

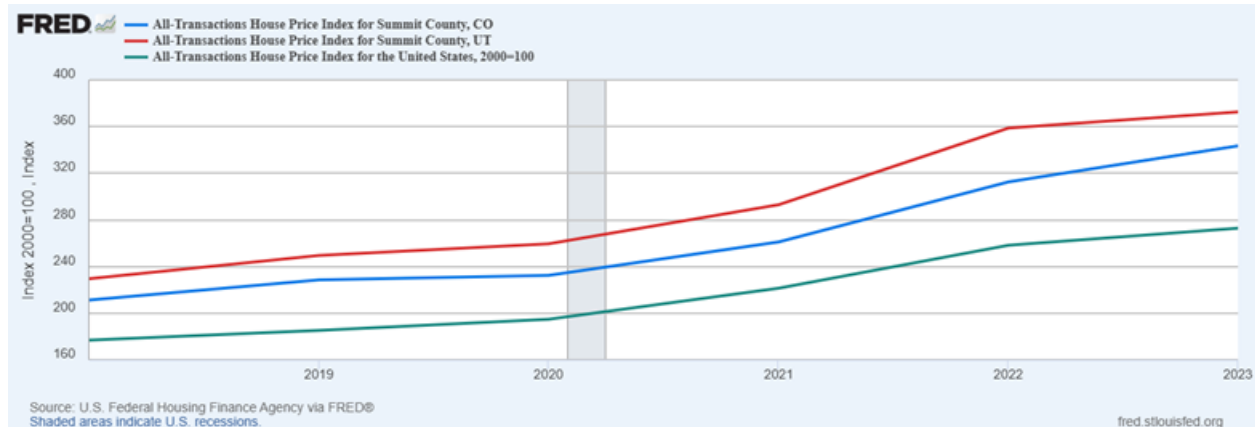
Oligopoly on the Slopes: Economic Pressures and Market Dynamics in the Ski Industry

On January 9th, 2025, both ski patrollers and Park City Mountain executives rejoiced as the two sides came to an agreement, ending a two-week-long strike over patrollers' wages. This labor dispute limited Park City's operational capacity to 13% of normal (Hampton, 2025). While further disasters have been avoided, Park City and other mountains like it are still facing several diverse economic challenges in the near future.

The United States ski industry structure is that of an oligopoly. Park City Mountain is owned by Vail Resorts, the largest ski property management conglomerate in the United States. According to the National Ski Areas Association (NSAA), Vail and its major competitor, Alterra Mountain Company, operate over 50% of daily chairlift volume. Throughout the 2000s, Vail worked to purchase destination ski resorts around the United States, eventually unveiling its flagship program: the multi-resort season pass. The 2008 introduction of Vail's Epic Pass shifted the entire market from an industry focused on daily lift tickets, to one focused on season passes. During the late 2010s, Vail and Alterra continued to expand their operations. In 2008, Vail offered unlimited access to five mountains. By 2017, it was triple that.

This oligopolistic market structure is unsurprising, as the ski sector presents ideal conditions for these dominating forces to emerge. A company looking to open a ski resort faces extremely high barriers to entry. Ignoring costs associated with facilities required for operation, most prospective resort owners would still need to obtain a United States Forest Service permit to operate on federal land (US Forest Service, 2017). These permits are costly and not guaranteed. Recently, Crested Butte Mountain Resort, already a permitted destination resort, spent \$2 million on an expansion proposal, only to have it rejected by the USFS (Fonner &

Berrens, 2014). This permitting process creates a regulatory bottleneck, reducing competition and therefore benefiting the existing market suppliers.



In the wake of the pandemic, record low interest rates, shifting work-from-home preferences, and, to a lesser extent, expanded unemployment and stimulus packages caused home sale prices to balloon (Gamber et al. 2023). During this expansionary period, the already expensive ski town housing markets across the West boomed. Between 2019 and 2024, Steamboat Springs, Colorado home values doubled, raising the average home listing price to \$1.8 million (Pettypiece, 2024). This was not an isolated incident, either. Between 2020 and 2021, southern Colorado's Crested Butte saw a median home price jump of 40% (Liu, 2022).

This booming housing market came with a cost to ski resorts: their employees were priced out of the market, leading to severe staffing shortages that impacted daily operations. In 2021, only 40% of mountain employees at Aspen, 50% in Truckee, and 30% in Vail lived in their area of employment (Liu, 2022). This directly impacts operations on the ground. Without affordable housing for these typically low earners, ski resorts' lift operations, snow management, and ski patrol teams suffer. In fact, at Telluride Mountain Resort, staffing issues were so bad that the city government urgently pushed rezoning measures. The city council found that employees

opted against seasonal employment, leaving the resort understaffed and unable to operate at capacity (Haynes & Wisor, 2021).

Furthermore, it is not only lower-skill workers struggling, but even high-earning mountain employees are experiencing this crunch. Steamboat Springs was unable to fill a director-level HR position with a salary of \$167,000, with candidates unable to find housing that fits their budget (Pettypiece, 2024). Over 60% of homes in Vail are considered unoccupied, with a similar trend across other ski towns. Homes in these markets typically serve as luxury getaways, rather than primary residences. These secondary residences have faced scrutiny, with some cities implementing a deed restriction program, preventing those looking for a vacation home from buying certain homes and providing affordable options for workers (Liu, 2021).

While workers in the ski industry face financial challenges, they are not the only ones experiencing budgetary pressures. Ski resort conglomerates have adopted a strategy from another oligopolistic industry: the dynamic pricing model from the energy industry (Haugom et al., 2021). Vail and Alterra have chosen to engage in third-degree price discrimination. They have hiked daily ticket costs, trying to extract all producer surplus and reduce crowds for their customers. During holidays and days following storms, lift ticket prices can grow by 150%, surging up to over \$300. Resorts justify these costs by appealing to higher paying season ticket holders. Much like the energy industry, if crowding reaches a certain threshold, both new and existing customers' utility suffers (Haugom et al., 2021). Those who wish to experience Colorado's "champagne powder" without purchasing a season pass can do so, but they must pay a premium for their last-minute desires.

This sales strategy, in the short term, seems to be working, as ski season passes are still an inelastic good. For the 2024/2025 season, Vail increased prices by 8% on their Epic Pass products but only saw a 2% dip in product volume, a 0.25 price elasticity value (Vail Resorts, Inc., n.d.). This is not surprising in the context of the market structure. Oligopolists are likely to face an inelastic demand curve since few substitutes exist.

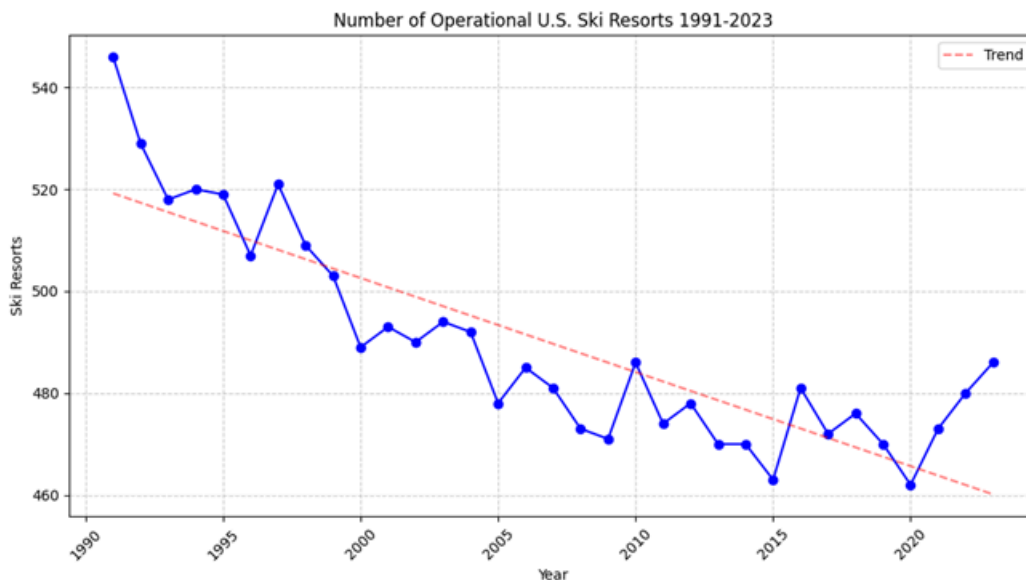
This season-ticket-based approach, however, presents a barrier to growth, because single-day lift tickets offer the least commitment and are most accessible for novice skiers. According to a case study, the median age of a person purchasing a single-day lift ticket is 47 (Savills Research & Rollason, 2023). This high average age may show that younger skiers are priced out of the market. Those who are new to skiing may choose to skip the slopes rather than risk their money on a dynamically-priced single-day lift ticket. Without these entry-level consumers, it is unclear how Vail and Alterra will grow their consumer base as the boomers age out of the extreme sports market.

Despite these issues with their current ticket allocation mechanism, it is unclear whether a better alternative exists. While high-priced lift tickets prevent new consumers, more accessible prices may aggravate both new and existing customers. In the 1970s, the USFS implemented a price control structure on permitted resorts. Over the ensuing years, crowds expanded, making the experience unbearable for skiers, and forcing the USFS to remove these price ceilings (Fonner & Berrens, 2014). In fact, a study found consumers express a 20% decrease in willingness to pay when crowds grow from 1 minute to 10 minutes, signaling a significant drop in perceived quality (Haugom et al., 2021). Similarly, the Langston Organization's case study also found that the most important perceived implicit cost to a skier standing in the lift line. While a decrease in price with maintenance in current ski area capacity may ease consumers'

budget crunch, a significant decrease may result in overcrowding, ruining the experience for new and existing skiers alike. For consumers, the cure to this cost/crowd question boils down to a common prescription: more competition in the market.

In addition to the economic and housing challenges, the ski industry must also confront the ongoing threats posed by climate change. According to a study, the average ski season was about 6 days shorter over the past two decades due to climate change. This reduction in season length, alongside other factors, contributed to a \$5 billion loss for ski resorts across America. The same study predicts compounding future effects, estimating an average of 20-30 days will be wiped off the ski season by 2050 (Scott & Stieger, 2024).

Data Source: NSAA "U.S. Ski Resorts in Operation During 2023/24 Season"



In more extreme cases, ski resorts have even shut their lifts down. Data from the NSAA shows that total ski resort numbers have been dwindling over the last 30 years. While destination resorts like Vail, Park City, Aspen, etc. are ranked highly in terms of their resilience to climate

change (Savills Research & Rollason, 2023), smaller independent resorts like Badger Pass, Teton Pass Ski Area, and Sitzmark, have closed their doors over the past few years (Housman, 2025).

These examples highlight the inequitable distribution of negative externalities in the market. While the large, destination resorts produce the most emissions, small resorts feel the negative climate effects most. And while Vail and Alterra are all in on environmental causes, it may even be a benefit for large destination resorts to pollute. The continued elimination of ski resorts with lower elevations and snow consistencies would grow their market share.

Overall, the economic future of the ski industry remains uncertain. The lack of competition has hurt consumers while rising housing costs have made it increasingly difficult for resorts to attract workers. More importantly, ski tourism serves as a clear example of how climate change is reshaping our economic futures. Whether Vail and other major players can navigate these challenges remains to be seen, but without significant investment in affordable housing, sustainable practices, and a shift towards a more growth-focused business model, the ski industry may soon find itself melting away.

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