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Vail Resorts, Inc. - Valuation and Comprehensive Analysis

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 $\label{lem:vail Resorts} \mbox{ Vail Resorts, Inc.} - \mbox{ Valuation and Comprehensive Analysis}$

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Executive Summary

This paper is organized by several sections. Section 1 provides a general description of Vail as a company. This includes a brief description of its history and experienced executive team as well as its products and segmentation, customer base, and drivers of growth.

Section 2 conducts a comprehensive analysis of Vail's competitive standing compared to its peers in the ski resort and hotels industries. This section identifies the factor conditions conducive to profitable operations, demand for its products, industries in support of operations, and the competitive advantages Vail holds over its peers. Section 2 also includes a SWOT analysis to better understand its current positioning.

Section 3 focuses on how Vail creates value. Specifically, Section 3 looks at value created through operations, service, and firm infrastructure. It also conducts a VRIO analysis of tangible and intangible resources to further identify which resources provide sustained competitive advantages.

Section 4 describes the historical trends of Vail's stock. This section discusses share price movements of MTN, as well as in comparison to its selected peers. Additionally, the history of Vail's dividend payments and stock repurchases is analyzed.

Section 5 provides a financial analysis of Vail. This section initially focuses on the historical income statements, balance sheets, and statement of cash flows to create ratios that help create an understanding of Vail's financial performance. Section 5 also analyzes the effect of snow fall on financial performance before comparing Vail to its competitors.

Section 6 creates a valuation of Vail through numerous methods. Initially, Section 6 describes the pro-forma projections that were created as the basis for much of the valuation. This includes five-year projections for the income statement, balance sheet, and free cash flows. The section then focuses on the calculation of the cost of capital which is also used in the process of valuing the company. The three methods used in the valuation are the discounted free cash flows method, adjusted present value method, and the dividend growth model. These come to respective estimated share prices of \$213.24, \$191.75, and \$250.67, compared to Vail stock trading at \$236.93 on May 14, 2023.

Section 7 recommends a hold position on Vail stock based on the analysis of this paper. The basis for this recommendation was industry control, profitability, and future growth potential amongst other considerations.

1. Description of Company

"We are the premier mountain resort company in the world and a leader in luxury, destination-based travel at iconic locations. Our product is the great outdoors. Our mission is simple: Experience of a Lifetime" (Dtn., n.d.-a). Founded in 1962 by Pete Siebert and Earl Eaton, Vail has grown into the largest ski area operator in the United States. Vail truly began its expansion in cohesion with the company going public in 1997, purchasing Keystone and Breckenridge, two of the largest resorts in America (Dtn., n.d.-a). While company headquarters are in Broomfield, Colorado, Vail operates 41 resorts located in 15 states and 4 countries which can be seen in Exhibit 1 (About Us, n.d.). Vail's operations can be broken down into 3 segments: Mountain, Lodging, and Real Estate Development. Each segment generates revenues in their own ways, but the Mountain and Lodging divisions clearly drive revenues and profits.

Vail has a strong executive team, many of whom have long histories working with the company. Kirsten Lynch has been the Chief Executive Officer since 2021 and held the positions of Executive Vice President and Chief Marketing Officer for the ten years prior. Lynch helped form the Epic Pass which has been one of the biggest revenue drivers for Vail. Timothy April, Executive VP and Chief Information Officer, has held the position since 2020. April has been with Vail since 2002 and has held numerous leadership positions. Ryan Bennet is a relatively new addition to Vail, holding the position of Chief Marketing Officer since 2021. Before Vail, Bennet was a Partner and Managing Director for the Boston Consulting Group. Angela Korch has been Chief Financial Officer since 2022. Prior to her new position, Korch worked numerous leadership positions over a ten-year span in Vail's finance department. Korch had a stint as CFO for CorePower Yoga from 2020-2022. Lynanne Kunkel has been Vail's Chief Human Resources Officer since 2017. Before Vail, Kunkel was an executive at Whirlpool Corporation for nearly a decade. Bill Rock has been the Chief Operating Officer of the Rocky Mountain region since 2019. Prior to this position, Rock was the COO of Vail's Lake Tahoe resorts. Kenny Thompson Jr. is Vail's Chief Public Affairs Officer. Before joining Vail in 2022, Thompson held executive positions for Pepsi Co. and worked within the Obama administration. All information on Vail executives was sourced from the senior executives' page on the company website.

Vail has numerous committees and charters designed to maintain proper governance of the company. However, there have still been some issues in the past. Recently, the concerning topic has been surrounding wage and labor complaints. The main concerns have been a lack of housing for employees, a backlog of wages for training, and not having enough employees to fully open its resorts (Meyer, 2022). Vail noted the impacts of the Covid-19 pandemic on these issues and has since promised to address them with a \$175 million investment in its employees (Vail Resorts Inc., 2022). This investment will go towards an industry-leading \$20 minimum wage for North American workers, affordable employee housing, and expanding the human resources department among other initiatives (Vail Resorts Inc., 2022). Overall, Vail earns a governance score of 2 out of 10 from Yahoo which indicates low risk and earns a 2 out of 5 from Morningstar for its ESG score (Yahoo!, 2023, Morningstar, n.d.). Morningstar's rating indicates moderate risk and cites business ethics as the driver for this rating.

1.a. Products and Segmentation

Vail's main product is its ski resorts and the access it brings to the mountains. Not only does Vail operate 41 resorts and regional ski areas, but it owns some of the largest resorts in the world. The four most visited resorts in the United States, Breckenridge, Vail, Park City, and Keystone, are owned by Vail Resorts Inc. as well as the tenth most visited, Beaver Creek (SEC., n.d.). The mountain segment, which encompasses ski resorts, drives the revenues for Vail. More specifically, lift tickets are the predominant source of income for the company. In 2020, 2021, and 2022 lift tickets respectively compromised 53%, 63%, and 59% of mountain segment revenues (Vail Resorts Inc., 2022). The mountain segment also includes products like rental services, dining services, and ski school.

The major lift pass product is the Epic Pass. Since the Epic Pass was launched in 2008, it has grown drastically to include numerous resorts. This pass includes access on various levels to all Vail resorts and multiple allied resorts such as Telluride, Hakuba Valley, Les 3 Vallées, and Verbier (Vail Resorts Inc., 2022). The Epic Pass creates preemptive guest commitment and ensures cash flows in years of poor snow conditions but has caused limitations to midseason ticket sales in some cases due to overcrowding. Options like the Epic Pass and other season passes create a surprisingly low effective daily ticket price of \$75.74 (Vail Resorts Inc., 2022). In 2011, Epic Mix was launched to better the on-mountain customer experience. The mobile app was designed to give riders information about on mountain events, lift and trail status, and distance skied, amongst other helpful information. Vail is also working towards putting ski passes on the app to decrease wait times at ticket windows (Vail Resorts Inc., 2022).

The lodging segment provides much of the housing for Vail's mountain visitors. In 2022, Vail owned and operated 5,900 hotel and condominium doors (SEC., n.d.). Included in the lodging segment is RockResorts, a luxury hotel brand that operates several luxury hotels near the Colorado and Utah resorts. These hotels hold high ratings for quality and have won numerous awards for their excellence. Vail also owns GLTC which offers lodging and other resort related activities in the Grand Teton National Park as well as numerous renowned golf courses. A resort ground transportation company is fully owned and provides transportation from the Denver airport to Vail's Colorado resorts. The lodging segment predominantly aims to support and complement the mountain segment to provide a comprehensive mountain experience.

The real estate segment is the smallest of Vail's operations. The Vail Resorts

Development Company is a wholly owned subsidiary but has not been profitable in recent years.

Vail does hold large amounts of real property and aims to use these to expand mountain and lodging operations as well as maintain control of architectural themes in the surrounding areas (SEC., n.d.). The real estate segment mainly sells land to third party developers and focuses on zoning and permit acquisition. Recently, Vail has been shifting towards third party developers in its real estate operations (Dtn., n.d.-b).

1.b. Target Consumer

While Vail appeals to a wide variety of individuals, the target customer tends to be one of higher income. The average household income for visitors of Vail owned resorts is over \$170,000 (Dtn, n.d.-b). Recent trends have shown that while baby boomers had contributed a large portion of skier visits, they have declined from 36.2% to 21.3% of yearly visitors over the last decade (Kekis, 2017). As baby boomers have receded, millennials have now become the largest market base but ski the fewest number of days per season. Gen Z however represents the highest share of skier visits with 34.7% (National Ski Areas Association, n.d.-c). Nationally, 63% of skiers and snowboarders are male while only 37% are female, and over 88% of visitors are white (National Ski Areas Association, n.d.-c). Among Vail's destination resorts in 2022, only 42% of visitors were locals while the other 58% were destination skiers. Conversely, visitation at Vail's regional resorts was comprised primarily of locals (SEC., n.d.).

Vail will need to continue to appeal to younger generations as the older generations age out of intense activities like skiing. While effective ticket prices are relatively low, finding ways

to provide affordable lodging could help boost engagement from millennial families. Targeting young, high income, couples and families will not only continue ticket sales, but boost lodging revenues as well.

1.c. Drivers

One major driver in attracting a larger customer base is social media. This can be used to target younger generations as they are continually exposed to videos of outdoor activities like skiing and snowboarding. The Covid-19 pandemic also motivated many individuals to get active and outside as there was not as much availability for indoor activities. This trend could continue in the coming years as it becomes more familiar to individuals. Additionally, Gen Z and millennials have been dedicating more of their income to experiences than past generations. Seventy-eight percent of millennials said they would spend their money on experiences as opposed to buying something nice, and 55% said they are spending more on events than they have in the past (Eventbrite., n.d.). This thirst for experiences should help Vail boost its engagement from millennials in the coming years. Other drivers include growth in disposable income, inbound trips by non-US residents, and domestic trips by US residents. These are expected to grow at respective rates of 1.1%, 11.53%, and 1.24% over the next five years (Berdousis, 2023). While foreign visitation will grow the most rapidly, the domestic numbers suggest consistent growth over a broader customer base.

2. Competitive Analysis

2.a. Competitive Landscape

Vail's competition can be looked at through the lens of ski resorts, or through a more encompassing one of resorts and hotels in general. Compared to ski resorts specifically, Vail dominates the industry with a 36.8% market share in the United States which has an estimated \$4.6 billion in revenues (Berdousis, 2023). The next closest competitors are Alterra (15.3%), Boyne Resorts (7.7%), and Aspen Skiing Co. (5.7%) which are all privately held firms (Berdousis, 2023). In North America there are 755 ski areas with 473 in the United States (Isaac, n.d.). These North American ski areas brought in 80.6 million skier visits in the 2021/22 season, and while Vail only operates 37 resorts in North America, it accounted for 16.2 million (20.1%) of these visits (SEC., n.d.).

The major competition to Vail's Epic Pass is the Ikon Pass offered in collaboration by Alterra Mountain Company, Aspen Skiing Company, Alta Ski Area, Boyne Resorts, Jackson Hole Mountain Resort, POWDR, and Snowbird (Alterra Mountain Company., n.d.). While the Ikon Pass provides a similar alternative to the Epic Pass, it comes at a steeper price and provides unlimited access to less than half of the total resorts when compared to the Epic Pass (Ski.com, n.d.). While Alterra is the largest partner to offer the Ikon Pass, the company must share significant profits with the other resorts. Meanwhile, Vail maintains the large majority of income from Epic Pass sales.

Vail has operations in other countries as well, with Perisher, Falls Creek, and Hotham of Australia, Whistler-Blackcomb of Canada, and recently acquired controlling stake in Andermatt-Sedrun of Switzerland. Perisher, Falls Creek, and Hotham are respectively the largest, third largest, and fifth largest Australian resorts (skiresort.info, n.d.). This gives Vail a great competitive advantage in that area of the world. While the Andermatt-Sedrun resort does not give Vail a large market share in Europe, or even Switzerland, it does provide entry into an otherwise foreign market, which could pave the path for future acquisitions. At 8,171 skiable acres, Whistler-Blackcomb is the largest ski area in North America and provides a great foothold in the Canadian market (Ski Mag Editors, 2021).

Expanding the scope to the hotels and tourism industry at large, Vail does not have the same stranglehold on the market. That being said, Vail still holds a solid position in the broadened industry. Compared to CSI Market's list of primary competitors in the hotels and tourism industry, Vail holds a 4.95% market share (CSIMarket, n.d.). However, as a percentage of total hotel industry revenues, Vail's market share is closer to 1%. Marriot leads the industry with a 41.81% market share followed by Hilton (17.61%), Hyatt (11.1%), and Intercontinental Hotels Group (7.22%) (CSIMarket, n.d.). The hotels industry in the US generated \$240 billion of revenue in 2022 and is expected to grow at an annual rate of 4.6% (Moreno Zambrano, n.d.). This industry is quite competitive in nature due to the high fixed cost and assets required to operate. For Vail specifically, barriers to entry are especially high as it is incredibly difficult to attain permits for new ski resorts.

2.b. Factor Conditions

The obvious factor condition is the abundance of mountains in the United States and Canada. Specifically, the Rocky, Sierra Nevada, and Cascade Mountain ranges provide the natural conditions needed for this type of business to exist. This includes the ideal climates in these areas that provide enough snow every year for continued operations. Access to large amounts of unskilled labor provides the opportunity to run the immense day to day operations that exist within resort and lodging activities. Existing infrastructure of ski resorts is another factor condition important to the industry and Vail. Because it is expensive and difficult to create new ski resorts, these existing infrastructures are what provide the opportunity to expand operations.

2.c. Demand

With nearly 61 million skier visits in the US during the 2021/22 ski season, the demand for Ski resorts has never been higher (National Ski Areas Association, n.d.-a). This is the highest number ever recorded and is still only recovering from the effects of the Covid-19 pandemic. Skier visits account for the total number of days skied, while the actual number of skiers in the US is closer to 11 million (National Ski Areas Association, n.d.-a). The Rocky Mountain region led the charge with over 25 million visits followed by the Northeast with nearly 13 million and the Pacific West with 11.5 million skier visits during the 2021/22 season (National Ski Areas Association, n.d.-b). This growth is expected to continue at the very least with the growth of the US population. For Vail, Skier visits tallied 14,852,000 in 2021 and increased 16.5% to 17,298,000 in 2022 (SEC, n.d.).

Travel in the United States is now reaching pre-pandemic levels with \$1.2 trillion in direct spending (US Travel Association, n.d.). Additionally, hotel room demand is expected to surpass pre-pandemic levels in 2023 with 1.3 billion occupied room nights (AHLA, 2023). There has been relatively rapid growth in the demand for hotels over recent years as the world has moved past the pandemic. However, while growth is still expected, it should slow in the coming years (Jelski, 2023).

2.d. Related and Supporting Industries

A major supporting industry for Vail is snow sport equipment. To get up on the mountain, individuals must have the gear required to ski or snowboard. In the US, skiing and snowboarding wholesale sales peaked during the 2020/21 season with a value of \$587 million (Team, K., 2022). This bodes well for continued resort visitation as owning gear will encourage skiing or snowboarding a few days a year. Similarly, ski and snowboard rentals reached an all-time high as well with a value of \$274 million during the 2021/22 season (Team, K., 2022).

Vail has major support from industries related to its development and lodging as well. One major supporting industry for Vail is development and construction, especially as Vail is steering more towards third parties for the real estate segment. With land development bringing in nearly \$12 billion in revenues and construction nearing \$2.6 trillion, there are numerous options to gain competitive bids from third party contractors (Clark, 2023). The travel agency industry also greatly supports Vail and helps secure bookings for lodging accommodations. Seeing 4% growth over the last five years, travel agencies are expected to continue steady growth as individuals travel more after the Covid-19 pandemic (Wood, 2023).

Some of Vail's major suppliers include Sysco for food and beverages, Vimeo for video software, Toyota for its vehicles, Helly Hansen for outerwear, ON24 for sales and marketing, and Cvent for marketing management (CSIMarket, n.d.). The company has also ventured further into tech as the industry has made its presence felt everywhere. One example is the Vail owned software company Resort Technology Partners which provides the resort management software for 8 of the top 10 resorts in North America (Berwyn, 2010). With technology playing a larger role in the world, staying on the forefront within the ski industry helps maintain a competitive advantage.

2.e. Competitive Advantage

Vail holds many competitive advantages against its peers. The first would be the sheer number of resorts in premier locations. While other companies certainly operate premier locations, none can compete with the amount of destination resorts Vail operates. This is a sustained competitive advantage as building a new resort is nearly impossible and acquiring a high end one is extremely costly. Another competitive advantage is the fact that many Vail resorts have all the amenities one could ask for that many other resorts cannot provide. Premier

lift operations including gondolas, high speed chairs, and the ability to seat 6 people or more provide a competitive advantage as most resorts do not provide these. Vails mountains also have the best trail and terrain park maintenance and engineers as well as the highest quality ski schools. While competitors possess these, they do not have the resources to provide the services to the extent that Vail can. While the Epic Pass has competitors like the Ikon and Mountain Collective passes, they cannot compete with the combination of skiable resorts, allowable days, and price range.

2.f. SWOT Analysis

Strengths

The biggest strength of Vails business is the incredibly high barriers to entry. The last ski resort of any notable size to be built was Tamarack Resort in Idaho in 2004, and even this resort is only 1,100 acres (Awconrad, 2022). Vail's high market share in the ski resort industry and the large amounts of cash it has on hand is a strength that other ski resort companies do not have. This cash allows a cushion in years of lower-than-expected revenues. Additionally, Vail's continued profitability, even during the pandemic, is another quality strength. Vail has also proven to be very successful at integrating other businesses and resorts into its operations, as well as maintaining customer loyalty.

Weaknesses

One weakness is that, while Vail is the leader in the ski resorts industry, the hotels industry in general is much larger, and there are still hundreds of other ski resort options. This is a competitive industry and Vail is very reliant on their mountain operations for revenues. The seasonality of Vail's operations provides another important weakness. High customer class and cost of visiting a resort means less access to the general public. High capital requirements and fixed costs are weaknesses in the industry that are difficult to avoid.

Opportunities

The rise of younger generations visiting the mountains creates an opportunity for Vail to capitalize on a youth movement. Investments in social media platforms and their influence on these generations can't be understated. Vail has already started to capitalize on this opportunity

with its Epic Mix application. Rising disposable income paired with younger generations interest in spending money on experiences creates an opportunity for Vail to garner a larger and wealthier customer base now and into the future. Additionally, as the world moves further from the pandemic, and as Vail's international operations pick up, there is an opportunity to increase foreign visitors.

Threats

Climate change presents the largest threat to Vail. The company is centered on its ski resorts, and in order to ski there needs to be snow. If snow levels were to reduce drastically, Vail would need to severely alter its business model. The Covid pandemic highlighted the threat of unforeseen events prematurely shutting down the ski season. This resulted in paybacks for the shortened season which greatly hurt the financials of the company. The looming threat of changes in government regulations could eliminate or alter the permits and leases that Vail needs to operate its resorts. Financially, Vail has large amounts of long-term debt that could pose a threat down the road if they struggle to pay it down.

3. Value Creation

3.a. Operations

Vail creates most of its value through its operations. The expansive number of lifts and accessible terrain make Vail's resorts nearly incomparable to other mountain conglomerates. Owning much of the lodging surrounding Vail's resorts creates value through the ability to control the entire travel experience of its customers. The control over dining, rental services, and ski school allows for a one-stop shop that many smaller resorts cannot provide. While Vail has faced backlash to its acquisitions of smaller ski areas, it has made an effort to maintain leadership positions of these operations. This helps maximize the value of these ski areas as incumbent individuals should have a more comprehensive understanding of the culture and operations of their respective mountains. While Vail experiences seasonal revenue swings, ownership of a wide range of resorts helps to partially offset these trends. Its Australian and Grand Teton operations are flipped with most North American operations as Australia is in the southern hemisphere and the Teton resorts mainly see visitation during the summer months. Additionally, the sale of season and Epic Passes provides security in revenues in case of a poor snow season.

Lift revenue was \$1,310,213,000 in 2022 and primarily came from the sale of tickets (Vail Resorts, 2022). Retail and rentals, ski school, and dining brought in revenues of \$311,768,000, \$223,645,000, and \$163,705,000 respectively (SEC, n.d.). Lodging operations brought in revenues of \$97,704,000 from condominiums, \$80,579,000 from hotel rooms, and \$48,569,000 from dining services as well as smaller amounts from golf courses and transportation (SEC, n.d.). The hotel rooms and condominiums perform very well on a per room basis with average daily rates (ADR) of \$309.78 and \$410.13 respectively. While many factors go into classifications of hotels, luxury resorts typically have an ADR of \$250 or more which places many of Vail's operations in this category (Smith Travel Research, n.d.).

3.b. Service

Vail has seen complaints about its service over the last few years but has recently made investments to address these issues. To limit wait times, Vail has invested heavily in updating and upgrading its lifts with 18 new or upgraded lifts in 2022 (SEC, n.d.). Additionally, many of these complaints seem to be caused by issues related to lack of employment from the Covid-19 pandemic.

3.c. Firm Infrastructure

The owned infrastructure maintains and creates large amounts of value for Vail. Amongst its hotels, condos, and resorts, Vail has the ability to sell off high value assets. In 2022, property, plant, and equipment totaled over \$2 billion. The premier location of many of the resorts as well as the highly experienced executive team further contribute value creation for the firm. Permits and lease agreements with the US government are incredibly expensive and hard to come by. With over 40 resorts in operation, these numerous agreements further provide value to the company.

3.d. VRIO Analysis

Table 1 - Tangible Resources

Resource	Valuable	Rare	Inimitable	Organized to capture value
# of mountain resorts	Yes	Yes	Yes	Yes

Prime locations	Yes	Yes	Yes	Yes
Epic mix	Yes	Yes	No	
Epic Pass	Yes	Yes	No	
Internationality	Yes	Yes	No	
Ski school	Yes	No		
High end hotels	Yes	Yes	No	

Each of the listed tangible resources in Table 1 provides value to Vail, but only a few of them provide a sustained competitive advantage. The number of mountain resorts and prime locations that Vail controls are not only rare, but due to the high costs of construction or acquisition are extremely difficult to imitate. These operations create immense value for the company. While most of the other tangible resources are rare as well, they are not incredibly difficult to imitate, limiting their ability to maintain a competitive advantage. For example, the Epic Pass can be copied through partnerships of other resorts, while many US hotel companies have international operations.

Table 2 - Intangible Resources

Resource	Valuable	Rare	Inimitable	Organized to capture value
Brand equity	Yes	Yes	Yes	Yes
Leadership	Yes	Yes	Yes	Yes
Pricing	Yes	Yes	Yes	Yes
Organizational culture	Yes	Yes	Yes	Yes
Customer experience	Yes	Yes	Yes	Yes
Quality	Yes	Yes	Yes	Yes
Loyalty	Yes	Yes	No	

With the exception of loyalty, all of Vail's intangible resources, shown in Table 2, provide the company with a sustained competitive advantage. Very few companies have the same brand recognition that Vail has within the ski industry, and this took years to build up. Additionally, Vail has a leadership team whose experience is incredibly valuable, rare, and difficult to imitate. While individual passes are very expensive, due to the number of resorts Vail owns, price to value for its Epic Pass is nearly impossible to match. Organizational culture, customer experience, and quality have all become competitive advantages through years of operations that

have created a control over the entirety of the mountain experience. Loyalty to the brand is high, but not inimitable as other hotel brands and ski resorts have acquired similar loyalty from their customer base.

4. Stock Analysis

In this section, all references to share price movement and dividend information is sourced from yahoo finance unless otherwise stated. The movement of Vail's stock, MTN, can be seen in Exhibit 2. When looking at the data of MTN over the last ten years, it can be categorized as steady growth and then high volatility. From May of 2013 until August of 2018 MTN shares increased in value from \$61.52 to \$298.05 before seeing a sharp decline to \$188.26 by the beginning of 2019. This steep fall may have been a result of larger than expected net losses during Vail's first fiscal quarter that year, although losses during the first fiscal quarter are not uncommon (Rubino, 2018). Additionally, the drop was increased due to lower-than-expected growth in pass sales (Rubino, 2018). MTN shares then leveled out before seeing another steep drop in 2019 due to the effects of the Covid-19 pandemic.

Exhibit 3 shows the same chart as Exhibit 2, however it overlays MTN's competitors' stock trends as well. The chosen competitors include Marriot International Inc. (MAR), Loews Corp (L), Hilton Worldwide Holdings (HLT), Hyatt Hotels Corp (H), Intercontinental Hotels Group Plc (IHG), and Park Hotels and Resorts Inc (PK). Although MTN saw the most initial growth over the first half of the chart, all its peers show growth as well. The crash at the end of 2018 brought MTN closer to the norm. March of 2020 had a similar tanking effect on all the analyzed companies as the nation shutting down essentially eliminated any near-term travel. Rapid growth ensued for MTN and most of the competitors, with most reaching or exceeding pre-pandemic levels in the beginning months of 2021. Loews Corp, which has a wide array of operations, did not follow the trends of the other analyzed companies. Again, MTN outpaced its competitors during this rally, peaking at \$372.51 in November of 2021. Just as the peak a few years earlier, MTN took a steep dive until it leveled out near other industry leaders share prices. The sharper incline of MTN share price in 2021 was "driven by expanding sales of its advance ski passes which led to an anticipation of quick rebound in travel demand" (Team, T., 2022). On the other hand, the decline of MTN in the beginning of 2022 coincided with general market

trends of investors becoming more bearish but was enhanced compared to its peers because of awareness of Vail's high levels of long-term debt (Team, T., 2022).

Vail began paying quarterly dividends in June of 2011, and increased the amount of the dividend every year until 2020, when it shut down many resort operations due to the pandemic. The halt in dividends was part of an initiative by then CEO Robert Katz to cut costs and save cash to try and offset the losses from stalled operations (Tseng, 2020). Included in these cost saving tactics was Katz and the board of directors forgoing their salary for 6 months and a 5%-25% pay reduction for salaried employees (Tseng, 2020). The \$1.76 dividend payments were suspended on 3/25/2020 until they picked up again on 10/4/2021 at a decreased payment of \$0.88. However, the most recent dividend payment on 3/24/2023 was the highest ever at \$2.06, continuing the trend of annual increases. The high level of long-term debt does make these dividends appear slightly questionable. Although Vail currently holds over \$1 billion dollars in cash, the dividend payments could go towards decreasing its debt obligations that have surpassed \$2.5 billion (SEC, n.d.). These dividend payments are used in a dividend growth model to value Vail, which can be seen in section 6.f..

Vail has also been repurchasing shares. When looking at its recent statement of cashflows, Vail has repurchased shares in each of the last five years except for 2021, including over \$75 million worth in 2022 (SEC, n.d.). Additionally, the board has recently increased the authorization of stock buybacks by a million shares to 3.5 million (LaConte, 2023). Stock buybacks are intended to return money to investors, but again this begs the question of whether this money could be used to pay down existing debt. It is worth noting that the increasing of dividends and authorization of buybacks does signal to investors the faith that management has in the future of the company. Buybacks specifically could be an indication that the company feels the stock is undervalued, especially after seeing a steep drop from its previous all-time high.

5. Financial Analysis

5.a. Vail Historical Analysis

The initial financial analysis of Vail Resorts Inc. is predominantly based on the financial statements of the past five years. The income statement (statement of operations), balance sheet, and statement of cash flows from 2018-2022 can be seen in Exhibits 4, 5, and 6 respectively. These financial statements were sourced from Mergent Online and transferred into Excel before

being reformatted for easier comprehension. When moving through the financial analysis, a spreadsheet of various historical ratios was created to help tell the story of Vail's financials. These can be seen in Exhibit 7.

While this analysis is not broken down quarterly, it should be noted that Vail's fiscal year begins August first. Due to the seasonal nature of ski resorts, Vail typically experiences high revenues and profit during its second and third fiscal quarters which overlap with the ski season. Conversely, the first and fourth quarter typically see lower revenues and often net losses. For example, the first quarter of this fiscal year resulted in a \$136,971,000 loss compared to a second quarter net income of \$208,679,000 (Vail Resorts Inc., 2023).

Revenue growth in 2022 was quite high at 32.27%, however this was an outlier growth rate, as the previous two years saw decreases in revenue due to the effects of the Covid-19 pandemic. 2018 and 2019 show more reasonable revenue growth rates of 5.47% and 12.93% respectively. Growth in the future could be expected to approach these numbers as pass sales have surpassed pre-pandemic levels, but retail and dining has yet to do so. The actual revenue growth lies under the sustainable growth rates for much of this period, although 2019 and 2022 see the revenue growth higher than sustainable growth rates. Continued revenue growth above the sustainable growth rate could require external financing which could be worrisome as Vail already has high levels of debt. Vail performs strongly in its profit margin with a level of 14.58% in 2022. 2020 and 2021 profit margins are lower, but Vail shows strength by staying profitable with levels of 5.55% and 6.52% respectively over the pandemic years. Much like profit margin, at 19.94% in 2022, return on equity is strong and has rebounded from lower levels during the pandemic. Additionally, return on assets has recovered some since pandemic lows but at 5.83% in 2022 has not reached pre-pandemic levels. With high levels of property, plant, and equipment, a stronger return on assets would be ideal.

Collection period has been relatively constant over the analyzed years, with 2020 being an outlier at 19.83 days. This may have been due to an increased urgency to collect payments as operations had halted. The payables period has increased over the past few years, making a big jump from 124.23 in 2019 to 216.21 in 2020. This is a bit worrisome as this means it is taking longer to pay off suppliers and the sort. If this is not resulting in extra fees, it is not much of a problem, but ideally Vail would be able to pay them back sooner.

Assets to Equity has risen to 3.42 over the past few years, which could be worrisome as a higher asset to equity ratio could mean that the assets are being attained through the issuance of debt. This checks out as debt to assets and debt to equity have increased by a wide margin over the last five years. Times interest earned (TIE), times burden covered (TBC), and times common covered (TCC) all followed similar trends over the past five years. TIE tells us whether Vail has the earnings to cover its interest expense, while TBC tells us the same plus coverage of interest-bearing debt, and TCC adds coverage of dividends to TBC. These ratios were at acceptable levels before the pandemic before dropping to dangerously low levels where Vail needed to finance its dividends payments with either the cash on hand or increased debt. In 2022 however, these ratios have recovered to levels that cover its obligations, but still leave room to be desired. The current ratio and acid test have both become more attractive since 2018 but paired with the knowledge of Vail's increased long-term debt, they are not particularly strong.

To see how dependent Vail's finances are on annual snowfall, I compared data on Denver Colorado's annual snowfall with Vail's net income. I chose Denver as it lies near many of Vail's major operations and had the most up to date, reliable, and available data. This data was sourced from Thornton Weather, which works with the National Oceanic and Atmospheric Administration (ThorntonWeather.com, n.d.). The data shows that there is not a great correlation between high snowfall and high returns and vice versa. The highest year of snowfall was in 2021 which had the second lowest net income over this five-year span (ThorntonWeather.com, n.d.). While this was a year affected by the pandemic, the highest net income year, 2018, occurred during the year with the lowest snowfall over this span (ThorntonWeather.com, n.d.). This is likely due to much of the revenue being sourced from season and Epic Pass sales.

While Vail is an international company, it is heavily reliant on its domestic operations. In 2022, internationally sourced revenue was only \$297,204,000 which accounted for just 11.76% of its total revenue (SEC, n.d.). Additionally, its international property, plant, and equipment was just \$388,652,000 which is 18.35% of total PPE (SEC, n.d.). Most of this is sourced from Canadian operations but should increase and diversify in the coming years as the Andermatt-Sedrun stake begins to show its impact on financial statements.

5.b. Peer Comparison

Exhibit 8 shows numerous key financial ratios for Vail's major competitors. The chosen competitors are mostly hotel and resort companies, not specifically ski resorts, as financial information on major ski resorts is difficult to attain due to them being privately held. The competitors were chosen based on a list provided by CSI Market. These competitors include Marriot (MAR), Loews Corp (L), Hilton (HLT), Hyatt (H), InterContinental Hotels Group (IHG), and Park Hotel and Resorts (PK). While a couple of the ratios needed to be calculated manually, the rest were sourced from Morningstar and IBISWorld.

When looking at Exhibit 8, some of the ratios jump off the page immediately. Hilton and InterContinental have more debt than assets, and thus have negative stockholders' equity. This makes ratios like leverage, return on equity, and debt to equity negative values. Overall, this is a high debt industry, which helps lighten the outlook of Vail's high debt, but negative stockholders' equity is never a good sign. All the competitors who are specifically hotel and resort companies saw higher revenue growth than Vail over the past year. Loews was the lowest, but again, has more diversified operations. These are very high numbers that are not sustainable and are a greater reflection of the increase in travel from return to normality than sustained business operations.

While Hyatt and Park have lower leverage at 3.33 and 2.24 respectively, Vail is not far behind with a value of 3.45. Higher leverage means debt is being used to finance assets and operations. While objectively these are not great numbers, given the industry context Vail is not too bad. Marriot for example is incredibly leveraged at 43.69. Vail does alright regarding its return on equity and assets, ranking second and fourth respectively amongst its listed peers. Its return on equity is likely a much healthier number than Marriot's astronomical 237.94%, as Marriot likely has low stockholders' equity due to high levels of debt. At 14.58%, Vail has the best profit margin amongst the analyzed peers. Hilton is close behind at 14.31% followed by Marriot at 11.35%. Vail does not perform as well in gross margin, ranking fifth amongst its peers. However, profit margin is the more important indicator as it is related to the bottom line. The large difference in the other companies gross and profit margins is likely due to high interest expenses from their debt levels. Vail also performs the best in EBITDA margin at 33.96%, another indication of its superior profitability to its peers.

At a level of 27.57, price to earnings for Vail is middle of the pack. This ratio is one of the main ratios used to see if a stock is trading at a fair value and lower values are more appealing. Loews has a P/E that is less than half that of Vail, and Park is not far behind at 16.89, but the rest of the peers are in a similar range. Vail's payables period is much higher than its peers at 202.82. This could be worrisome, as it may be an indication that Vail is struggling to pay back its obligations and is not taking advantage of discounts. However, if there are not additional charges, it could be an indication that Vail is using the money to pursue profitable projects. Vail again ranks in the middle for debt to equity at a level of 1.48 but given the differences in Loews' operations it would be expected for it to perform better. Hyatt and Park also perform slightly better, but the remaining peers perform significantly worse, as Marriot's ratio is 19.54 and Hilton and InterContinental have negative stockholders' equity.

Vail ranks third in times interest earned with a ratio of 4.09. Ahead of Vail is Marriot and InterContinental with ratios of 5.8 and 5.7 respectively. There is a steep drop after these three with the next closest companies being Hilton and Hyatt at 2.8. The current ratio, which is current asset over current liabilities is 1.61 for Vail. This means that selling off assets would cover their immediate liabilities. This ranks second to Park's 3.12. Marriot, Hyatt, Hilton, and Loews each have ratios under 1 which means each of those companies would not be able to cover current liabilities with the assets on hand. Overall, Vail performs well compared to its peers financially.

6. Valuation

The valuation section identifies three methods to arrive at different estimations for Vail's fair stock value. The discounted cash flow method and adjusted present value method rely on the projected free cash flows for Vail. These free cash flows were derived using pro-forma projections for the income statement and balance sheet. Estimations for Vail's costs of capital are also used to arrive at present values for Vail shares estimated fair value. Sensitivity analyses were performed to create a range of realistic estimations. The dividend growth model was also used to create an estimation of Vail's fair value. Under this method, the cumulative present value of Vail's projected future dividends is derived to come to an estimated fair value for its share price.

6.a. Pro-Forma

Pro-forma projections for the income statement can be seen in Exhibit 9. These pro-forma projections are for the years 2023-2027. While the recent average five-year growth rate for mountain and lodging services revenue is 8.56%, this was not used as the growth rate for the five-year projections. This is because these past years have been a bit volatile and other sources like IBISworld have slower projections. Instead, a growth rate of 5% was chosen. Additionally, a 7.5% growth rate was used for the retail and dining revenue growth. This was based on the historical average growth dating back to 2017. Expenses were based on historical average percentage of their respective revenue categories. Depreciation was forecasted as a historical average percentage of property, plant, and equipment. The chosen tax rate of 24.97% was based on Morningstar's most up to date listed tax rate. It can be seen that net income drops in the proforma years despite increases in revenue. For example, net income in 2022 was \$347,923,000 compared to a projected 2023 number of \$279,218,310. This is mainly due to a large gain on disposal of fixed assets in 2022 that occurred from the sale of a hotel as well as a higher tax rate. Vail will not typically be selling its hotels so there is a stark drop in the projected numbers for this line item.

The pro-forma balance sheet can be seen in Exhibit 10. Many of the line items for the balance sheet were based on historical percentage of total revenues. The other most commonly used assumption for the projections on the balance sheet was historical growth percentage of each line item. Some items like accumulated other comprehensive income were left as zero as there appeared to be a sense of randomness to them. Accounts receivable was based on the collection period, inventories were based on inventory turnover, and accounts payable were based on the payables period. Retained earnings was calculated using the prior year's retained earnings balance and adding net income then subtracting total dividends paid. These dividends were estimated by starting with \$6.00 per share payments in 2023 and increasing the dividend \$0.50 each year. The long-term debt line item was used as a plug to balance the balance sheet and help understand the level of financing Vail will need in the future. This number includes the current portion of long-term debt.

Projections for the free cash flows for 2023-2027 can be seen in Exhibit 11. While Exhibit 11 shows the base projections for Vail's free cash flows, Exhibits 12 and 13 show the projected free cash flows in a best- and worst-case scenario respectively. These will be discussed

in further detail in the valuation section. EBIT and depreciation were pulled from the pro-forma projections while the tax rate was assumed to be the same 24.97% as before as this is Morningstar's current listed tax rate for Vail. Capital expenditures were based on the pro-forma balance sheet by subtracting the prior years' property, plant, and equipment from the reference years. Net working capital was found by subtracting projected accounts payable from projected current assets. These line items were assumed to be the operating current liabilities and assets respectively. The free cash flows for each year were then calculated by adding together EBIT*(1-tax rate) and depreciation before subtracting capital expenditures and the change in net working capital. The terminal value was calculated assuming a 2.5% growth rate. This was chosen as it provides a terminal growth rate similar to what expected inflation could be (Higgins, 2007). These cash flows were then discounted to present values using the calculated weighted average cost of capital (WACC). The calculation for this number can be seen in section 6.c. The resulting total estimated present value of future Vail cash flows in the base scenario is \$10,743,302,000. The valuation numbers will be further discussed in later sections.

6.b. Beta

The beta of Vail stock was calculated to see how closely MTN follows the market. A beta of one means that the stock in question generally moves with the market. A beta over one means that the stock is more volatile than the market and a beta less than one means the opposite. To calculate beta, five years (4/23/18 - 4/23/23) of daily MTN price and return information was tracked alongside five years of daily SPY data. SPY is a leading S&P 500 exchange traded fund. This was chosen as the S&P 500 index is generally regarded as one of the best indicators of how the overall market is performing.

The standard deviation of the daily returns for both SPY and MTN was calculated in Excel as well as the correlation between the two. The beta was then calculated by multiplying MTN's standard deviation by the correlation and then dividing by SPY's standard deviation. This resulted in a value of .93855. An adjusted beta was then calculated by multiplying this value by 2/3 and adding 1/3, resulting in a value of .95901. These values are less than one, indicating that MTN stock is less volatile than the market as a whole. These results were then compared to yahoo finance who listed MTN's beta as 1.22 and Market Watch who has MTN beta listed at .93 (Yahoo, 2023, MarketWatch, n.d.).

6.c. Cost of Capital

To calculate the cost of capital, one must find the return required by investors and the return required by creditors. Finding the return required by creditors is not very difficult, as interest rates are typically listed in financial statements. For this project, the chosen cost of debt for Vail is 6.40%. This was chosen because it is the interest rate on Vail's largest portion of its long-term debt, a credit agreement loan which has an interest rate of SOFR + 1.35% (FEDERAL RESERVE BANK of NEW YORK, 2023). SOFR is the secured overnight finance rate and is beginning to be used as an alternative to LIBOR which has typically been the reference lending rate. On the other hand, the return required by investors requires some calculation.

To find the return required by investors the capital asset pricing model was used. The equation for this model is E(Ri) = Rf + Bi*(E(Rm)-Rf) where E(Ri) is the expected return, Rf is the risk-free interest rate, Rf is the beta of the asset, and Rf is the expected return of the market (Kenton, 2023). The chosen risk-free rate was 3.39% as this was the yield on 10-year constant maturity US treasury securities which, while nothing is truly riskless, is about as close as one can get (FRED, 2023). The market risk premium, which is the expected return of the market minus the risk-free rate was selected as 4.42% which was sourced from a study on market risk premiums (Graham and Harvey, 2018). The chosen beta was .93855 as was calculated in Section 6.b. This created a required return by investors of 7.54%.

The weight of debt was found to be 23.03% and the weight of equity was found to be 76.97%. These levels were calculated based on Vail's debt levels from its most recent quarterly report from January 31, 2023, and the share price and number of shares outstanding on May 14, 2023. These weights of debt and equity and their accompanying costs were then used to find Vail's WACC. The calculated WACC is 6.91% which was used in calculating the projected free cash flows. Exhibit 14 lays out the numbers used in the calculation of the WACC.

6.d. Discounted Free Cash Flows

The first method used in the valuation of Vail is the discounted free cash flows method, which produces an estimate of enterprise value, or the value of the firm. In this method, the projected free cash flows of the company for the next five years and the terminal value of these cash flows are calculated. They are then discounted to present values using the WACC to

establish the enterprise value. Then interest-bearing debt is subtracted, and excess cash is added to find the market value of equity. Excess cash in this calculation was found by finding the average cash on hand as a percent of revenues for Vail's competitors. This resulted in an average cash to revenue ratio of 20.49% compared to Vail's 43.84%. Thus, it was calculated that Vail had an excess of \$589,880,000 in cash holdings. The market value of equity was then divided by the number of shares outstanding to find an appropriate share price for the company. Exhibits 11, 12, and 13 show the results of a base, best, and worst-case scenario for the projections on Vail's future free cash flows. The assumptions used for the base case were based on the pro-forma projections for the income statement and balance sheet and can be seen on the right side of Exhibits 9 and 10 respectively. The calculation of the free cash flows is described at the end of the Pro-Forma section. For the best- and worst-case scenario, margins and growth rates in the pro-forma income statement and balance sheet were altered for better or worse. These new values were then used to calculate the best- and worst-case free cash flows before being discounted at the calculated WACC of 6.91%.

Some examples of the improved growth rates and margins for the best-case scenario proforma income statement are an increase in yearly revenue growth, decreased margins for various operating expenses, and an increase in depreciation due to increased PPE numbers. The best-case pro-forma balance sheet has higher PPE growth from increased operations and a higher payables period in the calculation of accounts payable. For the worst-case, the pro-forma income statement has lower revenue growth projections, higher operating expense margins, and lower depreciation from reduced PPE numbers. The worst-case pro-forma balance sheet has lower growth in PPE and uses a lower payables period in the calculation of accounts payable.

As shown in Exhibit 11, the base case provides a value of \$10,743,302,000 for the enterprise value. Then, to find the appropriate share price, interest-bearing debt from 2022 is subtracted and excess cash is added before being divided by the amount of shares outstanding. The chosen shares outstanding is 40,327,000 as it is the most up to date number from Vail's most recent quarterly report (Vail Resorts Inc., 2023). This provides an estimated share price of \$213.24. The share price as of May 14, 2023 is \$236.93, indicating that MTN may be overpriced.

As seen in Exhibit 12, the best-case scenario provides a present value of free cash flows of \$17,531,707,000. After adding excess cash and subtracting interest-bearing debt, this estimated equity value is divided by the number of shares outstanding. This creates an estimated share

price of \$381.57. This is significantly above the current share price. Conversely, Exhibit 13 (worst-case scenario) provides a present value of free cash flows of just \$8,185,075,000 and an estimated share price of \$149.80.

Exhibits 15 and 16 present additional sensitivity analysis of the projected free cash flows. Exhibit 15 shows the effects of different terminal value growth rates on the estimated value of Vail's share price. This sensitivity analysis tested terminal value growth rates increasing in 0.5% increments from no growth to a 3.5% terminal growth rate. A no growth terminal rate is associated with a share price of \$118.16 while a 3.5% terminal rate is associated with a share price of \$263.84. Under the initial pro-forma projections, a terminal growth rate over 3% would be needed to reach Vail's current stock price. This would be unlikely as long-term inflation usually tops out at around 3% and any company terminally outgrowing the market will eventually become the market (Higgins, 2007).

Exhibit 16 provides a sensitivity analysis of the combined effects of various WACCs used as a discount rate and the same varying terminal growth rates used in Exhibit 15. As shown in Exhibit 16, as the WACC increases, the projected share price decreases. Conversely, as the terminal growth rate increases, the associated share price increases. Thus, projected free cash flows with a discount rate of 7.5% and no terminal growth will provide an estimated share price of \$104.49. On the other extreme, projected free cash flows with a discount rate of 6% and a terminal growth rate of 3.5% provide an estimated share price of \$365.67.

6.e. Adjusted Present Value

Another way to provide a value estimation is the adjusted present value (APV) method. Under this method, projected free cash flows are discounted at a different rate than previously. The new discount rate is found using an industry average unlevered beta as opposed to Vail's beta. Additionally, the APV method includes the effect of an interest tax shield and the potential of distress costs on the value of the company (Luehrman, 1997).

Exhibit 17 shows the numbers used in the APV method. The unlevered beta was calculated by taking the industry average unlevered beta of the listed competitors. Each company's beta was unlevered by multiplying its beta by its equity to value ratio. After attaining an industry unlevered beta, an unlevered cost of equity was calculated. This came out to be 7.7%, which is greater than the calculated WACC of 6.91% that was used as the discount rate in the

discounted free cash flows method. After discounting the projected free cash flows, an unlevered value of \$9,185,941,000 is attained. Then the interest tax shield for each projected year and the terminal value is calculated by multiplying projected interest expenses from the pro-forma income statement by the tax rate of 24.97%. These values are also discounted using the unlevered cost of equity, providing a present value of the interest tax shield of \$877,984,000.

Distress costs were found by multiplying the probability of financial distress by the value of Vail with the interest tax shield and the loss of value if financial distress occurs. The 30% loss of value was attained from an article describing distress costs in the hotels industry (Singh, 2021). The probability of distress of 6.91% was attained through a table relating bond ratings to the five-year probability of default (Macreadie, 2022). The 6.91% related to BB rated bonds which is Vail's current bond rating (Cbonds, 2022). This created an estimated financial distress cost of \$186,887,000. Combined with the value of Vail with the tax shield, provides an APV of \$9,877,038,000 and an implied share price of \$191.75. This is less than the base case present value of projected free cash flows which resulted in a value of \$10,869,637,000 and a share price of \$213.24. While the tax shield increased the value, the increased discount rate and distress costs are what make it lower.

6.f. Dividend Growth Model

Because of Vail's solid history of dividend payments, the dividend growth model was used as another method to create a valuation. Using this model, Vail's price was estimated by projecting its future dividend payments and discounting them back to present day values. Before the recent pause and resumption of Vail's dividends, the company had historically raised dividends by an average of 38.17% per year. While this is a high growth rate, this number was used as one of the starting points for this valuation.

To calculate a share price using the dividend growth model, the most recent full year of dividends was assumed to grow over the next year at the historical growth rate of 38.17%. This resulted in an expected total dividend of \$10.56 for next year. This dividend was then assumed to grow at respective rates of 30%, 20%, 10%, and 5% over the proceeding four years. Dividends were then assumed to perpetually grow at an interest rate of 2.5%. These future dividends as well as the perpetual growth were then discounted back to present day values using the cost of equity of 7.54% seen in Exhibit 14. This resulted in an estimated share price of \$250.67. Additionally,

the dividend growth was used under the assumption of earlier implementation of perpetual growth. In this scenario, next year's dividends were projected using the historical growth rate of 38.17%, but all following dividends were expected to grow at 2.5%. This resulted in an estimated share price of \$209.52.

7. Conclusion and Recommendation

Although the estimated share price in the base scenario is below Vail's current price, I recommend a hold on MTN. Vail's current operations stance in the industry seem to present more upside going forward than downside, which puts a greater weight on its best-case scenario projections. Specifically, Vail is a strong company that has maintained profitability in trying times. It holds a dominating market share on the ski resort industry and performs well amongst its peers in the hotels industry. Consistent dividends provide a comforting source of income for investors, and the trend of yearly increases appears to be continuing. Continued expansion in international markets will help further the company's control and ability to increase profitability through scale and diversity of markets. While Vail has challenges such as its increasing debt and labor concerns, it has shown in the past the ability to overcome adversity and excess cash will provide a cushion in poor performing years. Ownership of prime locations in the domestic market and growth in Epic Pass sales provide security of revenues in years of low snow. While climate change is a major threat to the core of Vail's operations, Vail maintains the ability to transition its resorts to other outdoor activities and projects if climate change reaches further extremes.

References

- About Us. About Us | Vail Resorts Hospitality. (n.d.). Retrieved May 7, 2023, from https://news.hospitality.vailresorts.com/lodging/vailresorts-hospitality/about-us/
- AHLA. (2023). *A New Era for US Hotels*. ahla.com. https://www.ahla.com/sites/default/files/AHLA%20SOTI%20Report%202022%201.24.22. pdf
- Australia: Biggest Ski Resorts. skiresort.info. (n.d.). Retrieved May 8, 2023, from https://www.skiresort.info/ski-resorts/australia/sorted/slope-length/
- Average market risk premium in the U.S. 2011-2022. Statista. (2022, July 4). Retrieved May 8, 2023, from https://www.statista.com/statistics/664840/average-market-risk-premium-usa/
- Awconrad. (2022, April 4). *Complete list of future ski resorts of North America (15 proposed projects)*. Unofficial Networks. Retrieved May 8, 2023, from https://unofficialnetworks.com/2021/04/29/north-americas-unbuilt-ski-resorts/
- Berdousis, D. (2023, February). *Ski and Snowboard Resorts in the US*. IBISWorld. https://www.ibisworld.com/
- Berwyn, B. (2010, January 14). *Vail-owned software firm Dominates Resort Scene*. VailDaily.com. Retrieved May 8, 2023, from https://www.vaildaily.com/news/vail-owned-software-firm-dominates-resort-scene/
- Bruton, M. (2022, October 12). *How the ski and snowboard industry is changing in 2022 (and What comes next)*. Forbes. Retrieved May 7, 2023, from https://www.forbes.com/sites/michellebruton/2022/04/27/how-the-ski-and-snowboard-industry-is-changing-in-2022-and-what-comes-next/
- Cbonds. (2022, April 15). S&P Global Ratings affirms Vail Resorts at "BB" (local currency lt credit rating); Outlook stable. https://cbonds.com/news/1772999/#:~:text=Get%20access-,S%26P%20Global%20Ratings%20affirms%20Vail%20Resorts%20at%20%22BB%22%20(Local,credit%20rating)%3B%20outlook%20stable&text=S%26P%20Global%20Ratings%20affirmed%20the,The%20outlook%20is%20stable.&text=Vail%20Resorts%2C%20Inc
- Chris, D. (2020, December 12). *Vail Resorts CEO apologizes for 'unacceptable' customer service waits*. AspenTimes.com. Retrieved May 7, 2023, from https://www.aspentimes.com/news/vail-resorts-ceo-apologizes-for-unacceptable-customer-service-waits/
- Clark, C. (2023, January). *Land Development in the US*. IBISWorld. https://www.ibisworld.com/industry-statistics/market-size/land-development-united-states/

- Dtn. (n.d.-a). *Our company profile*. Vail Resorts Management Company | Company Profile. Retrieved May 7, 2023, from http://www.vailresorts.com/Corp/info/company-profile.aspx
- Dtn. (n.d.-b). *Our strategies*. Vail Resorts Management Company | Strategies. http://www.vailresorts.com/Corp/info/strategies.aspx
- Dtn. (n.d.-c). *Senior executives*. Vail Resorts Management Company | Senior Executives. Retrieved May 8, 2023, from http://www.vailresorts.com/Corp/info/senior-executives.aspx
- Epic pass vs. Ikon Pass. Ski.com. (n.d.). Retrieved May 8, 2023, from https://www.ski.com/epic-vs-ikon
- Eventbrite. (n.d.). *Millennials fueling the experience economy*. Retrieved May 8, 2023, from https://eventbrite-s3.s3.amazonaws.com/marketing/Millennials_Research/Gen_PR_Final.pdf
- Graham, J. R., & Harvey, C. R. (2018, April 2). *The Equity Risk Premium in 2018*. SSRN. https://deliverypdf.ssrn.com/delivery.php?ID=326006000126027086121110089126114014 0390760720080610491030701201200010031271091020310490410971060460290270000 7008200008610011403300003803901408608011801602501000502206312203102810907 5113104030107116112087104087008113001026069071065121118088029029&EXT=pdf &INDEX=TRUE
- HIGGINS, R. (2007). *Analysis for Financial Management* (10th ed.). MCGRAW-HILL EDUCATION.
- Introducing the ikon pass: Uniting north america's Premier Mountain destinations. Alterra Mountain Company. (n.d.). Retrieved May 8, 2023, from https://www.alterramtnco.com/news/introducing-the-ikon-pass
- Isaac, A. (n.d.). *US Ski Resorts in Operation During 2021/22 Season*. nsaa.org. Retrieved May 8, 2023, from https://nsaa.org/webdocs/Media Public/IndustryStats/ski areas per season thru 2022.pdf
- Jelski, C. (2023, January 28). *Hotels are going strong, but is there trouble up ahead?*. Travel Weekly. https://www.travelweekly.com/Travel-News/Hotel-News/Economy-could-drag-down-hotel-demand
- Kekis, J. (2017, January 11). *Ski Industry Targeting Millennials to replace Baby Boomer Business*. Boston.com. Retrieved May 7, 2023, from https://www.boston.com/sports/skiing/2017/01/11/ski-industry-targeting-millennials/
- Kenton, W. (2023, April 5). What is the Capital Asset Pricing Model (CAPM)? Investopedia. Retrieved May 8, 2023, from https://www.investopedia.com/terms/c/capm.asp

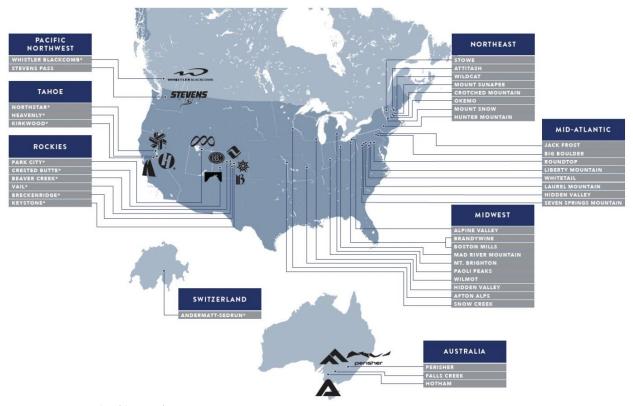
- LaConte, J. (2023, March 23). *Vail resorts to get more aggressive in pursuing stock buybacks*. VailDaily.com. Retrieved May 8, 2023, from https://www.vaildaily.com/news/vail-resorts-to-get-more-aggressive-in-pursuing-stock-buybacks/
- Luehrman, T. A. (1997, May-June). Using APV: A Better Tool for Valuing Operations. *Harvard Business Review*, 145-154. Retrieved May 19, 2023
- Macreadie, M. (2022, September 13). *S&P default rates and the risks in Bond investing*. Firstlinks. https://www.firstlinks.com.au/default-rate-study-risks-bonds
- Market yield on U.S. Treasury securities at 10-year constant maturity, quoted on an investment basis. FRED. (2023, May 19). https://fred.stlouisfed.org/series/DGS10
- Mergent Online. (n.d.). *Vail Historical Financials*. Mergentonline.com. Retrieved May 8, 2023, from https://mergentonline.com/
- Meyer, J. (2022, January 28). *Backlash against Vail resorts growing among skiers and snowboarders across the country*. The Denver Post. Retrieved May 7, 2023, from https://www.denverpost.com/2022/01/28/vail-resorts-complaints-epic-pass-staffing-colorado/
- Moreno Zambrano, A. (n.d.). *Hotels and Motels in the US*. IBISWorld. https://www.ibisworld.com/
- Morningstar. (n.d.). *Park Hotels & Resorts Inc PK Valuation*. Morningstar, Inc. Retrieved May 8, 2023, from https://www.morningstar.com/stocks/xnys/pk/valuation
- Morningstar. (n.d.). *Vail Resorts Inc Mtn Sustainability*. Morningstar, Inc. Retrieved May 8, 2023, from https://www.morningstar.com/stocks/xnys/mtn/sustainability
- MTN Company Profile. CSIMarket. (n.d.). Retrieved May 7, 2023, from https://csimarket.com/stocks/at_glance.php?code=MTN
- MTN stock price: Vail Resorts Inc.. stock quote (U.S.: NYSE). MarketWatch. (n.d.). Retrieved May 8, 2023, from https://www.marketwatch.com/investing/stock/MTN
- National Ski Areas Association. (n.d.-a). *Estimated Snowsports Paricipants*. nsaa.org. Retrieved May 8, 2023, from https://nsaa.org/webdocs/Media_Public/IndustryStats/active_US_participants_1996-97_2021-22.pdf
- National Ski Areas Association. (n.d.-b). *Historical Skier Visits*. nsaa.org. Retrieved May 8, 2023, from https://nsaa.org/webdocs/Media_Public/IndustryStats/Historical_Skier_Days_1979_2022.p df

- National Ski Areas Association. (n.d.-c). *US Downhill Snowsports Participants Demographics* 2021/22. nsaa.org. Retrieved May 8, 2023, from https://nsaa.org/webdocs/Media_Public/IndustryStats/Skier_Demographics_2022.pdf
- Rubino, J. (2018, December 10). *Vail Resorts Stock took Epic tumble Friday*. The Denver Post. Retrieved May 8, 2023, from https://www.denverpost.com/2018/12/09/vail-resorts-stock-down/
- SEC filing: Vail Resorts, Inc.. SEC Filing | Vail Resorts, Inc. (2023). https://investors.vailresorts.com/node/21656/html
- SEC. (n.d.). *Heavenly Resort Permitting*. Edgar filing documents for 0000812011-21-000069. Retrieved May 8, 2023, from https://www.sec.gov/Archives/edgar/data/812011/000081201121000069/0000812011-21-000069-index.htm
- SEC. (n.d.). *Vail 2022 10-K*. sec.gov. Retrieved May 8, 2023, from https://www.sec.gov/ix?doc=%2FArchives%2Fedgar%2Fdata%2F812011%2F000081201 122000040%2Fmtn-20220731.htm
- Secured overnight financing rate data. Secured Overnight Financing Rate Data FEDERAL RESERVE BANK of NEW YORK. (2023). https://www.newyorkfed.org/markets/reference-rates/sofr
- Singh, A. (2021, May 31). *Hotels in financial distress and their resolution*. Boston Hospitality Review. https://www.bu.edu/bhr/2021/05/31/hotels-in-financial-distress-and-their-resolution/
- Ski Mag Editors. (2021, January 27). *The 7 biggest ski resorts in North America ski mag ski magazine*. skimag.com. https://www.skimag.com/ski-resort-life/seven-biggest-resorts-in-north-america/
- Smith Travel Research. (n.d.). *A class tale: Luxury hotels around the world*. STR. Retrieved May 8, 2023, from https://str.com/data-insights-blog/class-tale-luxury-hotels-around-world
- Team, K. (2022, August 30). *The state of us skiing and snowboarding: 2022-2023*. Kenver. Retrieved May 7, 2023, from https://kenver.com/blogs/news/state-snow-sports
- Team, T. (2022, April 26). *Why did investors turn bearish on Vail Resorts Stock?* Forbes. Retrieved May 8, 2023, from https://www.forbes.com/sites/greatspeculations/2022/04/25/why-did-investors-turn-bearish-on-vail-resorts-stock/
- ThorntonWeather.com. (n.d.). *Thorntonweather.com Denver and Thornton, Colorado weather with realtime conditions, radar, forecasts, analysis, trends and historical data*.

 ThorntonWeather.com Denver and Thornton, Colorado weather with realtime conditions,

- radar, forecasts, analysis, trends and historical data. Retrieved May 8, 2023, from https://www.thorntonweather.com/
- *Topic: Winter Sports.* Statista. (n.d.). Retrieved May 7, 2023, from https://www.statista.com/topics/1770/winter-sports/
- Tseng, A. (2020, April 5). What to do with Vail Resorts now that it suspended its dividend. The Motley Fool. Retrieved May 8, 2023, from https://www.fool.com/investing/2020/04/05/what-to-do-with-vail-resorts-suspended-dividend.aspx
- US Travel Association. (n.d.). *The State of the Travel Industry*. ustravel.org. https://www.ustravel.org/sites/default/files/2023-01/2023frameworkandstrategicpriorities.pdf
- Vail Resorts reports fiscal 2022 fourth quarter and full year results, provides fiscal 2023 outlook and announces 2023 capital plan. Vail Resorts, Inc. (2022, September 28). https://investors.vailresorts.com/news-releases/news-release-details/vail-resorts-reports-fiscal-2022-fourth-quarter-and-full-year#:~:text=Resort%20net%20revenue%20was%20%242%2C525.2,%241%2C907.9%20 million%20for%20fiscal%202021
- Vail. (n.d.). Vail Resorts Management Company: Accounts Receivable. Vail Resorts Management Company | Accounts Receivable. Retrieved May 7, 2023, from http://www.vailresorts.com/Corp/info/accountsreceivable.aspx
- Wood, G. (2023, January). Travel Agencies in the US. IBISWorld. https://www.ibisworld.com/
- Yahoo! (2023, May 8). *Vail Resorts, Inc. (MTN) company profile & facts*. Yahoo! Finance. Retrieved May 7, 2023, from https://finance.yahoo.com/quote/MTN/profile
- Yahoo! (2023, May 8). *Vail Resorts, Inc. (MTN) valuation measures & financial statistics*. Yahoo! Finance. Retrieved May 8, 2023, from https://finance.yahoo.com/quote/MTN/keystatistics

Exhibit 1: Vail Resort Locations



Source: SEC. (n.d.). *Vail 2022 10-K*

Exhibit 2: MTN Share Price Chart



Source: Yahoo! Finance





Source: Yahoo! Finance

Exhibit 4: Vail Historical Income Statement

Canca	li <i>d</i>	Vail Resorts ated Statemen	_							
				Share Amount	e)					
Year ended July 31,	15 a	2018	1 6	2019	· ·	2020		2021		2022
Net revenue:	Н		Н		Н		Н		Н	
Mountain & lodging services & other	\$	1,584,310	¢	1,807,930	\$	1,578,463	\$	1,650,055	\$	2,116,547
Mountain & lodging retail & dining	Φ	423,255	Φ	462,933	'D	380,394	Ф	257,885	Ф	408,657
Resort net revenue		2,007,565		2,270,863		1,958,857	Н	1,907,940	Н	
Real estate revenue		3,988		712	H	4,847	Н	1,770		2,525,204 708
		2,011,553		2,271,575	Н		Н	1,909,710		2,525,912
Total net revenue Operating expense		2,011,333		2,2/1,3/3		1,963,704		1,909,710	Н	2,323,912
• • •		966,566		1,101,670		1,019,437	Н	960,453	Н	1,180,963
Mountain & lodging operating expense	1.4					159,066	Н		Н	162,414
Mountain & lodging retail & dining cost of products so	la	174,105		190,044		· ·	Н	112,536	Н	
General & administrative expenses	Н	251,806	Н	274,415	Н	278,695	Н	296,993	Н	347,493
Resort operating expense		1,392,477		1,566,129		1,457,198	Н	1,369,982	Н	1,690,870
Real estate, net		3,546 1,396,023		5,609 1,571,738	H	9,182	Н	6,676 1,376,658		5,911 1,696,781
Total segment operating expense		1,390,023		1,3/1,/36		1,466,380	Н	1,3/0,038	Н	1,090,781
Other operating (expense) income:		204.462		210 117	H	240.572	Н	252 595	Н	252 201
Depreciation & amortization expense		204,462		218,117	H	249,572	Н	252,585	Н	252,391
Gain on sale of real property		515		580	H	207	Н	324	Н	1,276
Asset impairments		1054		(5.0.5)	H	28,372	Н	- (1.1.102)	Н	(20.200)
Change in estimated fair value of contingent considerati				(5,367)	H	2,964	H	(14,402)	H	(20,280)
Gain (loss) on disposal of fixed assets & other assets, ne	t	(4,620)		(664)		838	Н	(5,373)		43,992
Income (loss) from operations		408,817		476,269	H	223,389	H	261,016	Н	601,728
Interest expense, net		63,226		79,496	H	106,721	H	151,399	Н	148,183
Mountain equity investment income, net		1,523		1,960		1,690	H	6,698		2,580
Investment income & other income, net		1,944		3,086	H	1,305	H	586		3,718
Foreign currency gain (loss) on intercompany loans		(8,966)		(2,854)	H	(3,230)	H	8,282		(2,682)
Income (loss) before provision for income taxes		340,092		398,965	H	116,433	H	125,183		457,161
Provision (benefit) for income taxes		(61,138)		75,472	L	7,378	H	726		88,824
Net income (loss)		401,230		323,493	L	109,055	L	124,457	Ш	368,337
Net income (loss) attributable to noncontrolling interests		(21,332)		(22,330)		(10,222)		3,393		(20,414)
Net income attributable to Vail Resorts, Inc.	\$	379,898	\$	301,163	\$	98,833	\$	127,850	\$	347,923
Per share amounts:							L			
Weighted average shares outstanding - basic		40,397,000		40,349,000		40,273,000		40,301,000		40,465,000
Weighted average shares outstanding - diluted		41,618,000		41,158,000		40,838,000		40,828,000		40,687,000
Year end shares outstanding		40,527,000		40,341,000		40,225,000		40,425,000		40,281,000
Net income (loss) per share - basic	\$	9.40	\$	7.46	\$	2.45	\$	3.17	\$	8.60
Net income (loss) per share - diluted	\$	9.13	\$	7.32	\$	2.42	\$	3.13	\$	8.55
Cash dividends declared per share	\$	5.05	\$	6.46	\$	5.28	\$	-	\$	5.58
Number of full time employees		6,100		6,600	L	7,300		6,100	Ш	6,900
Number of seasonal employees		27,200		31,900		36,200		40,200		38,100

Source: Mergent Online

Exhibit 5: Vail Historical Balance Sheet

Vail Resorts, Inc.

July 31, Assets Current Assets:	\$	nsolidated B (In Thou 2018	sar		2020		
Assets	\$,	_	-	2020		
Assets	\$	2018		2019	2020		
	\$				2020	2021	2022
Current Assets:	\$						
	\$						
Cash & cash equivalents		178,145	\$	108,850	\$ 390,980	\$ 1,243,962	\$ 1,107,427
Restricted cash		6,895		9,539	11,106	14,612	18,680
Accounts receivable, net		230,829		270,896	106,664	345,408	383,425
Inventories, net		85,588		96,539	101,856	80,316	108,723
Other current assets		37,279		42,116	54,482	61,288	173,277
Total current assets		538,736		527,940	665,088	1,745,586	1,791,532
Property, plant & equipment, net		1,627,219		1,842,500	2,192,679	2,067,876	2,118,052
Real estate held for sale & investment		99,385		101,021	96,844	95,615	95,983
Goodwill, net		1,475,686		1,608,206	1,709,020	1,781,047	1,754,928
Intangible assets, net		280,572		306,173	314,776	319,110	314,058
Operating right-of-use assets		-		-	225,744	204,716	192,070
Deferred charges & other assets		43,386		40,237	40,081	37,106	51,405
Total Assets	\$	4,064,984	\$	4,426,077	\$ 5,244,232	\$ 6,251,056	\$ 6,318,028
Liabilities and Stockholders' Equity							
Current Liabilities:							
Accounts payable & accrued liabilities	\$	504,533	\$	607,857	\$ 499,108	\$ 815,472	\$ 942,830
Income taxes payable		50,632		62,760	40,680	48,812	104,275
Long-term debt due within one year		38,455		48,516	63,677	114,117	63,749
Total current liabilities		593,620		719,133	603,465	978,401	1,110,854
Long-term debt, net		1,234,277		1,527,744	2,387,122	2,736,175	2,670,300
Operating lease liabilities		-		-	217,542	190,561	174,567
Other long-term liabilities		291,506		283,601	270,245	264,034	246,359
Deferred income taxes, net		133,918		168,759	234,191	252,817	268,464
Total Liabilities		2,253,321		2,699,237	3,712,565	4,421,988	4,470,544
Stockholders' Equity:							
Common stock		460		461	464	466	467
Exchangeable shares		1		1	-	-	-
Additional paid-in capital		1,137,467		1,130,083	1,131,624	1,196,993	1,184,577
Accumulated other comprehensive income (loss)		(2,227)		(31,730)	(56,837)	27,799	10,923
Retained earnings (accumulated deficit)		726,722		759,801	645,902	773,752	895,889
Treasury stock, at cost		272,989		357,989	404,411	404,411	479,417
Total Vail Resorts, Inc. stockholders' equity (def	cit)	1,589,434		1,500,627	1,316,742	1,594,599	1,612,439
Noncontrolling interests		222,229		226,213	214,925	234,469	235,045
Total Stockholders' Equity		1,811,663		1,726,840	1,531,667	1,829,068	1,847,484
Total Liabilities and Stockholders' Equity	\$	4,064,984	\$	4,426,077	\$ 5,244,232	\$ 6,251,056	\$ 6,318,028

Source: Mergent Online

Exhibit 6: Vail Historical Statement of Cash Flows
Vail Resorts, Inc.

Va	il Resor	ts, Inc.								
Consolidated	Stateme	nts of Cash Flo	ws							
	In Thous	ands) 2018		2019		2020		2021		2022
Year ended July 31, Cash flows from operating activities:	_	2018	Н	2019		2020	Н	2021	Н	202.
Net income (loss)	s	401,230	\$	323,493	\$	109,055	S	124,457	\$	368,337
Adjustments to reconcile net income to net cash provided by operating activities:	9	401,230	Ψ	323,473	Ψ	107,033	۳	12-1,-137	Ψ	300,337
Depreciation & amortization	_	204,462	Н	218,117		249,572	Н	252,585	Н	252,391
•		204,402	Н	210,117		28,372	Н	232,363	Н	232,391
Asset impairments	-	3,701	Н	-		3,684	Н	-	Н	
Cost of real estate sales	_	19,040	Н	19,856			Н	24,395	Н	24,885
Stock-based compensation expense			Н			21,021	Н		Н	(9,390)
Deferred income taxes, net		(45,770)	Н	22,419		17,435	Н	(16,136)	Н	
Loss (gain) on disposal of fixed assets	-	5 722	Н	5 752		5 772	Н	-	Н	(43,992)
Canyons obligation interest expense	-	5,723	Н	5,752		5,773	Н		Н	20.200
Change in fair value of contigent consideration	-	(1,854)	H	5,367		(2,964)	H	-	Н	20,280
Foreign currency gain	_	8,966	H	2,854		3,230	H	-	Н	-
Loss (gain) on sale of real property	_	(515)	H	(580)		(207)	Н	-	Ш	-
Other non-cash expense (income), net	_	(13,784)	Н	(13,875)		(16,674)	Н	12,544	Ш	3,510
Restricted cash		3,139	Ш	-		-	Ш	-	Ш	-
Changes in assets and liabilities, net of effects of acquisitions:			Ш				Ш		Ш	
Accounts receivable, net		(44,261)	Ш	(35,406)		167,347	Ш	(237,188)	Ш	(39,010)
Inventories, net		(963)	Ш	(7,274)		(1,924)	Ш	22,781	Ш	(28,048)
Accounts payable & accrued liabilities		1,879		23,296		(82,394)	Ш	118,979	Ш	41,078
Deferred revenue		42,007		35,628		(98,003)	Ш	199,410		48,973
Income taxes payable - excess tax benefit from share award plans		(71,077)		(12,932)		(8,236)		(18,096)		(17,042)
Income taxes payable - other		38,453		38,773		(4,951)		29,946		98,349
Other assets & liabilities, net		1,249		8,743		4,814		11,573		(9,822)
Net cash flows from operating activities		551,625		634,231		394,950		525,250		710,499
Cash flws from investing activities:							П		П	
Capital expenditures		(140,611)		(192,035)		(172,334)	П	(115,097)	П	(192,817)
Acquisition of businesses		(1,356)		(419,044)		(327,555)	П	-	П	(116,337)
Deposit for future acquisition of business		-		-		-	П	-	П	(114,414)
Cash received from disposal of fixed assets		-	П	-		-	П	-	П	66,264
Cash received from sale of real property		515	П	-		-	П	-	П	-
Other investing activities, net		6,873		15,045		7,150	П	11,768	П	9,387
Net cash flows from investing activities		(134,579)	П	(596,034)		(492,739)	Н	(103,329)	П	(347,917)
Cash flows from financing activities:		-	П	-		-	Н	-	Н	-
Proceeds from borrowings under Vail Holdings credit agreement		225,000	П	543,625		892,625	Н	-	П	-
Proceeds from borrowings under Whistler credit agreement		46,513	Н	26,518		209,634	Н	27,775		
Proceeds from borrowings under 0.0% convertible notes		- 10,515	Н	20,510		207,051	H	575,000	Н	
Proceeds from borrowings under 6.25% notes		-	Н	-		600,000	Н	-	Н	
Repayments of borrowings under Vail Holdings credit agreement		(182,500)	Н	(235,625)		(811,875)	Н	(62,500)		(62,500)
Repayments of borrowings under Whistler credit agreement		(91,941)	Н	(45,060)		(204,032)	Н	(45,657)	Н	(32,633)
		(21,241)	Н	(43,000)		(204,032)	Н	(43,037)	Н	(51,500)
Repayment of EB-5 development notes Employee taxes paid for share award exercises	_	(104,077)	Н	(27,239)		(19,478)	H	(39,090)	H	(37,300)
	_	(25,800)	Н	(85,000)		(46,422)	Н	(32,020)	Н	(75,006)
Repurchases of common stock		(204,161)	Н	(260,567)		(212,732)	Н		Н	(225,786)
Dividends paid	_	112 - 125	Н			(24 40 -	Н	(20,866)	Н	
Other financing activities, net	_	(13,749)	Н	(16,210)		(31,487)	Н		Н	(8,411)
Net cash flows from financing activities	-	(350,715)	Н	(99,558)		376,233	Н	434,662	Н	(493,136)
Effect of exchange rate on cash, cash equivalents & restricted cash	-	-	Н	(5,290)	Н	5,253	Н	(95)	H	(1,913)
Net (decrease) increase in cash, cash equivalents & restricted cash		-	H	(66,651)	Н	283,697	H	856,488	H	(132,467)
Cash, cash equivalents & restricted cash		107.660	6	185,040	6	110 200	e	402,086	6	1,258,574
				185 (140)	\$	118,389	- \$	407 (DX6)	\$	1 / 3 × 3 / 4
Beginning of period	\$	127,662	\$				_			
Beginning of period End of period Cash paid for interest	s s	185,040 53,842	\$		\$	402,086 88,398	\$	1,258,574 125,667	\$	1,126,107 114,074

Taxes paid (refunded), net
Source: Mergent Online

Exhibit 7: Vail Historical Ratios

	2018	2019	2020	2021	2022
Revenue Growth	5.47%	12.93%	-13.55%	-2.75%	32.27%
Profit Margin	19.95%	14.24%	5.55%	6.52%	14.58%
Retention Ratio	49.12%	19.45%	-95.07%	100.00%	38.70%
Asset Turnover	0.49	0.51	0.37	0.31	0.40
Leverage	2.26	2.44	3.04	4.08	3.45
Sustainable Growth Rate	10.95%	3.47%	-6.00%	8.13%	7.79%
Return on Equity	22.15%	18.73%	7.12%	6.80%	19.94%
Return on Assets	9.87%	7.31%	2.08%	1.99%	5.83%
Profit Margin	19.95%	14.24%	5.55%	6.52%	14.58%
Gross Margin	20.32%	20.97%	11.38%	13.67%	23.82%
Price to Earnings	29.45	33.05	78.38	96.28	27.57
Fixed-Asset Turnover	1.24	1.23	0.90	0.92	1.19
Inventory Turnover	16.31	16.28	14.40	17.14	15.61
Collection Period	41.88	43.53	19.83	66.02	55.41
Days Sales in Cash	32.32	17.49	72.67	237.76	160.03
Payables Period	131.91	141.16	124.23	216.21	202.82
Assets to Equity	2.24	2.56	3.42	3.42	3.42
Debt to Assets	31.31%	35.61%	46.73%	45.60%	43.27%
Debt to Equity	0.70	0.91	1.60	1.56	1.48
Times Interest Earned	6.38	6.02	2.09	1.83	4.09
Times Burden Covered	3.71	4.03	1.34	1.04	3.03
Times Common Covered	1.15	1.45	0.61	0.09	1.59
Current Ratio	0.91	0.73	1.10	1.78	1.61
Acid Test	0.76	0.60	0.93	1.70	1.51

Exhibit 8: Peer Comparison

	MTN	MAR	L	HLT	Н	IHG	PK
Revenue Growth	32.27%	49.91%	-0.52%	51.57%	94.55%	33.88%	83.63%
Leverage	3.45	43.69	5.17	-18.89	3.33	-2.54	2.24
Return on Equity	19.94%	237.94%	6.24%	-113.88%	12.53%	-17.89%	3.69%
Return on Assets	5.83%	9.36%	1.29%	8.11%	3.65%	8.40%	1.66%
Profit Margin	14.58%	11.35%	7.21%	14.31%	7.72%	9.64%	6.48%
Gross Margin	23.82%	21.94%	43.79%	30.75%	21.86%	28.01%	27.71%
Price to Earnings	27.57	24.1	13.57	32.68	28.82	34.25	16.89
Asset Turnover	0.40	0.82	0.18	0.57	0.47	0.87	0.26
Payables Period	202.82	16.57	59	19.29	40.56	17	37.95
Debt to Equity	1.48	19.54	0.62	-8.00	0.93	-1.72	1.12
Times Interest Earned	4.09	5.80	2.20	2.80	2.80	5.70	1.20
Current Ratio	1.61	0.45	0.23	0.85	0.68	1.09	3.12
EBITDA Margin	33.96%	18.29%	15.40%	26.34%	16.53%	20.94%	27.55%

Source: Morningstar, IBISWorld

Exhibit 9: Pro-forma Income Statement

	ail Resorts In	с.					
Pro Forma Conso	lidated Statem	ent of Operati	ons				
	In Thousands)					
Year ended July 31.	2023	2024	2025	2026	2027		Assumptions
Net revenue:							
Mountain & lodging services & other	2,222,374	2,333,493	2,450,168	2,572,676	2,701,310	5.00%	Historical and projected growth
Mountain & lodging retail & dining	439,309	472,261	507,684	545,765	586,701	7.50%	AVG growth %
Resort net revenue	2,661,684	2,805,754	2,957,852	3,118,441	3,288,011		
Real estate revenue	500	500	500	500	500		Guess
Total net revenue	2,662,184	2,806,254	2,958,352	3,118,941	3,288,511		
Operating expense:							
Mountain & lodging operating expense	1,335,790	1,402,580	1,472,709	1,546,344	1,623,661	60.11%	AVG % of services revenue
Mountain & lodging retail & dining cost of products sold	182,212	195,879	210,572	226,366	243,345	41.48%	AVG % of retail/dining revenue
General & administrative expenses	357,263	376,597	397,009	418,560	441,316	13.42%	AVG % of net revenue
Resort operating expense	1,875,265	1,975,056	2,080,289	2,191,270	2,308,323		
Real estate, net	2,017	2,017	2,017	2,017	2,017	403.43%	AVG % Real estate rev
Total segment operating expense	1,877,282	1,977,073	2,082,306	2,193,287	2,310,340		
Other operating (expense) income:							
Depreciation & amortization expense	268,471	287,916	308,768	331,131	355,113	11.82%	AVG % of PPE
Gain on sale of real property	500	500	500	500	500		Guess
Gain (loss) on disposal of fixed assets & other assets, net	6,624	6,982	7,361	7,760	8,182	0.25%	AVG % of net rev
Income (loss) from operations	523,554	548,747	575,138	602,783	631,740		
Interest expense, net	137,690	147,713	159,951	174,796	192,721	5.02%	AVG % of interest-bearing debt
Mountain equity investment income, net	3,732	3,934	4,147	4,372	4,610	0.14%	AVG % of net revenue
Investment income & other income, net	2,539	2,676	2,821	2,974	3,136	0.10%	AVG % of net revenue
Income (loss) before provision for income taxes	392,134	407,645	422,156	435,334	446,765		
Provision (benefit) for income taxes	97,916	101,789	105,412	108,703	111,557	24.97%	Most recent tax rate morningstar
Net income (loss)	294,218	305,856	316,743	326,631	335,208		
Net income (loss) attributable to noncontrolling interests	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)		Guess
Net income attributable to Vail Resorts, Inc.	\$ 279,218 \$	\$ 290,856	\$ 301,743	311,631	\$ 320,208		

Exhibit 10: Pro-forma Balance Sheet

1	Pro 1	Forma Consoli	dat	ed Balance Sh	eet						
	10 1	(In Th				•					
July 31,		2023	_	2024		2025	2026		2027		Assumptions
Assets	П		П		П			П			
Current Assets:	П		П		П			П			
Cash & cash equivalents	\$	931,764	\$	982,189	\$	1,035,423 \$	1,091,629	\$	1,150,979	35.00%	Based on historical AVG % of net revenue
Restricted cash	П	34,169	Ĥ	36,019		37,971	40,032	Ħ	42,208	3.67%	AVG % of cash
Accounts receivable, net		330,638		348,531		367,421	387,366		408,427	45.33	Collection Period
Inventories, net		117,720		123,977		130,576	137,535		144,875	15.95	Inventory Turnover
Other current assets		216,596		270,745	П	338,432	423,040	П	528,799	25.00%	Guess
Total current assets		1,630,887		1,761,461		1,909,823	2,079,602		2,275,289		
Property, plant & equipment, net		2,271,453		2,435,965		2,612,392	2,801,596		3,004,504	7.24%	AVG growth %
Real estate held for sale & investment		97,770		97,770		97,770	97,770		97,770	97,770	AVG
Goodwill, net		1,833,887		1,916,398		2,002,621	2,092,724		2,186,881	4.50%	AVG growth %
Intangible assets, net		323,266		332,745		342,501	352,543		362,880	2.93%	AVG growth %
Operating right-of-use assets		177,192		163,466		150,804	139,123		128,346	-7.75%	AVG growth %
Deferred charges & other assets		42,443		42,443		42,443	42,443		42,443	42443	AVG
Total assets	\$	6,376,898	\$	6,750,247	\$	7,158,353 \$	7,605,800	\$	8,098,111		
Liabilities and Stockholders' Equity			П		П			П			
Current Liabilities:											
Accounts payable & accrued liabilities	\$	839,720	\$	884,357	\$	931,429 \$	981,071	\$	1,033,429	163.27	Payables period
Income taxes payable		74,731		78,775		83,045	87,553		92,313	2.81%	AVG % of net revenue
Total current liabilities	П	914,451		963,133	П	1,014,474	1,068,624	П	1,125,742		
Long-term debt, net including CPLTD		2,743,141		2,942,817		3,186,634	3,482,383		3,839,495		Plug
Operating lease liabilities		156,416		140,152		125,579	112,521		100,822	-10.40%	AVG growth %
Other long-term liabilities		236,250		226,555		217,259	208,344		199,795	-4.10%	AVG growth %
Deferred income taxes, net		265,577		279,949		295,122	311,142		328,059	9.98%	AVG % of net revenue
Total liabilities		4,315,835		4,552,606		4,839,068	5,183,015		5,593,912		
Stockholders' Equity:											
Common stock		468		469		470	471		472	1	Guess
Additional paid-in capital		1,456,209		1,535,015		1,618,212	1,706,054		1,798,808	54.70%	AVG % of net revenue
Retained earnings (accumulated deficit)		932,317		1,076,939		1,215,840	1,347,686		1,470,731		Prior year RE + NI - Dividends
Treasury stock, at cost		554,507		641,358		741,813	858,002		992,389	15.66%	AVG growth %
Total Vail Resorts, Inc. stockholders' equity (deficit)	1,834,487		1,971,065		2,092,709	2,196,209		2,277,623		
Noncontrolling interests		226,576	П	226,576	П	226,576	226,576	П	226,576	226,576	AVG
Total stockholders' equity		2,078,891		2,122,267		2,159,295	2,188,264		2,207,153		
Total Liabilities andstockholders' equity	\$	6,376,898	\$	6,750,247	\$	7,158,353 \$	7,605,800	\$	8,098,111		

Exhibit 11: Projected Free Cash Flows (Base Case)

Base Scenario	2022	2023	2024	2025	2026	2027	Terminal
EBIT (Thousands)	601,728	523,554	548,747	575,138	602,783	631,740	
Tax Rate	24.97%	24.97%	24.97%	24.97%	24.97%	24.97%	
EBIT*(1-T) (Thousands)	451,477	392,822	411,725	431,526	452,268	473,995	
Depreciation (Thousands)	252,391	268,471	287,916	308,768	331,131	355,113	
Captial Expenditures (Thousands)	50,176	153,401	164,512	176,427	189,204	202,908	
Net Working Captial (Thousands)	848,702	791,167	877,104	978,395	1,098,531	1,241,859	
Change in Net Working Captial (Thousands)	(81,412)	(57,535)	85,937	101,291	120,137	143,328	
Free Cash Flow (Thousands)	735,104	565,427	449,192	462,577	474,058	482,872	11,228,099
Present Value (Thousands)	735,104	565,427	420,167	404,728	387,971	369,650	8,595,359
Present Value Cash Flow (Thousands)	10,743,302						
Projected Share Price	\$ 213.24						

Exhibit 12: Projected Free Cash Flows (Best-Case)

Best Case Scenerio	2022	2023	2024	2025	2026	2027	Terminal
EBIT (Thousands)	601,728	743,333	796,166	852,782	913,455	978,477	
Tax Rate	24.97%	24.97%	24.97%	24.97%	24.97%	24.97%	24.97%
EBIT*(1-T) (Thousands)	451,477	557,723	597,363	639,843	685,365	734,152	
Depreciation (Thousands)	252,391	270,382	292,013	315,374	340,604	367,852	
Captial Expenditures (Thousands)	50,176	169,444	183,000	197,640	213,451	230,527	
Net Working Captial (Thousands)	848,702	683,127	738,386	798,232	863,055	933,280	
Change in Net Working Captial (Thousands)	(81,412)	(165,575)	55,260	59,846	64,823	70,225	
Free Cash Flow (Thousands)	735,104	824,236	651,117	697,731	747,695	801,252	18,631,282
Present Value (Thousands)	735,104	824,236	609,044	610,473	611,917	613,376	14,262,660
Present Value Cash Flow (Thousands)	17,531,707						
Projected Share Price	\$ 381.57						

Exhibit 13: Projected Free Cash Flows (Worst-Case)

Worst Case Scenerio	2022	2023	2024	2025	2026	2027	Terminal
EBIT (Thousands)	601,728	352,240	363,143	374,258	385,578	397,094	
Tax Rate	24.97%	24.97%	24.97%	24.97%	24.97%	24.97%	24.97%
EBIT*(1-T) (Thousands)	451,477	264,285	272,466	280,806	289,299	297,939	
Depreciation (Thousands)	252,391	266,627	283,957	302,415	322,072	343,006	
Captial Expenditures (Thousands)	50,176	137,673	146,622	156,153	166,303	177,112	
Net Working Captial (Thousands)	848,702	825,147	872,145	922,318	975,919	1,033,220	
Change in Net Working Captial (Thousands)	(81,412)	(23,555)	46,997	50,174	53,601	57,301	
Free Cash Flow (Thousands)	735,104	416,793	362,804	376,894	391,467	406,533	8,448,575
Present Value (Thousands)	735,104	416,793	339,361	329,760	320,379	311,210	6,467,572
Present Value Cash Flow (Thousands)	8,185,075						
Projected Share Price	\$ 149.80						

Exhibit 14: WACC Calculations

Book Value of Interest-Bearing Debt (Thousands)	2,859,409
Cost of Debt	6.40%
Tax Rate	24.97%
Shares Outstanding (Thousands)	40,327
Share Price	236.93
Market Value of Equity (Thousands)	9,554,676
External Financing (Thousands)	12,414,085
Weight of Debt	23.03%
Weight of Equity	76.97%
WACC	
Beta	0.93855
Risk Free Rate	3.39%
Market Risk Premium	4.42%
Cost of Equity	7.54%
WACC	6.91%

Exhibit 15: Terminal Growth Rate Sensitivity Analysis

The state of the s										
Rate of Growth	Terminal Value	PV FCFs	Estimated Value	Share Price						
0.0%	6,989,959,647	7,498,912,061	4,764,863,061	\$ 118.16						
0.5%	7,573,038,040	7,945,271,522	5,211,222,522	\$ 129.22						
1.0%	8,254,808,036	8,467,181,597	5,733,132,597	\$ 142.17						
1.5%	9,062,642,984	9,085,597,192	6,351,548,192	\$ 157.50						
2.0%	10,035,070,623	9,830,012,149	7,095,963,149	\$ 175.96						
2.5%	11,228,099,180	10,743,302,008	8,009,253,008	\$ 198.61						
3.0%	12,726,399,631	11,890,284,282	9,156,235,282	\$ 227.05						
3.5%	14,664,331,245	13,373,813,977	10,639,764,977	\$ 263.84						

Exhibit 16: Terminal Growth Rate and WACC Sensitivity Analysis

	Terminal Growth Rate													
WACC		0.00%		0.50%		1.00%		1.50%		2.00%		2.50%	3.00%	3.50%
6.00%	\$	144.37	\$	159.60	\$	177.88	\$	200.22	\$	228.15	\$	264.06	\$ 302.44	\$ 365.67
6.25%	\$	136.39	\$	150.28	\$	166.82	\$	186.83	\$	211.56	\$	242.88	\$ 275.16	\$ 327.72
6.50%	\$	129.03	\$	141.74	\$	156.76	\$	174.78	\$	196.81	\$	224.34	\$ 251.77	\$ 296.09
6.75%	\$	122.21	\$	133.88	\$	147.57	\$	163.88	\$	183.61	\$	207.99	\$ 231.49	\$ 269.32
7.00%	\$	115.88	\$	126.62	\$	139.15	\$	153.96	\$	171.73	\$	193.46	\$ 213.75	\$ 246.38
7.25%	\$	109.99	\$	119.91	\$	131.41	\$	144.91	\$	160.99	\$	180.45	\$ 198.10	\$ 226.49
7.50%	\$	104.49	\$	113.67	\$	124.26	\$	136.62	\$	151.22	\$	168.74	\$ 184.19	\$ 209.09

Exhibit 17: Adjusted Present Value

	MTN	MAR	HLT	н	IHG	PK
Levered beta	1.22	1.58	1.23	1.37	0.95	2
Market capitalization (Billions)	9.826	53.419	37.947	12.114	11.632	2.988
Total debt (Billions)	2.86	11.098	9.691	3.45	2.823	4.851
E/V ratio	77.46%	82.80%	79.66%	77.83%	80.47%	38.12%
Unlevered beta	0.94496	1.30821	0.97978	1.06632	0.76447	0.76234
Industry average unlevered beta	0.97622					
Beta	0.97622					
Risk Free	3.39%					
Risk Premium	4.42%					
Unlevered Cost of Equity	7.70%					
	2023	2024	2025	2026	2027	Terminal
Tax Rate	24.97%	24.97%	24.97%	24.97%	24.97%	24.97%
Free Cash Flow (Thousands)	565,427	449,192	462,577	474,058	482,872	9,509,171
Present Value (Thousands)	565,427	417,058	398,762	379,424	358,831	7,066,439
Present Value CF (Thousands)	9,185,941					
Interest Tax Shield	2023	2024	2025	2026	2027	Terminal
Interest Expense (Thousands)	137,690	147,713	159,951	174,796	192,721	3,795,246
Tax Shield (Thousands)	34,381	36,884	39,940	43,647	48,123	947,673
Present Value (Thousands)	34,381	34,245	34,430	34,934	35,761	704,233
Present Value of Interest Tax Shield (Thousands)	877,984					
Value With Tax Shield (Thousands)	10,063,925					
Distress Costs						
Probability of Distress (Thousands)	6.19%					
Loss of Value (Thousands)	30.00%					
Financial Distress Cost (Thousands)	186,887					
Adjusted Present Value (Thousands)	9,877,038					
Projected Share Price	\$ 191.75					