

# Constraints and Optimization of Post-Olympic Ski Tourism Consumption in China

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**Abstract:** The Beijing 2022 Winter Olympics catalyzed a historic surge in China's winter sports participation, yet the industry now faces a "Post-Olympic Paradox" characterized by high initial interest but low consumer loyalty. This study investigates the underlying barriers to sustained consumption, identifying high operational costs and safety concerns as critical structural and intrapersonal constraints. To address these challenges, the paper suggests a multi-dimensional optimization strategy: implementing dynamic pricing to improve affordability, enhancing safety protocols to mitigate psychological barriers, and adopting year-round operational models to ensure long-term industrial viability.

**Keywords:** Post-Winter Olympics; Ski Tourism; Consumption Constraints; Sports Economics

## 1. Introduction

### 1.1 Background

The Beijing 2022 Winter Olympics served as a monumental catalyst for the winter sports industry in China. It is fundamentally altering the landscape of national fitness and leisure consumption. Before 2015, skiing in China was largely a niche activity restricted to a small demographic of elites and enthusiasts. However, the successful bid and hosting of the Games propelled the industry into a "Golden Decade" of development. According to the "2024-2025 China Ski Industry White Paper," the number of ski resorts in China grew from 568 in 2015 to over 800 in 2024, representing a Compound Annual Growth Rate of approximately 5.8%. More impressively, skier visits surged to nearly 25 million in the 2024-2025 season, a testament to the "300 million people on ice and snow" initiative [1]. Policy support from the central

government has been instrumental; the "Opinions on Stimulating the Vitality of the Ice and Snow Economy" issued by the authorities explicitly calls for optimizing the supply of ice and snow tourism products and enhancing facility service levels to foster a trillion-yuan industry by 2025 [2]. This top-down endorsement has unlocked capital investment and infrastructure development, connecting remote mountainous regions with major urban centers via high-speed rail networks, thus significantly improving accessibility.

### 1.2 Problem Statement

Despite these impressive macro-statistics and infrastructure dividends, a critical micro-level issue remains: is the Chinese ski market effectively converting these millions of first-time participants into long-term, loyal devotees? The data suggests a concerning "Post-Olympic Paradox." While initial participant volume is high, the retention rate remains stubbornly low compared to mature markets like Europe or Japan. Industry surveys indicate that over 70% of visitors to Chinese ski resorts are "one-time experience seekers" who do not return for a second trip within the same season [3]. This "high churn rate" poses a severe threat to the industry's sustainability, particularly as the "Olympic buzz" naturally wanes.

Why is this happening? Research indicates that unlike the "devotees" common in the Alps or the Rockies who view skiing as a lifestyle, the majority of Chinese participants are "peripherals." They lack the technical skills to enter a "flow state"—the optimal psychological state where skill matches challenge—and instead often experience anxiety and frustration. Under the current macro-background of global economic softness, consumers have become increasingly rational and price-sensitive. The combination of rising costs and a frustrating,

fear-inducing initial experience creates a powerful barrier to re-entry. Thus, "fear"—both of financial loss and physical injury—has become a silent but potent inhibitor preventing the transition from novice to enthusiast [3].

### 1.3 Significance of the Study

Understanding these constraints is not merely an academic exercise but a survival imperative for the industry. As the extensive growth phase driven by government investment subsides, the industry must transition to an intensive growth phase driven by consumer retention and lifetime value. If ski resorts cannot crack the code of retention, they face the risk of becoming "ghost towns" of expensive infrastructure. This study aims to dissect these constraints through the lens of Leisure Constraint Theory, specifically analyzing independent variables like economic pressure and psychological risk. By offering practical, evidence-based management strategies, this research seeks to help ski resorts navigate the economic headwinds and cultivate a loyal customer base, ensuring that the "Olympic legacy" translates into lasting economic vitality rather than a fleeting phenomenon.

## 2. Analysis of Constraints in Ski Tourism Consumption

### 2.1 Economic Constraints: The "Double Squeeze" of Cost and Price

Economic factors constitute the most direct and formidable "structural constraint" facing the ski industry in the post-Olympic era. This constraint operates as a "double squeeze": rising costs on the supply side and tightening budgets on the demand side.

On the supply side, ski resorts are grappling with an acute case of "Baumol's Cost Disease." Skiing is a capital-intensive and labor-intensive industry [4]. The costs of maintaining high-quality snow—critical for safety and experience—are skyrocketing. Snowmaking requires vast amounts of water and electricity, prices for which have trended upward globally. Furthermore, the specialized labor required for slope grooming, lift operation, and safety patrol demands higher wages to attract talent to remote mountainous areas [5]. Unlike manufacturing, where automation can drastically reduce costs, the service nature of ski resorts limits productivity gains, forcing operators to pass these rising costs onto consumers to maintain

viability.

On the demand side, the global economic slowdown has impacted consumer confidence. Skiing is a discretionary expenditure with a high price tag. A typical weekend ski trip to a destination like Chongli or Changbaishan involves costs for high-speed train tickets, accommodation (often at premium rates during peak season), lift passes (which can exceed 400 RMB/day), equipment rental, and coaching. For a middle-class family, a single trip can easily cost half a month's disposable income. Literature on leisure constraints consistently identifies financial cost as the primary structural barrier for participation [6]. In a booming economy, consumers might overlook the "value for money" equation; however, in a softer economy, they become hyper-sensitive. If the experience does not justify the high expense—for instance, if individuals spend most of the time struggling on the bunny hill—the "economic pain" reinforces the decision to abandon the sport.

### 2.2 Psychological Constraints: Perceived Risk and "Fear Factor"

For the emerging Chinese market, "intrapersonal constraints" are arguably more critical than economic ones. While money can be saved, fear is harder to overcome. Protection Motivation Theory (PMT) posits that when individuals perceive a threat (in this case, injury), they engage in a cognitive appraisal process. If the perceived severity of the threat and their vulnerability to it outweigh the rewards and their self-efficacy (confidence in their ability), they will adopt "avoidance behaviors"—i.e., they will not ski.

Recent studies on Chinese ski tourists identify a distinct segment of "peripherals" who have a very low psychological connection to the sport [3]. Unlike "devotees" who accept risk as part of the thrill, these beginners view risk as a pure negative. The physical risk of falling, collision, and injury is a dominant psychological barrier. Videos of ski accidents on social media further amplify this "fear of injury," creating a "vicarious trauma" effect even before they step on the snow [7].

Furthermore, cultural factors exacerbate this constraint. In the context of Chinese culture, "Mianzi" (Face) plays a significant role in social behavior. Skiing is a highly visible public performance. For an adult beginner, the prospect

of falling repeatedly in front of others, or being unable to control one's movements, triggers "social anxiety." The fear of "losing face"—of looking foolish or clumsy—acts as a powerful psychological cost. This is distinct from Western individualism where "learning through failure" is more normalized. In China, the pressure to perform competently can make the learning curve feel humiliating, leading to early dropout [3].

### 2.3 Structural Constraints: Seasonality and Accessibility

Skiing is inherently constrained by the rigid structure of time and space. Geographically, "ice and snow resources" are unevenly distributed. The "Golden Snow Belt" is located in high-latitude regions like Heilongjiang and Jilin, or high-altitude areas like Chongli. However, the primary sources of tourists—the affluent middle class—are concentrated in the Yangtze River Delta (Shanghai, Hangzhou) and the Pearl River Delta (Guangzhou, Shenzhen).

This spatial mismatch imposes heavy "time costs" and "accessibility" challenges [6]. While high-speed rail has reduced travel time, the "last mile" problem often persists—getting from the train station to the resort can still be cumbersome. More critically, the "intervening opportunities" theory suggests that if a consumer has to travel 5 hours to ski, but only 1 hour to play tennis or go camping, the friction of distance will favor the latter unless the motivation to ski is overwhelmingly strong. Moreover, the seasonal window is narrow. Outdoor skiing is largely restricted to fewer than 100 days a year in many regions. This structural limitation makes it difficult to cultivate a habit. Habits are formed through consistent repetition. If a consumer skis once in December, and then cannot ski again until the next December, the "muscle memory" and psychological interest degrade. This "habit discontinuity" is a structural flaw that makes retention incredibly difficult compared to year-round sports like gym fitness or swimming.

## 3. Optimization Strategies for the Sustainable Development of Ski Tourism

### 3.1 Innovating Pricing Mechanisms and "Constraint Negotiation"

How can ski resorts lower the economic barrier without bankrupting themselves? The answer

lies in facilitating consumers' "constraint negotiation"—the process by which individuals navigate through barriers to participate [8]. First, resorts must adopt dynamic, stratified pricing models. The airline and hotel industries have long used yield management; ski resorts must catch up. Instead of a flat "weekend vs. weekday" rate, prices should reflect demand curves and user segments. Crucially, resorts should implement "low-threshold entry" tickets. A beginner who only uses the magic carpet and the bottom 50 meters of a slope should not pay the same lift ticket price as an expert accessing the gondola and black diamonds. Introducing "Beginner Zone Only" tickets at 20-30% of the full price would drastically improve the "value for money" perception for first-timers, lowering the cost of "trial and error."

Second, the subscription economy must be embraced. Drawing lessons from the "Ikon Pass" or "Epic Pass" in North America, Chinese resorts (or alliances of resorts) should promote season passes that can be paid in installments. A lump-sum payment of 3000 RMB is a hurdle; a monthly subscription of 250 RMB is a nudge. This model locks in loyalty early and improves cash flow for operators.

Third, transaction costs should be reduced through bundling. "All-inclusive" packages (Club Med style) that bundle accommodation, meals, lift tickets, equipment, and lessons remove the "decision fatigue" and "hidden cost anxiety" for families. By offering a transparent, fixed price, consumers feel more in control of their budget, facilitating the negotiation of financial constraints.

### 3.2 Constructing a "Psychological Safety" Service System

If fear is the enemy, safety is the product. Ski resorts must shift their mindset from selling "tickets" to selling "confidence." This requires a holistic "Psychological Safety Service System." Zone Design: Implementing "Zero-Anxiety Zones" is critical. These should be strictly enclosed areas dedicated solely to first-timers, physically separated from intermediate slopes to prevent the terrifying "torpedo" collisions caused by out-of-control skiers. The gradient should be minimal (under 5 degrees), and wide enough to prevent crowding.

Visual Safety: Safety must be seen to be believed. Increasing the visibility of safety infrastructure—brightly colored, soft protection

nets, clear "Slow Zone" signage, and the conspicuous presence of "Safety Patrols"—signals to the primitive brain that "this environment is managed".

**Psychological Coaching:** The role of the instructor needs to evolve. Traditional coaching focuses on technique ("bend your knees"). For the anxious Chinese beginner, coaching must include "psychological support." Instructors should be trained in encouraging semantics, framing falling as part of learning rather than failure to mitigate "loss of face." Offering complimentary "Safe Fall" clinics—teaching people how to crash without getting hurt—can paradoxically increase confidence. As Choo notes, reducing perceived risk has a direct, significant positive correlation with the intention to revisit [7].

### 3.3 Promoting "Four-Season Operation" to Dilute Costs

To solve the structural seasonality issue and Baumol's cost disease, resorts must transition from "ski resorts" to "mountain vacation destinations."

**Diversification:** The "four-season" model is not just a slogan; it's an economic necessity. Resorts in Chongli have successfully piloted this by utilizing their terrain for summer activities: mountain biking on the slopes, trail running festivals, and music festivals at the base. By generating revenue in the "green season," resorts can spread their high fixed costs (infrastructure, permanent staff) over 12 months instead of 4, alleviating the pressure to charge exorbitant prices in winter.

**Urban-Mountain Linkage:** To bridge the geographic gap, outdoor resorts should form strategic alliances with the booming indoor ski simulators and snow domes in southern cities [9]. An indoor ski center in Shanghai can serve as a "feeder" or "training academy" for a resort in Jilin. Consumers can learn the basics nearby year-round, overcoming the "skill barrier" and "habit discontinuity." When winter comes, they are already confident enough to travel to the "real mountains". This ecosystem approach integrates the accessibility of urban venues with the experience of destination resorts.

## 4. Conclusion

The post-Winter Olympics era stands as a defining watershed for China's ski tourism industry. The masses have been effectively

mobilized, but loyalty has not yet been won. This study reveals that the industry's sustainable development is currently throttled by a "double squeeze": the structural rigidity of high costs and the intrapersonal barrier of fear.

To break the deadlock of "high traffic, low retention," the industry must undergo a fundamental paradigm shift. A transition is required from "resource-centric" expansion—building bigger lifts and longer trails—to "human-centric" service optimization. This means innovating pricing to lower economic thresholds, engineering safety systems to dismantle psychological fear, and evolving into four-season destinations to overcome the limitations of nature. By addressing these core pain points with empathy and economic logic, ski resorts can turn "experience seekers" into "devotees," ensuring that the vast potential of the post-Olympic market is realized in lasting industry resilience and economic vitality.

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