Fan Consumption Behaviour from Herd Effect and Framing Effect - An Analysis Based on Behavioural Economics

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Abstract. Nowadays, the global economy is in a downturn and social consumption is becoming more rational. However, the entertainment concert economy is growing against the trend and is unprecedentedly hot, and the fan economy is expected to reach a new high. For this reason, the social influence and huge commercial value formed by the fan economy also have an important weight in the entire business sector. Traditional economics theory is still imperfect in analyzing the current fan consumption behavior. Behavioral economics can improve market efficiency and guide fans to consume rationally through the study of fans' irrational behavior. Therefore, this paper analyzes fan consumption behavior from the perspective of behavioral economics, analyzes Jay Chou's concert economic model through the herd effect, and understands how Taylor Swift drives the entire US economic recovery through the framing effect. And proposes optimization strategies to enable the healthy development of the fan economy and provide a useful supplement to the development of the entertainment industry conert economy.

Keywords: Herd Effect, Framing Effect; Behavioral Economics.

1. Introduction

1.1. Research Background

Fan economy, as a new type of economic form, has been developing rapidly in entertainment, sports, culture and other fields in recent years, and has become an important part of the global market. According to Future Market Insights, the global fan economy market will reach $5.24 billion in 2023 and is expected to grow to $27.3 billion by 2033, with a compound annual growth rate of 17.9% [1]. Fans are not only consumers, but also emotionally invested, and their consumption behaviours are often driven by emotional and social factors, which can't be explained by traditional assumptions. Fans are not only consumers, but also emotionally engaged individuals whose consumption behaviour is often driven by emotional and social fact ors that cannot be explained by traditional economic theories that assume complete consumer rationality. Behavioural economics is an important perspective for understanding irrational consumption in the fan economy, especially since theories such as the herd effect and the framing effect can be used to explain the consumption decisions of fan groups. By introducing the perspective of behavioural economics, the operation mechanism of the fan economy and its impact on the market can be explored more deeply, and optimization strategies can be provided for enterprises and artists.

1.2. Research Purpose and Significance

This essay aims to analyse the irrational behaviours in fan consumption through the behavioural economics theories, mainly analysing the influence mechanism of the herd effect and the framing effect on fan consumption decisions. Through the combination of case study and theory, this paper will explore the behavioural characteristics of fans under group pressure and the way information is presented, and how these behaviours affect market.

Study about these issues have strong significance: on one hand, the herd effect and framing effect are prevalent in the fan economy, affecting fans' consumption experience and earnings; on the other hand, these irrational behaviours may lead to market failures, such as scalping ticket speculation and uneven resource allocation. Therefore, this paper analyses fan consumption behaviours and provides optimization suggestions for companies and artists to improve fans' consumption decisions and maximize utility, as well as enhance market efficiency.

1.3. Structure arrangement

This paper is structured as follows: the second part analyses the herd effect in fan consumption and explores how information asymmetry, social identity and emotional drive lead to group snapping behaviour. The third part explores the impact of the framing effect on fan consumption. The fourth part puts forward optimization suggestions, including strategies such as information transparency, guiding rational consumption and enhancing fan interaction to mitigate the impact of irrational behaviours; and the fifth part concludes the whole paper by summarizing the key findings and looking ahead to future research directions.

2. Herd Effect in Fan Consumption

2.1. Case Description

This section examines the impact of the herd effect on fan consumption through a case of Jay Chou's 2024 Taipei concert ticket sales. On 23 October 2024, tickets for Jay Chou's ‘Carnival’ world tour in Taipei (which took place from 5-8 December) went on sale, with 150,000 tickets sold out in just five minutes [2], with approximately 890,000 fans grabbing tickets online simultaneously. On the day of the sale, the tag ‘#JayLenTaipei’ quickly rose to the top of the social media charts, triggering a rush for tickets. Many fans turned to the secondary market for tickets because they were worried about missing the Taipei show that they’ve expected for a long time, causing ‘scalped tickets’ to soar to NT$300,000 (about US$9,500) and even prompting police intervention [2].This phenomenon shows that fans show strong following behaviours under the atmosphere of high demand and group buying, which is a typical case of the herd effect.

2.2. Case Analysis

2.2.1. Information Asymmetry

Fans usually cannot directly obtain ticket inventory and complete demand information on ticketing platforms or software and rely on social media signals to judge the value of the concert and the supply and demand situation. When the news of “tickets are about to be sold out” spreads on social media, fas see it as a signal of high value, and therefore quickly join the rush to purchase tickets.

Bikhchandani et al.'s information cascade theory suggests that in asymmetric environments, where individuals do not have access to complete information, they will infer value by observing the behaviour of others [3]. Specifically, when two or more consecutive individuals take the same action (e.g., buying tickets), subsequent individuals will ignore the information they have and choose to follow. This imitation behaviour creates a cascade effect, leading to group decisions that do not correspond to the actual value of the behaviour.

In the case of Jay Chou's Taipei concert, the news of sold-out tickets on social media pushed to form a cascade effect, leading fans to take quick action to join the rush without fully assessing the situation.

2.2.2. Social identity

Participation in high-demand activities is an important way for fans to confirm their group identity. Social media comments such as ‘True fans can't miss it!’ and other statements reflect the psychological pressure fans feel to avoid being ostracized by the group.

Asch's classic follower experiment showed that when individuals are faced with a disagreement with the group's opinion, about 37% of participants choose to change their judgement to conform to the majority view [4]. This type of submissive behaviour is particularly evident in situations involving social identity - when individuals perceive that their group membership is threatened, the tendency to conform increases significantly.

In the case of Jay Chou's concert, fans' fear of being ‘excluded from the fanbase’ constituted a strong social pressure, stemming from their need to belong to the group and their fear of social exclusion. When individual fans are in an environment where they have a strong need to belong to a group (e.g., a fan community), they tend to maintain their social identity through herd behaviour, even in the face of situations that contradict their own judgement.

2.2.3. Emotionally Driven

Fans have a strong emotional attachment to Jay Chou, an iconic figure in Chinese music, making them more susceptible to herd behaviour. The fear of missing the Taipei concert, which was seven years in the making (FOMO), further exacerbated this effect.

Kahneman and Tversky's prospect theory explains this through loss aversion: for fans, the emotional pain of missing the concert far outweighs the economic cost of paying for the high-priced scalped tickets (NT$300,000) [5]. And social media publicity and messaging among fans amplify the collective excitement and sense of urgency, further fuelling impulse spending.

2.3. Behavioural Optimisation

2.3.1. Transparent Information

The herd effect stems partly from information asymmetry in the case of Jay Chou's Taipei concert, where fans panicked over the news of the sell-out and the rush to buy, leading to irrational decision-making. Thaler and Sunstein point out in their book Nudge that providing clear information (e.g., the status of inventory) is an important part of the boosting strategy component that can help consumers make more rational decision [6]. Therefore, organizers should increase the transparency of information by announcing the total number of tickets in advance (e.g. 150,000 tickets), by scheduling the opening of tickets in batches (e.g. 50,000 tickets per day for three consecutive days), and by updating real-time information about the remaining stock on the ticketing software page. Taking Coachella 2023 as an example, the lottery mechanism adopted by the festival provides fans with a fair chance to purchase tickets and avoids the panic caused by centralized rush purchases.

2.3.2. Rational Consumption

In order to guide rational consumption, the organisers and artists can encourage fans to set a budget limit through promotional activities, and release a ‘Rational Ticket Purchase Initiative’ through official channels (e.g., Jay Chou's official Instagram account or the official website of the music industry) before the sale of tickets, reminding fans to purchase tickets according to their own financial capacity and real needs. If a fan receives a ‘rational ticketing initiative’ before If fans receive the ‘rational ticket purchase’ reminder before grabbing tickets, they may reduce the purchase of high-priced scalped tickets, thus avoiding unnecessary economic losses.

2.3.3. Enhance Fan Interaction

The herd effect was exacerbated by the amplification of social media in the case of Jay Chou's concert, as the hot topics and news of sold-out tickets on social media, such as X, focused fans' attention on scarcity. In order to alleviate this pressure, the focus of attention can be shifted from ‘competition for tickets’ to ‘community participation’ by enhancing fan interaction. Specific measures include: launching interactive activities before the ticket sale, such as ‘share your expectation of the concert’ or ‘recall your favourite Jay Chou song’, and setting up rewards (e.g., a lucky draw for a signed poster) to encourage fans to participate in the discussion rather than blindly grabbing tickets.

Thaler and Sunstein in ‘Nudge’ mentioned that increasing group interaction can reduce group pressure by distracting individuals from focusing on a single goal (e.g., grabbing tickets) [6]. In Jay Chou's case, such interactive activities can help fans view ticket purchasing behaviour more rationally, while enhancing the emotional connection between fans and the artist and each other, and reducing the negative impact of the herd effect.

3. The Impact of the Framing Effect on Fan Consumption

3.1. Case Description

Taylor Swift's Eras Tour is the first global tour to break the billion-dollar box office record, setting a record for the highest box office in music history. Its scale and influence have gone beyond the scope of entertainment alone and have given rise to a unique economic phenomenon – Swiftonomics. Question Pro [7] shows that Swift's tour is likely to generate approximately $4.6 billion in spending in the United States alone, injecting funds into local economies including hotels and restaurants.

3.2. Case Analysis

In the Taylor Swift concert economic phenomenon, the framing effect profoundly affects fans' consumption behavior in various forms. It is mainly reflected in the following aspects:

3.2.1. Loss Aversion Drive

First, the concert was framed as a rare "once in a lifetime" experience rather than ordinary entertainment consumption. This psychological framework significantly increased fans' willingness to pay. In addition, Taylor Swift was given the title of "World No. 1 Female Singer". Many non-European and American music fans would also be willing to see her singing skills because of this title, which made concert tickets extremely difficult to buy. This is the irrational feature of loss aversion, the core mechanism of the framing effect, which drives people's decision-making. Secondly, the high ticket price of the concert was reframed as "emotional investment" rather than simple expenditure. Therefore, an attractive audio-visual feast made fans willing to spend thousands of yuan to invest in high economic costs rather than lose this opportunity to pay.

Furthermore, the framing effect is also reflected in the time dimension. The "revenge consumption" psychology after the epidemic frames entertainment expenditure as "release after repression", making consumers more inclined to meet the needs in time rather than long-term financial planning. The framing effect is applied to the consumer entertainment sector. Swifties spend an average of an additional $1,300 to $1,500 on the local economy for travel, accommodation, food and goods. Every $100 spent on live performances drives another $300 in spending. Generation Z fans even say they are willing to pay far more than they would for regular entertainment. Therefore, concerts are the best way to apply behavioral economics to the consumer entertainment sector. This phenomenon reveals the deep psychological mechanisms of contemporary entertainment consumption and reflects the powerful shaping power of specific psychological frameworks on consumer behavior.

3.2.2. The Phenomenal Performance and Market Impact of Taylor Swift's Economics

The close and lasting connection established by "Swiftnomics" with the fan group Swifties is considered to be the secret to the success of her concerts. The concerts have an astonishing effect on the local economy, hotels, restaurants, and retail industries. During the US tour alone [8], each show created 500 to 800 temporary jobs, greatly reducing the unemployment rate in the cities where the tours were held. During the Chicago concert, 3,300 new jobs were created, and all 44,000 hotel rooms in the city were fully booked, setting a record of US$39 million in revenue per day and generating an economic effect of US$320 million. During the Singapore stop [9], airfares from many cities around the world to Singapore almost doubled, and the number of tourist attractions increased 23 times compared to normal days, bringing a total of about S$400 million in revenue to Singapore, directly driving the country's GDP growth by 0.2 percentage points in the first quarter [10].

This economic phenomenon is not unique to Taylor, but its scale and sustainability are unprecedented. Swiftnomics has triggered research from scholars in the academic community [11]. The subtle behavioral economics framing effect behind it has reshaped fans' perception and evaluation of the value of concerts. The framing effect is multi-dimensional and multi-layered in this phenomenon, from price perception to social value, from time dimension to identity recognition, forming a complete psychological ecosystem that continuously strengthens fans’ motivation and consumer willingness.

3.3. Behavioural Optimisation

Based on the valuable experience of "Taylor Swift Economics" in the field of fan consumption, people should continue to deepen the application of the framing effect in behavioral economics, and further optimize the framing effect on the fan economy from the dimensions of reconstructing positioning, publicity, and optimizing pricing mechanisms.

3.3.1. Reconstruct the Positioning and Promotion of the City Hosting the Event

Breaking through the traditional framework and positioning music performances as "complex cultural and economic events" is the primary strategy for optimization. The success of Taylor Swift's tour is largely due to the clever use of the contemporary cultural phenomenon as a framework for the series of concerts. When promoting music performances, Chinese cities can learn from this idea and deeply integrate the activities with the city's cultural characteristics. For example, Xi'an can frame the concert as "a dialogue between modern music and a thousand-year civilization" based on the image of the ancient capital, while Haikou can use the tropical style to create a music holiday in the coconut island style. This differentiated framework can effectively avoid homogeneous competition, improve the city's recognition and attractiveness, and increase the city's economic benefits.

3.3.2. Pricing Re-Optimization

Fans are usually very sensitive to prices. Differentiated pricing can effectively influence consumers’ perception of price fairness and thus increase their willingness to buy [12]. Coupons or gifts can effectively alleviate fans’ negative emotions when they consume. For example, providing early ticket buyers with an “early bird gift package” that includes discount coupons for peripheral products and local transportation coupons, rather than simple price discounts, can not only reward loyal fans, but also prevent late ticket buyers from having a strong sense of unfairness.

Designing a tiered value framework for different consumer groups is also an important strategy. The ticket system for Taylor Swift’s concert includes multiple price levels [13]. This tiered pricing method is a specific manifestation of the framing effect in analyzing consumption. It can effectively reduce the resistance caused by simple price comparison and fully meet the consumption needs of different analyzed consumer groups. Practice has shown that special ticket prices that include artist meet-and-greets, and backstage tours are often more likely to attract middle- and high-income groups to increase their spending, effectively increasing per capita consumption.

The multiple manifestations of the framing effect in “Taylor Swift Economics” have enabled fans’ consumption decisions to break through the framework of traditional economics. Understanding the role of the framing effect in Taylor Swift's economics not only explains why fans are willing to pay far more than conventional entertainment expenses, but also provides valuable experience for optimizing marketing in the future.

4. Optimization Suggestions

Based on the previous analysis of the influence of the herd effect and framing effect on fan consumption behaviour, this section proposes the following optimization strategies, focusing on designing more targeted solutions from the perspective of behavioural economics, with the aim of helping organisers and artists to mitigate the negative impacts of fans' irrational consumption behaviours, and at the same time, improve market efficiency and optimise the fan experience,.

4.1. Psychological Intervention

The core of the herd effect and framing effect lies in psychological drivers (e.g. loss aversion, group pressure), so psychological intervention can effectively guide fans to rational consumption.

4.1.1. Cooling-off Period

Organisers can introduce a ‘cooling-off period’ into the ticketing process, i.e. after a fan has added a ticket to their shopping cart, a short pop-up window is set up asking the fan to confirm their intention to buy and answer a simple question, such as ‘Have you considered your budget and itinerary?’. The short pause breaks the impulsive buying triggered by the herd effect and relieves the psychological pressure of the framing effect of ‘missing out is a pity’.Kahneman and Tversky's theory of anticipation suggests that short decision intervals can reduce irrational behaviours caused by loss aversion [14]. In the UK, for example, under the Consumer Contracts Regulations (CCR), consumers who buy goods online usually enjoy a 14-day cooling-off period [15].

4.1.2. Psychological Reminders

Artists or organisers can post warm reminders on ticketing pages or social media (e.g. Weibo, Instagram), such as ‘there are many ways to enjoy music, and watching live streams is also a great way to support your favourite artist’. By redefining the ways in which one can ‘support the artist,’ such reminders reduce the psychological burden of framing the experience as ‘essential’ in the framing effect, while reducing the group pressure caused by the herd effect. Nudge", Thaler and Sunstein suggest that psychological boosting strategies such as positive cues can be effective in guiding consumers to make more rational choices [16].

4.2. Dispersing Scarcity Pressure

Both the herd effect and the framing effect exacerbate irrational consumption by fans through the perception of scarcity (e.g., ‘Tickets are about to be sold out’ or ‘Limited Time Offer’). Decentralising scarcity pressure can effectively alleviate this problem.

4.2.1. Multiple Rounds

Ariely's research shows that releasing scarce resources in phases allows consumers to assess the value more rationally and avoid overestimating the importance of the goods due to scarcity [17].

Organisers can ease the pressure on fans to grab tickets by selling tickets in stages. For example, the 150,000 tickets can be divided into three rounds, with 50,000 tickets released in each round, with an interval of a few hours or days in between. In this way, fans do not have to grab all the tickets at once, the tension of grabbing tickets will be greatly reduced, and the collective impulsive behaviour brought by the herd effect can also be reduced.

4.2.2. Limiting Ticket Market Chaos

Impulsive ticket snatching triggered by the herd effect and the framing effect often leads to secondary market chaos, such as high prices of scalped tickets. To address this problem, organisers can spread the scarcity pressure by limiting the ticket market. For example, Billie Eilish partnered with ticketing platform Ticketmaster for her 2024 Hit Me Hard and Soft tour to implement a no-transfer ticket policy, which required tickets to be the no-transfer ticket policy, which requires tickets to be tied to the identity of the purchaser, effectively prohibits the resale of tickets on the secondary market. This approach aims to protect fans from overpriced scalped tickets and reduce irrational purchasing behaviours caused by perceptions of scarcity [16]. Similar policies can help organisers maintain order in the ticketing market and further ease the pressure on fans to grab tickets.

4.3. Enhancing Fan Interaction

Interaction can distract consumers from price concerns brought about by herd pressure and framing effects, and enhance fans' sense of belonging. For example, organizing pre-sale live broadcasts encourages fans to share their anticipation rather than their anxiety, and Ariely shows that interactive activities can increase the proportion of rational decision-making by 10% [17].

5. Conclusion

This study explores the irrational consumption behaviors of fans through the lens of behavioral economics, focusing on the herd effect and framing effect. The analysis of Jay Chou's 2024 Taipei concert reveals how information asymmetry, social identity, and emotional drivers amplify herd behavior, leading to impulsive ticket snatching and scalping issues. Similarly, the case of Taylor Swift's Time Tour demonstrates the framing effect's role in shaping fans' perceptions of concerts as "once-in-a-lifetime" experiences, driving excessive spending. To address these issues, optimization strategies such as psychological interventions (e.g., cooling-off periods), dispersing scarcity pressure (e.g., phased ticket releases), and enhancing fan interaction are proposed to guide rational consumption and improve market efficiency.

The study primarily relies on case analyses without large-scale empirical validation. Future research could incorporate quantitative experiments to test the proposed strategies' effectiveness across different cultural contexts.

Future research could leverage AI-driven sentiment analysis to quantify the herd effect's impact or compare framing effects across cultural contexts, such as between Chinese and American fan bases, to deepen understanding of fan economy dynamics.

Author Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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