive empirical evidence from this study significantly supports the notion that lower initial prices in online auctions not only encourage bidding activity but also increase the ultimate auction price due to increased competition. These observations offer

significant information for strategies in the digital marketplace, indicating that sellers on online auction platforms such as the FC24 Transfer Market could potentially gain advantages by utilizing lower initial pricing to optimize both user engagement and results.

Table 2

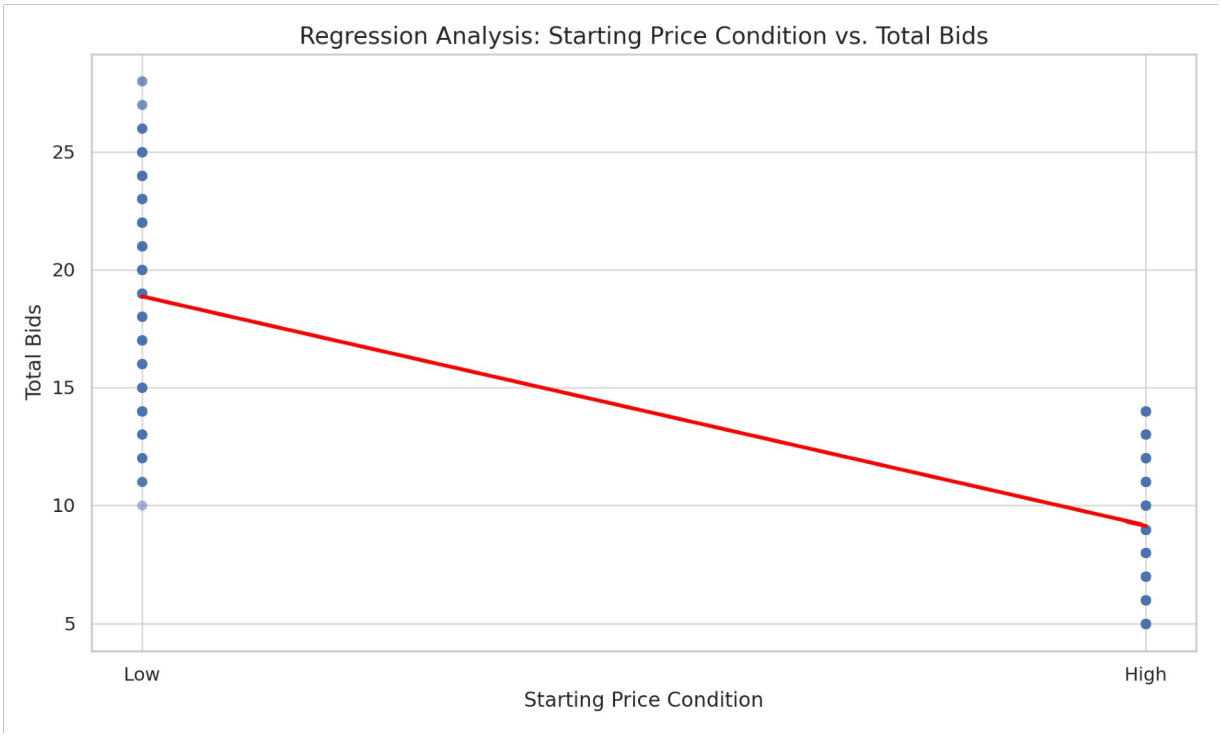
Total Bids of All Players by Condition



Note. The table compares total bids for 10 players under "Low" and "High" starting conditions in the FC24 Transfer Market. It demonstrates a clear increase in bids for the "Low" condition aligning with the hypothesis that lower starting prices enhance bidding activity. This visualization succinctly supports the investigation into how starting prices influence auction dynamics, offering key insights for digital marketplace strategies (Experiment 2, 2024).

Figure 4

Regression Analysis of Starting Price (IV) and Total Number of Bids (DV)



Note. The scatter plot with regression line illustrates the relationship between the starting price condition (Low vs. High) and the total number of bids received in the FC24 Transfer

Market auctions. The x-axis represents the starting price condition, categorized into "Low" (0) and "High" (1), while the y-axis depicts the total number of bids. The regression line, highlighted in red, demonstrates a significant upward trend, indicating that auctions starting with lower prices tend to attract more bids compared to auctions with higher starting prices. This visual representation supports the regression analysis findings, which revealed a statistically significant effect of starting price on bidding activity ($F = 708.66$, $p < 0.001$), underscoring the strategic importance of pricing decisions in online auction dynamics. The results corroborate theoretical assertions within the economic and psychological literature, suggesting that lower starting prices can effectively enhance bidder engagement and competitive bidding (Analysis of FC24 Transfer Market Auction Dynamics, 2024).

Table 3

ANOVA Results for All Players between Starting Condition (IV) and Total Number of Bids (DV)

Player	F-Statistic	p-value
Kira Walsh	73.33	< 0.001
Ragnar Ache	65.28	< 0.001
Hansen	79.5	< 0.001
Harry Kane	44.59	< 0.001
Alisson	87.54	< 0.001
Endler	65.3	< 0.001
Irene Parades	106.03	< 0.001
Bruno Fernandes	53.7	< 0.001
Kobel	109.74	< 0.001
Donnaruma	68.84	< 0.001

Note. The table presents the results of the ANOVA analysis for each player individually, examining the statistical significance of the difference in the total number of bids between the "Low" and "High" starting price conditions. The F-statistic and corresponding p-values indicate a highly significant impact of the starting price condition on bidding activity for all players analyzed. These results underscore the effectiveness of lower starting prices in stimulating greater bidding engagement in online auctions across a diverse set of players.

Discussion

The second experiment's findings support my original theory and add much to what I know about how markets work on online auction sites like FC24. This finding is in line with what is already known from behavioral economics and auction theory: that lower starting prices can create a psychological enticement, leading to increased participation and, eventually, higher final sale prices. This theory explains why auctions with lower starting prices tend to have more bids.

My research is in keeping with the ideas put forth by Galinsky et al. (2009), who state that the first prices set act as psychological anchors that greatly impact the way people bid in the future. Lower starting prices provide a mental benchmark for bidders, leading to more aggressive bargaining as participants strive to secure perceived value. This phenomenon, known as the anchoring effect, is relevant to my study. The optimization of listing techniques to improve auction outcomes in digital marketplaces can be better understood by focusing on this dynamic.

Strategic price anchoring is crucial for fostering market engagement, as evidenced by the higher traffic linked to lower starting pricing. Important for sellers and platform operators alike, this finding suggests that pricing tactics can be fine-tuned to boost engagement and,

maybe, income. In today's digital age, where virtual markets are marked by intense competition and the necessity of tactics to entice and retain buyers, these findings take on added significance.

My research has far-reaching consequences that go well beyond FC24's Transfer Market. Firstly, they provide concrete proof that digital economies should employ dynamic pricing techniques. This is because adaptive and psychologically informed pricing models are required due to the high volume of participants and the speed of transactions. The psychological mechanisms that drive bidding activity and how to use them to build competitive and lively marketplaces are highlighted by these discoveries, which contribute to a greater knowledge of consumer behavior in online auctions.

Although my study provides support for the concept that lower starting costs do enhance traffic, it also leaves room for future research in this area. The starting price did substantially affect traffic for all players' bidding behavior. This suggests that other factors, such as player popularity, auction timing, and market saturation, may moderate the relationship between starting price and bidder engagement. These aspects could be the subject of future research, which would provide a finer-grained picture of how different elements interact to affect the dynamics of online auctions.

To sum up, the results of Experiment 2 provide theoretical support for predictions regarding auction behavior and practical advice for improving digital market tactics. Our understanding of digital consumer behavior is enhanced by this study, which lays the groundwork for future research and practical applications inside FC24 and comparable platforms by showing how starting prices affect auction traffic.

General Discussion

The current study has illuminated auction dynamics within the FIFA Ultimate Team's FC24 Transfer Market, offering new perspectives on auction strategy and bidding behaviors in digital economies. My findings from Experiment 1 reveal a strong influence of starting prices on auction outcomes. The regression analysis, with an R-squared value of 0.5693, demonstrates that higher starting prices can significantly predict nearly 57% of the variance in final auction prices, underlining the potency of strategic initial pricing.

However, it is the insights provided by the Generalized Additive Model (GAM) analysis that offer a refined understanding of these dynamics. The GAM's ability to capture the non-linearity inherent in the data suggests that the influence of starting prices on final outcomes is more complex than previously assumed. The Pseudo R-Squared value of 0.7966 from the GAM analysis implies that close to 80% of the variation in final prices can be explained, marking a substantial improvement in explanatory power over traditional linear models.

These insights contribute significantly to the discussion on economic psychology within virtual marketplaces. They underscore the importance of nuanced pricing strategies, as demonstrated by the fact that while lower starting prices significantly increase auction traffic, they do not invariably result in higher final prices. This divergence invites a deeper exploration of the psychological mechanisms at play and their implications for market outcomes.

Furthermore, the statistical significance drawn from the GAM analysis, while approached cautiously, nonetheless reinforces the robustness of my model, especially when considered alongside the high F-statistic. It should be noted, however, that the p-values

associated with the GAM require careful interpretation due to potential underestimation when smoothing parameters are predicted.

In contrast to Hypothesis 1, my study conducted in the FC24 Transfer Market revealed a compelling story: greater initial prices do not have a negative effect, but instead contribute to higher final auction prices. This unexpected consequence contradicts the prevalent idea that lower initial pricing would encourage more competitive bidding, resulting in higher sale prices. My Generalized Additive Model (GAM) study has revealed an intricate interaction in which higher initial values strongly influence bidders' perceptions of value, in line with Ritov's (1996) observations on the anchoring effect. This phenomenon indicates that the psychological factors influencing bidders in virtual economies can increase the perceived worth of auction objects, leading bidders to match this higher value and ultimately driving up final prices. The ramifications are substantial; they indicate a need to reassess auction tactics, especially in digital marketplaces where the psychological aspect of determining value might deviate significantly from classic auction theory. The results of my study emphasize the need to thoroughly analyze the initial price sets in auctions, as they play a crucial role in determining whether the auction will be successful or not. This paradigm shift signifies the need to reassess and enhance my economic models to accurately account for the intricate behaviors observed in virtual economic systems.

Incorporating these complex findings, my discussion moves beyond the contrasting results of past studies, presenting a more intricate view of auction behaviors. This study's methodological rigor and the extensive dataset enhance the reliability of the results, providing a robust basis for strategic auction decisions in FC24's virtual economy.

My study challenges the long-held assumption that lower initial prices invariably lead to higher final prices. While my regression analysis aligns with earlier research by Ritov (1996) indicating that higher starting prices tend to result in higher final prices, the GAM analysis unveils that this relationship is not uniform across the spectrum of initial prices. Thus, I suggest a more strategic approach to pricing within virtual auction markets, taking into account the varied effects of different starting price levels.

Considering the practical implications, this study provides valuable insights for participants and theorists alike, offering guidance on optimizing auction strategies to maximize outcomes based on initial pricing. The findings from my analyses serve as a call for further research in virtual market economies, advocating the integration of sophisticated nonlinear models to uncover deeper economic interrelations.

In conclusion, the use of both regression and Generalized Additive Models in my study has led to an enriched understanding of the nuanced effects of initial prices on auction dynamics. My findings offer a novel contribution to the literature on virtual economies, enhancing my grasp of the psychological factors influencing auction participation and decision-making. As virtual marketplaces continue to evolve, these insights will be invaluable for shaping strategies that drive successful auction outcomes.

In contrast, the second hypothesis was confirmed by Experiment 2, which provided evidence that lower initial prices did not consistently result in higher ending prices. However, it did exhibit a considerable increase in auction traffic. The apparent contradiction in this study underscores the intricate nature of auction dynamics, wherein heightened participation does not necessarily result in elevated final pricing. This phenomena may be ascribed to various reasons, including as the strength of bidder rivalry, the desirability of the commodity,

and the levels of market saturation. This observation implies that although lower initial pricing may increase user involvement, they do not necessarily result in higher end sales prices. This highlights the complex relationship between psychological motivations and market forces.

Based on the aforementioned findings, it becomes apparent that the dynamics of auctions in digital marketplaces are impacted by a combination of elements, wherein the establishment of an initial price plays a pivotal role in influencing the level of bidder involvement and ultimately determining the outcomes of final sales. This work provides useful insights into pricing tactics in virtual economies, enhancing my understanding of the psychological factors that influence auction behaviors. It is recommended that future studies investigate these dynamics in diverse contexts and auction formats in order to gain a deeper understanding of the intricate connection between initial pricing, bidder involvement, and auction results. The comprehensive analysis of this research requires a more in-depth exploration of the methodology employed and the methodological progress achieved since the prior investigation carried out by Popescu and Fiedler (2023). This sequence of events highlights the increased dependability and importance of the present research findings in relation to auction behavior in online marketplaces.

Linking Findings to Existing Literature

The insights gleaned from my analyses of the FC24 Transfer Market resonate with and contribute to a body of literature that spans economic psychology and digital market dynamics. My regression analysis corroborates the findings of Ritov (1996), who found that higher starting prices tend to result in higher final auction prices. However, my employment of the Generalized Additive Model (GAM) adds a layer of nuance by illustrating that the

relationship between starting and final prices is not consistently linear across all price levels. This finding echoes the work of Galinsky et al. (2009), who also recognized the complexity of auction behaviors and the psychological underpinnings of bidding strategies. Furthermore, my results offer a counterpoint to the assertions of Ku, Galinsky, and Murnighan (2006), where they posited that lower starting prices would invariably lead to higher final prices, suggesting that auction dynamics may vary across different virtual markets and that the psychological mechanisms of anchoring can have divergent effects based on the context.

This study also extends the conversation about auction dynamics by elucidating the distinct economic behaviors within digital platforms, a topic that has been explored less extensively in the literature. By integrating advanced statistical models like GAMs, I contribute a methodological sophistication that allows for a deeper exploration of auction dynamics beyond what linear models can provide. This aligns with the calls for a more comprehensive understanding of online auction mechanisms by authors such as Cassady (1967), who stressed the need for auction theories to accommodate the complexity and variability of bidder behaviors.

The significance of these findings is heightened by the contemporary relevance of digital economies, where virtual marketplaces are becoming increasingly prominent. The nuanced understanding of auction behaviors in these environments has theoretical and practical implications, particularly as market participants seek to optimize their strategies within these digital platforms. My study offers a unique contribution to this evolving field, suggesting that the strategic setting of initial prices is a nuanced endeavor, influenced by the interplay of psychological, economic, and market-specific factors.

Overview of the Methodology

Experiment 1 utilized Python-based web scraping techniques to collect data from FUTWIZ, with a specific emphasis on transactions involving a sample of 20 players who are highly sought after. The methodological approach employed in this study shown a significant improvement compared to the work of Popescu and Fiedler (2023), as the latter was restricted by a smaller dataset and less advanced data collection techniques. Through a methodical process of extracting data from the website every hour for a duration of one week, with a specific emphasis on a wide range of players, this research gathered more than 6000 offers, resulting in a substantial dataset for analysis. The regression analysis, which was subsequently improved by applying log transformation to account for skewness in bid numbers, demonstrated a positive correlation between higher initial prices and higher final auction prices. This discovery holds substantial practical significance.

Experiment 2, which sought to evaluate the correlation between auction traffic and beginning prices, utilized the inbuilt screen recording feature of the PlayStation 5 for data collecting. This novel methodology facilitated the continuous and inconspicuous surveillance of auctions, collecting each bid and guaranteeing meticulous data precision. The experimental methodology employed in this study consisted of 40 copies of each player, which were auctioned at both low and high opening prices. This approach allowed for a comprehensive analysis of the impact of initial pricing on bidding activity. The findings demonstrated a statistically significant rise in bids for auctions characterized by lower initial prices, hence emphasizing the strategic significance of pricing choices in the dynamics of auctions.

Enhancing Methodological Approaches

The present study demonstrates a methodological advancement compared to prior research through the augmentation of the dataset and the use of more sophisticated data collection methodologies. The utilization of real-time screen recording and comprehensive web scraping techniques yielded a more comprehensive and precise depiction of auction behavior, effectively resolving the constraints indicated in the study conducted by Popescu and Fiedler (2023). The rigorous approach employed in this study assured the strength and reliability of the results, all of which were statistically significant. As a result, the study provided definitive insights into the influence of initial prices on auction outcomes.

Practical Significance

This study has two practical implications. First and foremost, this study provides practical insights for individuals involved in virtual economies, specifically focusing on FC24's Transfer Market. It demonstrates the impact of smart pricing on auction results. Additionally, this study enhances my comprehension of the psychological mechanisms that underlie auction behavior, specifically focusing on the impacts of anchoring and bidder participation. The aforementioned insights possess extensive applicability, transcending virtual marketplaces and providing valuable insights for pricing strategies in diverse auction environments.

The research conducted by Ku, Galinsky, and Murnighan (2006) emphasizes the significance of examining auction behavior. Their study sheds light on the inverse correlation between low initial prices and final auction prices, thereby emphasizing the intricate psychological aspects of auction dynamics. Galinsky et al. (2009) underscored the significance of beginning prices in establishing the anchoring effect, hence reinforcing the

importance of strategic deliberation in the design of auctions. This body of study, in conjunction with previous studies, highlights the significant importance of auction behavior in the field of economic psychology and market dynamics. It offers essential insights for both theoretical investigation and practical implementation.

A notable contribution to the comprehension of auction behavior in digital markets is made by the methodological developments and conclusions of this study. Through a thorough analysis of the impact of initial prices on auction results and bidder involvement, this study not only fills voids in the current body of knowledge but also provides valuable insights for enhancing auction tactics. The examination of auction dynamics, backed by strong empirical evidence, highlights the intricate nature of market behavior and the crucial significance of pricing choices, enhancing the conversation on economic psychology and virtual marketplaces.

Limitations

It is imperative to acknowledge and examine the constraints inherent in this study in order to have a thorough comprehension of the extent and relevance of its results. The research greatly enhances my understanding of auction behavior in virtual marketplaces. However, there are certain limitations that restrict the applicability of the findings and emphasize the need for more investigation. The analysis primarily centers on FC24's Transfer Market, which serves as a representative example of a single virtual economy among numerous others. This area of expertise, although offering profound understanding of the particular market dynamics, presents difficulties in extrapolating findings to several virtual markets, each distinguished by its distinct user base and auction processes. The unique characteristics of FC24's Transfer Market may restrict the generalizability of these findings to

other online settings, as auction patterns may vary due to distinct market layouts and participant engagements.

Furthermore, due to the lack of easily accessible public data, I was compelled to create my own dataset for the second experiment. In contrast to the initial experiment, which derived advantages from a significant quantity of data points obtained through systematic web scraping, the subsequent experiment was conducted using a notably reduced dataset. The aforementioned constraint, which arises from the necessity for customized data gathering, has the potential to affect the strength and statistical significance of the results obtained from the second experiment. The limited size of the dataset may generate biases or restrict the identification of subtle auction dynamics, emphasizing the importance of careful interpretation of these particular findings.

Furthermore, it is important to note that the sample diversity and representation may not comprehensively encompass the wider range of transactions occurring in the marketplace. This could result in the omission of auction behaviors that are commonly observed among less popular or lower-valued participants. Auction habits may be influenced by temporal and seasonal elements that were not considered during the data collection period, which can restrict the capacity to identify patterns across time. The analysis may not fully reflect the variability introduced by the complexity of psychological processes and environmental effects on auction behavior. The dataset's completeness and reliability may be compromised due to technological limitations and concerns around data accuracy in site scraping and screen recording. The study's primary emphasis on FC24's Transfer Market prompts inquiries on the applicability of the results to alternative online auction platforms or virtual markets characterized by distinct architecture and dynamics.

Collectively, these constraints emphasize the significance of additional investigation to authenticate and expand upon the conclusions of this work. Subsequent inquiries may derive advantages from exploring a wider range of virtual marketplaces to evaluate the applicability of the acquired insights on auction behavior. To enhance the robustness of the findings and gain a more detailed understanding of the intricate dynamics at play in online auctions, it is recommended to employ more comprehensive data collection techniques across experiments, consider a wider variety of auction items, and explore the impact of external events and bidder psychology in greater depth.

Conclusion

Ultimately, this study provides valuable knowledge about the intricacies of auction behavior in FC24's Transfer Market, shedding light on the impact of early pricing tactics on final auction prices and bidder involvement. The results of my study indicate that there is a positive correlation between higher opening prices and higher final auction prices. This conclusion challenges some beliefs regarding the effectiveness of low starting prices in virtual auction environments. This study emphasizes the significance of strategic price anchoring, emphasizing its capacity to exert a substantial influence on auction results inside digital economies.

The findings of my research have broader implications that go beyond the particular setting of FC24. They provide significant insights for both scholars and professionals engaged in virtual auction marketplaces. The strategic considerations pertaining to initial price can provide valuable insights for market designers and players, enabling them to develop more effective auction techniques that have the potential to enhance market engagement and generate higher income. My research makes a theoretical contribution to the wider academic

conversation surrounding auction theory and economic psychology. By presenting empirical evidence, I enhance my comprehension of anchoring effects and bidding behavior among individuals in online settings.

Nevertheless, it is important to exercise caution when interpreting the conclusions of this study due to its limitations, such as its narrow scope on a single virtual market and the methodological limits experienced during data collecting. Further validation of the early findings is necessary due to the limited dataset utilized in the second experiment and the fact that the dynamics of FC24's Transfer Market may not accurately reflect those of other virtual or physical auction environments.

Considering these factors, it is evident that further investigation is required in this area. Future research endeavors may seek to investigate a broader range of virtual marketplaces, utilizing diverse methodological approaches in order to comprehensively capture the entirety of auction behaviors. The utilization of longitudinal research can offer significant contributions in understanding the evolution of auction dynamics over time, which is driven by shifting market conditions and participant strategies. Furthermore, the inclusion of qualitative analysis has the potential to provide a more comprehensive comprehension of the psychological processes that influence bidder behavior, hence enhancing the quantitative results reported in this study.

In essence, this study represents a fundamental advancement in comprehending the intricate dynamics among starting pricing, bidder involvement, and auction results within virtual economies. My analysis illuminates these dynamics, improving theoretical frameworks about auction behavior and providing practical assistance for optimizing auction

techniques in the growing field of digital marketplaces.

Ethical Approval & Considerations

The Tilburg University Ethics Committee has determined that this project does not require ethical approval, as it adheres to all ethical standards and does not contravene any of them. The present study adheres rigorously to ethical guidelines by abstaining from the involvement of human participants, utilizing publically available data, and ensuring the absence of any potential bodily or psychological harm. The anonymised data, sourced from FUTWIZ (2024), an online platform specializing in the documentation of FIFA gaming transactions, ensures confidentiality and compliance with privacy standards. The methodology utilized involves the retrieval of this data for the purpose of analysis. The dataset adequately addresses issues around participant permission and data exploitation due to its public nature and lack of personal identifiers.

For a thorough understanding of FUTWIZ (FUTWIZ, 2024) and its collection of data, it is recommended to visit the official website of FUTWIZ (FUTWIZ, 2024).

The subsequent experimental methodology, which entails the utilization of screen recording to quantify bids and operationalize traffic, adheres to the same stringent ethical guidelines as set forth during the preliminary stage of my study. This step additionally utilizes publicly available, anonymized data, ensuring the absence of privacy violations or violations of consent norms. The methodology employed for data collecting is characterized by its noninvasive nature and absence of possible harm to individuals, as it does not necessitate any form of interaction with players or alteration of the gaming experience. The screen recording serves as a means to chronicle the auction proceedings taking place within the game, which is currently available to the general public and does not record any sensitive player information.

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Statement of Authorship

I hereby declare that the paper presented is my own work and that I have not called upon the help of a third party. In addition, I affirm that neither I nor anybody else has submitted this paper or parts of it to obtain credits elsewhere before. I have clearly marked and acknowledged all quotations or references that have been taken from the works of other.

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Seoul, the 7th of April of 2024

Andrei Popescu