

# An Economic Analysis of the Classical Music Market from the Perspective of Two-Sided Market Theory

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## ABSTRACT

This paper employs the two-sided market theory to analyze the structure, characteristics, and development trends of the global classical music market. The study reveals that the classical music market, as a typical two-sided market, involves performance institutions, record companies, and streaming platforms acting as intermediaries to connect two distinct groups—music creators and consumers—while facing unique challenges in network externalities and pricing strategies. By examining cross-group network effects, platform competition strategies, and price structures, this paper elucidates the economic mechanisms of the classical music market during its digital transformation. It further provides a theoretical explanation for the rapid growth of classical music markets in developing countries, particularly China, offering a new analytical framework for understanding the commercialization pathways of traditional cultural arts in modern economic contexts.

## KEYWORDS

Two-sided market theory; Classical music; Network externality; Platform economy; Streaming media

## 1. INTRODUCTION

Classical music constitutes an essential component of Western civilization, serving as a hallmark of national and urban cultural refinement. As a traditional art form, it faces both challenges and opportunities in adapting to commercialization within contemporary market economies. Existing research predominantly examines the classical music market from perspectives such as cultural communication, arts management, or consumer behavior, lacking a systematic economic theoretical framework. This study innovatively applies the two-sided market theory (Rochet & Tirole, 2003; Armstrong, 2006) as an analytical lens to re-examine the structural characteristics, operational mechanisms, and developmental trends of the classical music market.

The core focus of two-sided market theory lies in examining how platforms connect two or more distinct user groups and generate value by managing cross-group network effects. The classical music market exhibits quintessential two-sided market characteristics: intermediaries such as performance institutions, record companies, and streaming platforms serve as market makers that link two distinct groups—music creators (artists, composers, orchestras) and consumers. Within this structure, the platforms' business models, pricing strategies, and competitive behaviors demonstrate distinctive economic properties.

This study makes three principal theoretical contributions: first, it extends the application scope of two-sided market theory to the cultural arts domain; second, it provides a novel analytical framework for interpreting development trends in classical music markets; third, it offers an economic

explanation for the rapid growth of classical music markets in developing countries, particularly China.

## **2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

### **2.1. Overview of Two-Sided Market Theory**

The two-sided market theory, initially proposed by Rochet and Tirole (2003) and subsequently refined by Armstrong (2006), Evans (2003), and other scholars, posits that such markets involve two distinct user groups interacting through a platform. A key characteristic is that one group's utility from platform participation depends on the other group's size, demonstrating cross-group network externalities.

The core concepts of two-sided market theory include: (1) cross-group network effects--an increase in users from one group affects the value derived by users from the other group; (2) platform competition-- multiple platforms compete for both user groups, with single-homing or multi-homing behaviors influencing competitive dynamics; (3) asymmetric pricing--platforms typically adopt different pricing strategies for distinct user groups, sometimes even subsidizing one side (negative pricing).

### **2.2. Applicability of Two-Sided Market Theory to the Classical Music Market**

The classical music market exhibits fundamental characteristics of two-sided markets, featuring two interdependent user groups: content creators (musicians, orchestras) and consumers (audiences) in a complementary relationship. Cross-group network effects manifest when renowned musicians' participation attracts larger audiences, while substantial listener bases incentivize more artists to join platforms. Intermediaries like performance venues, record labels, and streaming platforms create value by facilitating interactions between creators and consumers. The market demonstrates asymmetric pricing structures, where platforms implement differential pricing strategies, such as compensating artists (negative pricing) while charging audiences ticket fees or subscription costs (positive pricing).

## **3. TWO-SIDED MARKET ANALYSIS OF THE CLASSICAL MUSIC MARKET**

The classical music market has shown post-pandemic recovery following initial declines, demonstrating steady year-on-year growth. Market expansion is driven by the resurgence of live performances and substantial sponsorship support worldwide. Increased expenditure on leisure activities is projected to further stimulate growth in the live classical music sector in coming years.

According to a report by Grand View Research, the global classic music market was valued at USD 11.86 billion in 2021 and is projected to grow at a compound annual growth rate (CAGR) of 14.4% from 2022 to 2028, reaching USD 30.49 billion by 2028 [1].

From a policy perspective, emerging economies have relaxed multiple restrictions and increased investment in traditional music after the pandemic, which is expected to exert a positive impact on the market. Economically, developing economies are increasingly adopting advanced technologies for music recording and playback, such as greater use of physical formats like CDs and streaming services, which has also accelerated market growth in recent years. From the perspective of microeconomic agents, the expansion of the global music audience is driving market growth, with a focus on attracting potential customers in emerging economies through traditional music offerings.

The global commercialization of classical music exhibits multifaceted characteristics and evolving trends. The market is undergoing digital transformation, with the rise of streaming platforms presenting both opportunities and challenges. Classical music streaming has experienced rapid expansion, growing from 54.6 million yuan in 2015 to 140 million yuan in 2019, representing a compound annual growth rate of 26.6%. Projections indicate the streaming market will reach 254 million yuan by 2025 [2], maintaining an anticipated CAGR of 11.4% from 2020 to 2025.

### **3.1. Two-sided Market Structure and Participants**

The classical music market exhibits a prototypical two-sided market structure where platform intermediaries include not only traditional venues like concert halls, theaters, and music festivals, but also record labels (e.g., Sony Classical, Decca, Naxos) and streaming platforms (e.g., IDAGIO, Apple Music Classical, NetEase Cloud Music Classical Zone).

Record companies play a pivotal role in the classical music market. For instance, Sony Classical has topped classical music charts with its film soundtracks and expanded its market share through film music. Decca Records has emerged as another major player, achieving remarkable success through high-profile promotional campaigns and soundtrack productions. Naxos and Universal Classics likewise maintain leading positions in market share within this sector.

The advancement of streaming technology has prompted platforms like Spotify to enter the classical music market. Former Columbia Records Berlin executive Till Janczukowicz founded IDAGIO, a dedicated classical music streaming service and app, which now serves as the official digital audio channel for the Vienna Philharmonic. While physical CDs remain dominant in classical music consumption, the emergence of streaming platforms presents both new opportunities and challenges for the industry.

On one side of this two-sided market structure lies the creator group comprising musicians (conductors, instrumentalists, vocalists), orchestras, choirs, composers and arrangers. Symphony orchestras, including the Berlin Philharmonic, London Symphony Orchestra, Philadelphia Orchestra and Los Angeles Philharmonic, represent crucial organizers and participants in classical music performance markets. The Philadelphia Orchestra alone influences nearly one million listeners in its local market. These orchestras maintain their market position not only through live performances but also via subscription models and ticket sales.

Individual musicians also exert significant influence in the classical music market, with renowned artists like Wang Yuja and Martha Argerich frequently generating market buzz through their recordings and performances. These musicians expand their audience base not only through traditional recording and concert activities but also via cross-genre collaborations.

The other side of this two-sided market comprises consumers including live performance attendees, physical recording purchasers, streaming subscribers, and music education participants. Classical music consumers typically possess higher educational attainment. Jain (2011) et al.'s research demonstrated that they expect superior service quality and have elevated product expectations when engaging with classical music. This consumer demographic is currently undergoing rejuvenation, as evidenced by a joint report from Deezer, the British Phonographic Industry, and the Royal Philharmonic Orchestra revealing that 34% of global classical music enthusiasts are aged 18-25 [3]. This trend indicates younger consumers are emerging as the driving force behind classical music commercialization, displaying greater willingness to pay for cultural interests--a consumption characteristic that contributes to sustainable market expansion in classical music-related industries.

The global classical music market exhibits distinct regional distribution patterns and variations. European markets show divergent trends, with Spain and Portugal experiencing recent growth, while France, Italy and the UK demonstrate declining engagement [4]. Asian markets present contrasting vitality, particularly in Israel, China's Taiwan region, South Korea and Japan where classical music

maintains stronger popularity and deeper cultural roots. This regional analysis reveals that while classical music globally faces challenges of shrinking audiences and demographic narrowing, it continues to sustain significant market share and cultural influence in specific Asian markets.

### **3.2. Cross-group Network Effects in the Classical Music Market**

The classical music performance market demonstrates considerable economic potential and exhibits distinct positive cross-group network effects. From creators to consumers, the participation of high-caliber musicians and orchestras enhances platform value for audiences--an effect particularly pronounced in classical music where consumers show greater sensitivity to artist reputation than in popular music markets. For instance, performances by renowned artists like André Rieu and Andrea Bocelli generate USD 1.1 million per event, whereas mid-sized productions like the Melbourne Youth Orchestra typically achieve box office revenues of around USD 67,900 per concert [5]. In China, ticket prices for Berlin Philharmonic concerts command tenfold premiums over performances by Chinese symphony orchestras. Conversely, from consumers to creators, large-scale, high-quality audiences increase revenue and exposure opportunities for performers and composers. Between 2004-2021, classical music generated \$88.9 million with 1.2 million attendees, achieving 134.2% revenue growth and 97.5% audience increase in 2022 alone [6]. This scale effect provides creators with stable financial returns and career development opportunities.

Throughout its historical development, classical music has evolved distinct stylistic schools corresponding to different societal periods. However, its overly rigid developmental paradigm and simplistic promotional approaches have undoubtedly constrained its growth [7]. The market exhibits certain negative cross-group network effects, with Hewett observing that classical music remains “stagnant water” in today’s vibrant musical landscape [8]. Congestion effects manifest prominently in these negative network externalities. Within finite-capacity performance markets, excessive creators intensify resource competition. In 2020, Columbia Artists Management, once among America’s top three classical music agencies, collapsed amid fierce competition and constrained capital flows, signaling the end of traditional classical music promotion. Simultaneously, quality dilution effects emerge as platforms lower entry barriers through price competition strategies to attract consumers, ultimately degrading overall quality and diminishing brand value. This phenomenon explains why elite orchestras and concert halls maintain stringent performance standards.

### **3.3. Platform Pricing Strategies and Business Models**

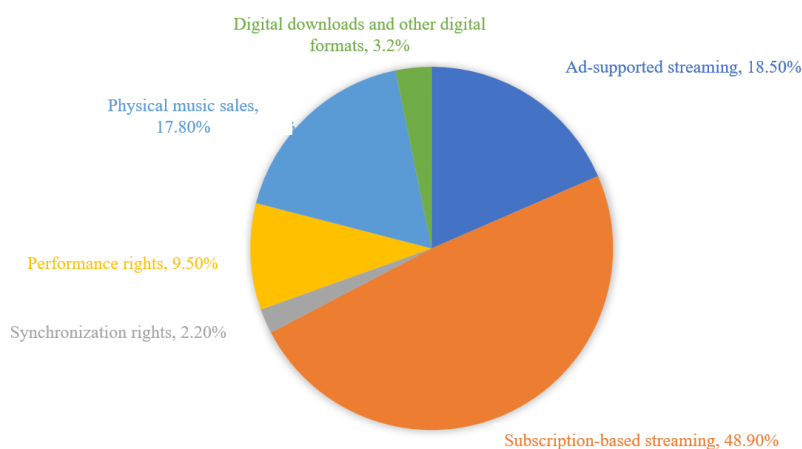
The classical music performance market employs diverse and sophisticated marketing approaches. Research indicates classical music consumers can be divided into distinct tiers including single-ticket purchasers and subscribers, with each demonstrating different experiential requirements and engagement patterns with orchestras. This necessitates differentiated marketing strategies, as exemplified by London’s Southbank Centre which successfully attracted classical music novices through its “VITAL” marketing campaign targeting uninitiated audiences.

The classical music market exhibits diverse revenue models and pricing strategies across its platforms, with many adopting the asymmetric pricing approach characteristic of two-sided market theory, which can be observed from both the subsidy side and the charging side. In live performances, venues (as platforms) provide performance fees to musicians (subsidy) while charging audiences ticket prices (revenue); in recorded music, labels pay artist royalties (subsidy) and collect album fees from buyers (revenue); streaming platforms compensate rights holders through licensing fees (subsidy) while charging user subscriptions (revenue). These pricing strategies demonstrate dynamic adaptation to consumer demand. Budget labels like Naxos and Hyperion achieve profitability through standardized repertoire selections, secondary-tier orchestras, and engagements of emerging recording artists, illustrating how platforms maintain consumer affordability by reducing creator-side subsidies (through selection of lesser-known artists). Major labels such as Deutsche Grammophon (under

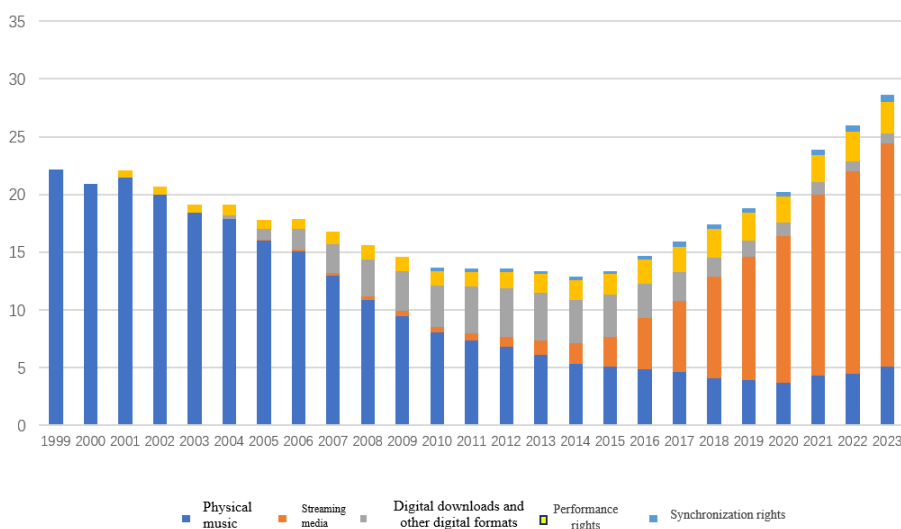
Universal Music Group) further implement mid-price and budget editions to cater to varied listeners, exemplifying the balanced pricing strategies fundamental to the two-sided market.

The business models of classical music recording markets are equally susceptible to macroeconomic conditions. During economic downturns, diminished consumer interest in cultural products challenges market vitality, prompting record companies to implement adaptive strategies including reduced re-recording volumes, introduction of new repertoires, and development of crossover albums to address market saturation.

The classical music recording market has adopted diversified development strategies in response to challenges facing traditional sales models, incorporating digital technologies, innovative business approaches, and crossover collaborations to attract broader audiences. These transformations have created new revenue streams for record companies while expanding dissemination opportunities for classical music. Contemporary platforms have evolved into multilateral markets by incorporating additional participants including sponsors, advertisers, and educational institutions alongside the core musician-listener relationship, thereby extending market boundaries.



**Figure 1.** Revenue distribution across segments in the global recorded music market (2023)  
(Data source: IFPI Global Music Report 2023)



**Figure 2.** Global recorded music industry revenue (in billion US dollars), 1999-2023  
(Data source: IFPI Global Music Report 2023)

## **4. ANALYSIS OF TWO-SIDED MARKET CHARACTERISTICS IN CHINA'S CLASSICAL MUSIC MARKET**

### **4.1. Rapid Growth of China's Classical Music Market**

While classical music currently maintains a relatively limited audience base in Chinese society, recent years have witnessed accelerated growth driven by economic prosperity and improved living standards, fostering greater public pursuit of spiritual and cultural enrichment that draws increasing numbers to experience classical music's artistic appeal firsthand.

China's classical music performance sector has undergone remarkable transformation and expansion, with domestic orchestras achieving professionalization through operational models increasingly aligned with international standards, most notably through the adoption of music season systems now comparable to Western counterparts in planning and execution. Shanghai exemplifies this development, where the classical music market's evolution vividly demonstrates urban China's growing engagement with the genre. The city's performance infrastructure expanded from solely the Shanghai Centre Theatre in 1993 to multiple new venues by the late 1990s, reflecting both enriched artistic resources and Shanghai residents' deepening appreciation for classical music.

According to market data from Frost & Sullivan, China's classical music market has demonstrated robust growth in recent years. Specifically, from 2015 to 2019, the market size expanded from 1.0404 billion yuan to 1.7738 billion yuan, achieving a compound annual growth rate (CAGR) of 13.7%. This upward trajectory is projected to continue, with the market expected to reach 2.39 billion yuan by 2025, maintaining a stable CAGR of 9.3% during the 2020-2025 period [9].

The copyright segment of China's classical music market has demonstrated equally robust performance, growing from 70.2 million yuan in 2015 to 135 million yuan in 2019 at a remarkable 17.8% compound annual growth rate (CAGR). Projections indicate this market will reach 216 million yuan by 2025, maintaining an 8.9% CAGR from 2020 onward.

The two-sided market theory provides an explanatory framework for the rapid expansion of China's classical music market, which exhibits the characteristic "positive feedback loop" of such markets. Statistical data shows that the number of professional symphony orchestras in China increased from 30 in 2014 to 82 in 2017, activating a virtuous cycle between creators and consumers: more orchestras provided richer performance options that attracted larger audiences, while the growing audience base in turn supported the establishment and operation of additional orchestras. Consistent with two-sided market theory, platforms often cultivate markets through initial investments. The support from Chinese government agencies, cultural institutions, and commercial performance entities can be viewed as such platform investments that reduced creator participation costs and activated market feedback loops. As the classical music market developed and expanded, increasing numbers of performance groups, musicians, composers and audience members reached critical mass, triggering self-reinforcing network effects. This is the "critical mass effect" in two-sided market theory. China's classical music market likely reached this inflection point in the past decade, leading to accelerated growth as evidenced by the market's expansion from 1.0404 billion yuan in 2015 to 1.7738 billion yuan in 2019, achieving a 13.7% compound annual growth rate.

### **4.2. Correlation Between Economic Development and Two-Sided Market**

The growth of China's classical music market demonstrates significant correlation with national economic development, a relationship explicable through two-sided market theory. First, enhanced user purchasing power: economic growth has increased consumers' willingness and capacity to pay, enabling platforms to adopt more aggressive pricing strategies that generate revenue to reinvest in the creator side, establishing a virtuous cycle. Second, late-mover advantages: as a developing market, China's classical music sector could directly implement more efficient two-sided platform models

(e.g., streaming services, digital marketing), bypassing intermediate developmental stages to achieve accelerated growth, exemplified by NetEase Cloud Music's pioneering "Classical Zone" and Apple Music Classical's emergence as a leading platform. Third, evolving demand structures: economic progress has shifted consumption from basic material needs toward higher-level cultural demands, expanding classical music's consumer base. These factors collectively explain the previously cited growth of China's classical copyright market from 70.2 million yuan in 2015 to 135 million yuan in 2019, achieving a 17.8% CAGR.

## **5. EVOLUTION OF CLASSICAL MUSIC'S TWO-SIDED MARKET IN THE STREAMING ERA**

Authoritative research reports indicate that the global streaming music market is in a stage of rapid expansion. Data shows that as of 2023, the overall size of this market has reached 40.51 billion U.S. dollars and demonstrates strong growth potential. It is expected that by 2036, this figure will rise to more than 221.37 billion U.S. dollars, with a compound annual growth rate of over 14.2% during this period [10]. Focusing on the Chinese market, streaming music platforms have a very high level of popularity, and their download volume accounts for an overwhelming share of the market, with more than 80% of users choosing to consume music through such platforms. In terms of market size, the development of China's streaming music market is even more remarkable. Starting from 44 billion yuan in 2013, after nearly a decade of development, the market size has increased to 155.49 billion yuan by 2022. The rapid growth highlights the dominant position of streaming music in the field of music consumption in China [11]. This series of growth data not only reflects technological progress and changes in user preferences but also indicates that streaming music is gradually replacing traditional music consumption methods and becoming an indispensable core force in the global and Chinese music industries.

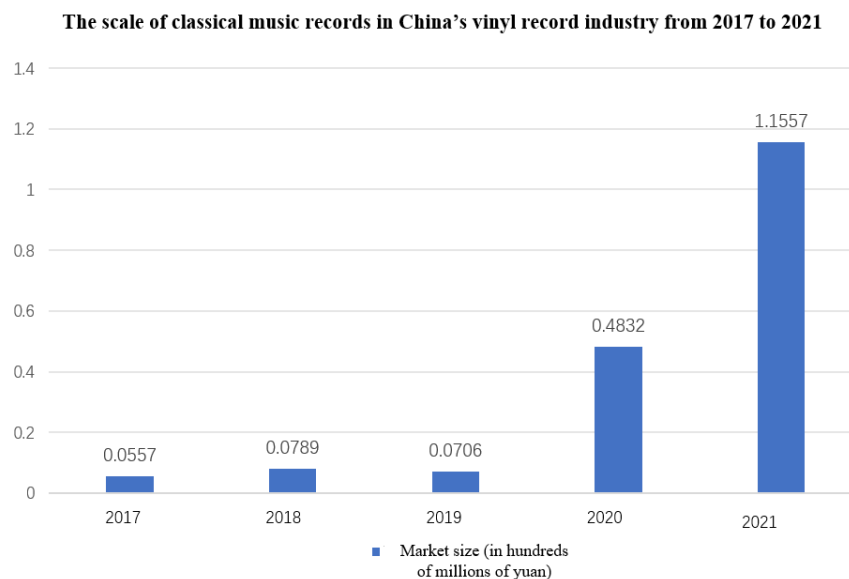
According to Alpha Data's December 2019 statistics, classical music accounted for 2.5% of U.S. recorded music sales, demonstrating measurable market presence. However, its streaming performance proved comparatively weaker with less than 1% market share, indicating limited influence on this increasingly dominant consumption platform [12]. This trend was further corroborated by 2018 global streaming data, with classical music accounting for merely 1.5% of total streaming content [13], reflecting its limited market penetration in the streaming sector.

While classical music maintains a relatively small share in China's streaming market, its development trajectory shows positive momentum. Major domestic platforms and tech giants have significantly increased investments in classical music promotion. NetEase Cloud Music pioneered the "Classical Zone", the first dedicated classical channel among mainstream music apps, providing enthusiasts with more accessible and professional listening experiences. Meanwhile, in January 2024, global tech giant Apple announced the launch of its dedicated standalone application Apple Music Classical in mainland China. Specifically tailored for classical music, the app not only offers free downloads to subscribers but also provides unlimited access to the world's leading classical music streaming library encompassing over 5 million tracks, thereby significantly addressing the market's pressing demand for high-quality classical music resources [14, 15]. International platforms like Spotify and Tidal have also established specialized classical sections, while dedicated services including Qobuz, Primephonic and IDAGIO gain market recognition through superior audio quality and optimized classical music search functionalities, collectively driving the sector's growth [16].

### **5.1. Transformation from Traditional Two-Sided Market to Multilateral Digital Platforms**

The classical music market exhibits distinctive characteristics during digital transformation, with traditional physical media (e.g., vinyl records) coexisting and complementing digital content. China's

recorded music market has shown remarkable growth recently, particularly in classical vinyl records whose industry scale reached 115.57 million yuan in 2021, reflecting strong market recognition for high-quality, nostalgic music formats. From a two-sided market perspective, this represents platforms’ strategic product differentiation to satisfy diverse consumer needs.



**Figure 3.** The scale of classical music records in China’s vinyl record industry from 2017 to 2021  
(Data source: Organized by the Data Center of Guanyan Tianxia.)

Dedicated classical music streaming platforms (e.g., IDAGIO, Apple Music Classical) employ differentiation strategies by offering specialized services tailored to classical music characteristics, such as refined search functionalities and detailed performance metadata. This specialization aligns with the “platform focus” concept in two-sided market theory, effectively attracting core users within this niche. Compared to traditional platforms, digital services possess superior data collection and analytical capabilities, enabling more precise matching between creators and consumers to enhance platform efficiency. Consequently, streaming platforms present both new opportunities and challenges for classical music’s digital evolution.

## 5.2. Challenges of Classical Music Streaming From A Two-Sided Market Perspective

Despite the rapid overall growth of the streaming market, the proportion of classical music within it remains relatively low, and this phenomenon can be explained by the two-sided market theory. Firstly, there is the problem of cross-platform compatibility. The special attributes of classical music, such as the length of works and the numerous performance versions, make it difficult for classical music to adapt to streaming platforms designed for popular music. From the perspective of the two-sided market, this is the result of a mismatch between platform design and the needs of specific user groups. Secondly, there is the problem of the dispersion of network effects. On comprehensive streaming platforms, the audience for classical music is relatively scattered, making it difficult to form a powerful network effect. As a result, in the field of streaming, the performance of classical music is relatively inferior, and its proportion remains low. This is in line with the predictions of the two-sided market theory for niche markets. Thirdly, there is the issue of the pricing dilemma. The significant quality differences in classical music and the complexity of value assessment make it difficult for platforms to formulate effective pricing structures. This is also the reason why some streaming platforms focusing on classical music, such as Qobuz, Primephonic, IDAGIO, etc., can find their positioning in the market, as they can adopt a pricing model that is more suitable for the characteristics of classical music.

## **6. CONCLUSIONS AND POLICY RECOMMENDATIONS**

### **6.1. Theoretical Conclusions**

Through the brief analysis of the classical music market above and in combination with the two-sided market theory, the following core conclusions can be drawn. Firstly, in terms of structure and mechanism, the classical music market is a typical two-sided market, and its development follows the network effects and platform competition rules of the two-sided market. Platforms (performance institutions, record companies, streaming platforms) play a crucial role in connecting creators and consumers. Secondly, in terms of development impetus, the development of the classical music market is mainly driven by the positive network effects between the two user groups on both sides, and platforms create value through reasonable pricing structures and differentiated strategies. Thirdly, regarding the growth of the Chinese market, the rapid growth of the Chinese classical music market can be attributed to the positive feedback mechanism of the two-sided market activated by economic development, and the support from the government and relevant institutions is equivalent to platform investment, accelerating the maturity of the market. Fourthly, regarding digital transformation, the challenges and opportunities faced by classical music in the streaming environment are essentially issues of matching platform design with user needs during the transformation process of the two-sided market.

### **6.2. Policy and Practical Suggestions**

Based on the two-sided market theory, for the classical music market, especially the emerging classical music market like that in China, this paper puts forward the following policy and practical suggestions. Firstly, platform operators can adopt a differentiated pricing strategy, implementing different price structures for creators and consumers; they should focus on cultivating the critical user scale and can attract core users through subsidy strategies; they should develop service functions tailored to the characteristics of classical music to enhance platform-user demand alignment. Secondly, for policymakers, government support should focus on cultivating the network effects of the market rather than simply providing subsidies; it is necessary to encourage moderate competition among platforms to avoid monopoly by a single platform; strengthen classical music education to expand the consumer base and activate the positive feedback mechanism of the market. Thirdly, it is recommended that creators further understand the two-sided market mechanism and choose appropriate platform strategies; utilize digital technology to reduce the interaction costs with consumers; explore a multi-platform strategy to balance the benefits and costs of being single-platform-oriented and multi-platform-oriented.

### **6.3. Research Limitations and Future Directions**

This study has certain limitations, including limitations in data availability and insufficient quantitative verification. Future research can focus on the following directions. Firstly, construct a quantitative model of the two-sided market of classical music to verify the intensity of network effects; secondly, explore the differences in the applicability of the two-sided market theory under different cultural backgrounds; thirdly, study the optimization of the pricing strategy of classical music in the streaming environment; fourthly, analyze the interaction effects between the education market and the performance market.

The two-sided market theory provides a new perspective for understanding the structure and dynamics of the classical music market. Future research should further deepen the application of the theory to provide more powerful guidance for the sustainable development of classical music in the modern market environment.

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