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**MARRIOTT: ASCENDING TO RULE THE RIVALRY
IN HOSPITALITY'S ARENA**

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Abstract

This report, which is part of a two part Equity Research on Marriott International was produced in a time when war takes over the world, financial markets are unstable, and companies are insecure about the future. In this work project, we understand the company itself, as well as the industry where it is inserted, analyzing market trends and peers' performance when compared to Marriot's dominance. This trend and market analysis becomes specially crucial regarding the ever changing environment we live in, with new tendencies appearing every day, which one might miss if not paying attention.

Keywords (up to four):

Lodging, Toursim, Guest Loyalty, Asset Light

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This report is part of the Marriott International Inc Equity Research – The leader of tomorrow: A deep dive into Marriott’s pipeline dominance as the catalyst for market share supremacy report (annexed), developed by Simão Correia (53261) and Francisco Carvalho (53876) and should be read as an integral part of it.

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Introduction

In this joint report, me and my pair intend to perform a valuation on Marriott International Inc, providing shareholders with the potential returns they might obtain in case they buy the stock at the present time and hold it for one year. In the end, we have reached the conclusion that Marriott's stock is slightly undervaluated, with a price of 221.14\$, compared to our target price of 229.93\$, resulting in a 8.4% return, including 2024 dividends, which means that our advise would be to HOLD the Marriott's stock.

In this part of the report we look into the company itself, as well as the market it is inserted in. We look into some historical data, comparing Marriott with its competitors and observing its performance metrics over the historical years, capturing important trends to forecast the future of the company. This part also looks deeply into the lodging industry, highlighting some market trends which will be of the utmost importance going forward. It concludes with a multiple valuation, in order to give the reader an idea of Marriot's potential share price based on market movements and prices, and to complement the DCF analysis.

In the other part, we look deeply into Marriot's financial statements captions, and forecast what they will look like in a few years time, in an attempt to accurately predict the company's share price movements. The DCF analysis is also part of the other part, where we calculate the WACC and reach our final Equity Value and Share Price, of 229.93\$. Finally, it ends with a risk analysis, crucial to the investor as it allows him/her to understand potential problems that are not yet reflected in the financial statements, as well as a sensibility and scenario analysis, designed to validate inputs and understand how much the share price would change, had certain assumptions been different.

Company Overview

Company History

Marriott International Inc is the sounding name of the largest hotel group as of December 2023, with around 1.6 million rooms available worldwide. Indeed, Marriott International has evolved through the past nine decades following the founders' motto "We Put People First", based on the conviction that a good customer service demands good care of Marriott's associates and this has been the key value driving the group expansion, now covering over thirty brands with units placed across 138 countries and the most distinctive business segments, (ranging from the utmost *Luxury* scale to the Upper Midscale, according to the STR chain scales).

Back in 1927, the couple J. Willard and Alice Marriot got their business started as an *A&W Root Beer* franchise with a nine-seat stand in Washington D.C, which did not take too long to further evolve to a low-cost restaurant going by the name of "Hot Shoppes". During the Second World War, the brand entered a few management agreements to explore cafeterias at government buildings and other public infrastructures through the 50's, culminating in a public listing in 1953. As far as the operations were expanding to several locations, the couple built its first hotel unit, the Twin Bridges Marriott Motor Hotel with a contiguous Hot Shoppe, leveraging the bet on the lodging industry with the credibility their meals brand had conquered so far. At this point in time, it was the couple's son, Bill Marriot, who was in charge of overseeing the hotel expansion. In later 60's, both Marriott segments embraced an international expansion, firstly, with the acquisition of a flight kitchen in Venezuela and then with the opening of the first hotel unit outside the USA, the Paraiso located in Mexico. On one hand, the following years have been determinant to consolidate Marriott Corporation positioning in the meals business through restaurants and food service acquisitions, for instance, Saga Corporation, and the creation of the fast-food division under the brand Roy Rogers, ultimately, making Marriott the biggest food company in the U.S., in later 80's. On the other hand, Marriott was on the verge to set its focus on the lodging industry, leading the company to a restructuring plan which implied the disposal of fast food and family restaurants and subsequent investments in longer stay hotels and increasingly luxurious units in the upper-scale segments, such as the Ritz-Carlton Company LLC purchased at a 98% stake by the end of 1998. By this time, Marriott had already surpassed the \$10 billion revenue milestone.

To sum up, Marriott International as it is known today results from a spin-off of Marriott Corporation in 1993, conceiving two separate companies, Host Marriott Corporation – the real estate owner and the concessions operator at airports and toll roads and Marriott International – the multi-branded portfolio manager in the lodging industry.



Figure 1: Marriott brand portfolio
Sources: Financial reports

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Business Model

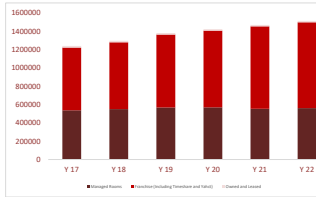


Figure 2: Properties by type
Source: Financial Reports

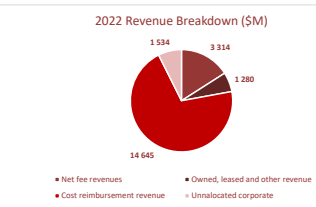


Figure 3: Revenue Breakdown
Source: Financial Reports

Marriott International has been following a fee-driven, asset-light business model, (Marriott International, 2022), under which it usually operates and franchises hotels and other lodging facilities as well as branded residential real estate and timeshare. Hence, it is reasonable to divide Marriott’s business in three core operational segments as follows: Managed, Franchised/Licensed (including Yacht, Timeshare and Residential) and Owned/Leased.

The fee-driven model is based on two main sources of revenue. On one hand, managed units (accounting for 36.6% of total rooms) – the hotel owner and Marriott enter long-term agreements, typically for initial periods of 20-30 years, and the third-party pays Marriott a base management fee depending on the hotel revenue and an additional incentive management fee profit linked. Those management agreements, generally, contain third-party obligations regarding the reimbursement of costs that Marriott incurs to run the business, such as staff expenditures, daily supplies and any sort of cost related to centralized benefits. On the other hand, franchise and licensing agreements (accounting for 62.8% of total rooms) allow owners to operate their business under one of Marriott’s prestigious brands against the payment of an initial application fee as well as royalty fees (including room revenue and food). In both situations, third-party owners benefit from the centralized provisions for instance, the Marriott Bonvoy loyalty program, marketing channels, campaigns and the reservation system. In addition to that, franchise fees also include royalties from timeshare¹ and the most recent offer within the alternative luxury experience, the Ritz-Carlton Yacht Collection² as well as fees on the revenues generated by branded residential real estate sales.

Finally, Marriott collects direct revenue as the owner and operator of a small portfolio of 13,432 rooms (51 hotels), which are expected to decrease at a -2.3% CAGR, between 2022 and 2026, following the asset-light trend.

- Worldwide Coverage

Marriott International comprises a portfolio of 1.6 million guest rooms across 31 brands whose operations are widespread across five regions – North America (U.S. and Canada), Caribbean and Latin America, Asia Pacific, Middle East & Africa and Europe, although it is generally assumed a simple split between the North America business, where the company was born and

¹ Timeshare revenue arises from license agreements with Marriott Vacations Worldwide Corp., a former Marriott’s subsidiary, generally, referred as “MVW”.

² The Ritz-Carlton Yacht Collection was launched in 2022 and there are another two yachts in the pipeline, which are expected to be sailing in 2024 and 2025, respectively.

where it still concentrates the largest portion of its portfolio and the International business.

At present date, Marriott's portfolio exhibits a major dependence on the North America market, representing 63% of total available rooms, but the company seems to be committed to balance its geographic presence as far as it is growing at a historical CAGR of 5.71% outside the U.S. & Canada and 2.99% in the main region, between 2017 and 2022. Therefore, the forecasts that will be further discussed in the following sections of the joint report lay heavily in this historical trend, and it is actually believed the company will exhibit a 57% room allocation in the American region by the end of 2034.

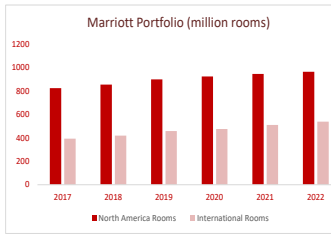


Figure 4: Marriott Portfolio
Source: Financial Reports

Moreover, it worths mentioning the fact the systemwide operation is asymmetrically distributed across one region and another. Hence, the number of franchise rooms accounts for a major stake in the U.S. & Canada, around 78%, while the franchise percentage within the operation in the rest of the world represents no more than 39% of the asset light portfolio. This is due to different cultural approaches to the business in the lodging industry, which are more franchise-oriented in the U.S. where brand affiliation covers more than 70% of hotel rooms, as owners want to preserve some independence in their day-to-day activities. On the contrary, in several other regions, there is a prevalence of independent owners who are indeed more prone to benefit from Marriott's expertise in terms of hospitality management, which represents a vital growth opportunity for the company in less overcrowded markets. Therefore, it can be expected some competition shifting towards non-American markets, which will be ultimately reflected in increasing Average Daily Rates growing above the systemwide average in the long run.

▪ Pipeline Management

Marriott International is not only the leader in terms of guestrooms worldwide but also in terms of guestrooms already signed or under construction, placing the company in a strategic position to sustain its market share in an increasing competitive environment in the following years (fig5). At present date, Marriott holds a pipeline of 516.700 rooms (excluding 40.300 approved but not yet subject to signed contracts), surpassing the 457.300 rooms of Hilton's pipeline as of the past quarter. In addition, pipeline maturities of both companies actually represent a strong indicator to anchor expectations for gross addition in the short-term, and both players have around 230.000 rooms in the construction phase, highlighting Marriott's challenging years ahead. In addition to that, there is some raising concern regarding the fact that Marriott is still signing less Management & Franchise agreements as it used to do before 2020, when the company reached an all-time peak of 250.000 new signings. This outlines the counter-cyclical effect of Marriott branding attractiveness for third-party owners, which saw brand-affiliation as safe choice in times of uncertainty following the first Covid-19 lock-down in 2020. Another relevant trend concerning pipeline additions has to do with the increasing weight of conversions from competitor brands accounting for 27% and 20% of total new signings and 2021 and 2022, respectively.

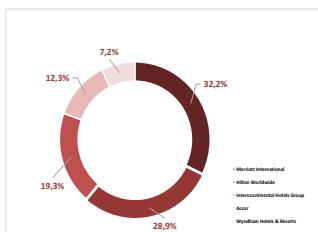


Figure 5: Marriott and competitors rooms in pipeline
Source: Statista

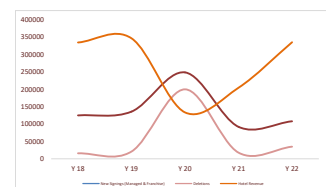


Figure 6: Marriott's pipeline management (SM, number of rooms)
Source: Financial Report

As a conclusion, this pipeline analysis corroborates the expectation concerning the number of International rooms for the future aligned with the key points highlighted in the aforementioned section – on average 55% of new signings correspond to non-america operations.

Board and Ownership Structure

The Board of Directors is headed by David S. Marriott, the grandson of the company’s founders and the third Chairman of the Board in Marriott’s 96-year history. David is a former President within the U.S. Full Service Managed by Marriott, and he has been a key player in the U.S. integration efforts of Starwood Hotels & Resorts acquisition (2016). The CEO Anthony Capuano has served in diverse roles of leadership since 1995 and holds a broad knowledge of the company operations as well as of the hospitality industry as whole. He also integrates boards of non-profit entities, such as the McDonald’s Corp. and other relevant associations, enhancing Marriott’s governance perspectives and brand reputation (Marriott International Inc., 2022).

Marriott exhibits a market capitalization of \$65B as of December 2023, (YahooFinance, 2023) and it has 308.12 million shares outstanding. Concerning the shareholder structure, the family has been losing its stake on the company during the past few years, as Marriott has caught the eye of giant institutional investors who account for 65% of the total capital of the firm, as of the second quarter of 2023. The most recent shareholder composition accessed through *Bloomberg* exhibits a high stake held by Vanguard Group (7.3%), Blackrock Fund Advisors (5.41%), JP Morgan Investment Management (2.43%), Fidelity Management (2.26%) and other asset management players which conveys a profound sense of credibility to the market, as institutional capital tends to follow ambitious standards for risk management policy and enhance the quality of the information disclosed to the public and Marriott’s stakeholders in general. Despite this trend, the founder’s two sons keep a family interest in Marriott’s capital as they hold around 11.5% of shares outstanding, being the chairman David S. Marriott the top private owner.

Historical Performance

- Revenues and profitability analysis

Marriott’s revenues have grown slightly from 2018 to 2022, displaying a 0.02% CAGR between this period. This growth was mainly due to a 1.91% CAGR of the main revenue caption, Gross Fees, and offset by a (4.99%) CAGR from the Owned and Leased Hotels, which highlights Marriot’s asset light strategy, and the increasing importance it will have over the years. In terms of gross fees, we can clearly see a trend to increase the importance of franchised hotels, as it is the most representative caption of this segment, as well as the only one that grows during 2018-2022, showcasing a loss of importance of management contracts. While gross fee revenues vary similarly in both International and North America, we see a very clear trend in the Owned and Leased Sector, where Marriott increased its dominance in international soil, mainly due to the acquisition of several resorts in the Caribbean area. Summing up, Marriot’s revenue breakdown not only gives us a clear image of their strategy going forward, but also shows the ability to recover from the COVID-19, launching the company into a bright future. Looking into its peers, we can see that all their revenues added up do not reach Marriot’s reported revenue. This is mainly because of the high Cost Reimbursements Marriot showcases in comparison to peers, once again portraying a strong image of an asset light strategy. Even if we remove that caption from total revenues, Marriott shows total dominance over all its peers, showing its

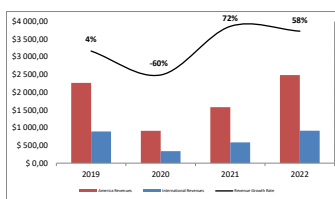


Figure 7: Gross Fee comparison: International vs NA
Source: Financial Reports

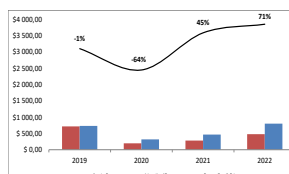


Figure 8: Owned and Leased: International vs North America
Sources: Financial Report

position as the most solidified top lodging company in the world.

Diving into profitability measures, we can see what it seems to be some inefficiencies by Marriott when compared to its peers. In fact, the hotel giant has got a significantly lower EBITDA margin than the average of its peers, even though it is more stable, and will less violent fluctuations. This might, at first sight, indicate that Marriott is less able to generate operating results, but it is heavily influenced by the anomaly big reimbursements caption. If we isolate this effect from the EBITDA margin, we can see much bigger margins from Marriott, even surpassing competitors. This is the case not only because Reimbursements make up a very significant part of revenues, but also because the timing on the payments versus receivements on this matter has been off, pushing margins down, as payments are being made faster than Marriott is receiving the money, resulting in a negative reimbursement value. This also impacts Marriott's Cash Conversion Cycle, as it has, by far, the shortest time period to pay to suppliers, resulting in a very positive CCC. Regarding the ability to generate net income, we can see that Marriott has been surpassed by the competitor's, which are generating, on average, 15% of revenues as net income, compared to Marriott's 9%. This ratio is being pushed up by Choice, which is the most asset light competitor out of all, and Whyndham.

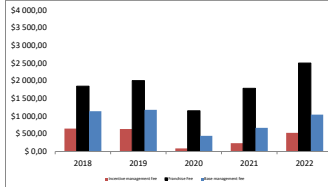


Figure 9: Gross fee revenues decomposition
Source: Financial Report

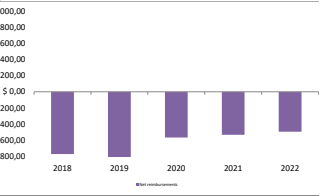


Figure 10: Net reimbursements
Source: Financial Reports

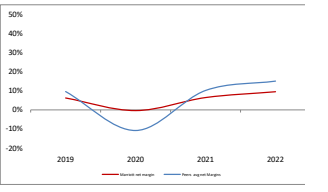


Figure 11: Net margin comparison
Source: Financial reports

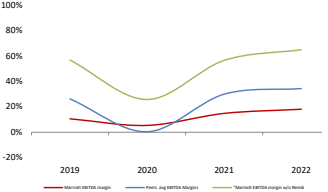


Figure 12: EBITDA margin comparison
Source: Financial Reports

▪ **ROIC and ROE**

Marriott's total Return on Invested Capital has been positive in all considered historical period and growing from 2018 to 2022. This derives mainly from the increase in the Core ROIC, which was 24.02% in 2022. A high ROIC can be associated with the asset light model, as it can generate larger revenues without possessing a large balance sheet, reflected by low Invested Capital values. The average peer ROIC was 56% in 2022, due to a very high value coming from Intercontinental hotel (209%). Excluding this value, we see a ROIC of only 17% in 2022, showing that competitors are not doing as well as Marriott. Regarding only the Core ROIC, which shows us if the company is creating value, we see that it was, on average, higher in Marriott's peers than in Marriott itself, once again prompted by Intercontinental. Excluding this company from analysis, we can see Marriott's proven ability to create value, with a ROIC above its peers, and above the WACC.

Concerning ROE, we see that Marriott shows a heavily volatile number, due to the fact that it has a low equity value (close to 0), which makes the ratio very sensible to small changes. It was still higher than competitors average, proving that Marriott is more efficient with its equity book value.

▪ **Liquidity**

Marriott presented below 100% current ratio values in all analysed historical period, meaning that its current liabilities are not fully covered by its current assets. This can put Marriott in a fragile position, as it means it has difficulty in complying with short term obligations. Furthermore, Marriott's Cash Conversion Cycle is positive, due to the fact that it takes little to no time paying to suppliers, which can worsen the situation, as Marriott is not financed by its suppliers, and needs cash availability to fully operate. Indeed, Marriott might not be prepared to deal with unforeseen situations. In the COVID-19 years, however, the company has been gradually increasing this ratio, using a more conservative and cautious approach, as the

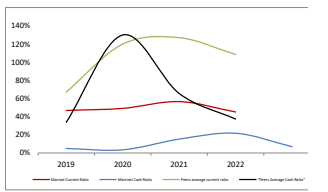


Figure x: Marriott and peers current and cash ratio
Source: Financial Reports

situation was unstable and unpredictable. Compared to its peers, Marriot is the one in the worst spot regarding liquidity.

In terms of Cash Ratio, Marriott has been improving its position by stacking cash, reinforcing its position by purchasing more than 2.5 Billion dollars worth of treasury stock. We must, however, take into consideration that Marriott's ratios do not necessarily mean trouble, as the liability for guest loyalty program will most likely not result in a financial expenditure, at least not paid in cash. Without this caption, Marriott's liquidity ratios would be very close to the 100% mark.

- Solvency

Looking at Marriott's capital structure, we can see that it is a company which relies on financial leverage, a tendency that was worsened during the COVID pandemic, reaching highs in the Net Debt to EBITDA ratio, and lows in equity value. This tendency, however, already started to be reversed during 2022, driven by better operating results. In fact, Marriott's credit rating has improved in 2022, going from a Baa3 to a Baa2 in Moody's rating, which is positive as it may allow the company to access financing at lower costs. Compared to its peers, Marriott is within the average, and fairly better than its closest peer, Hilton, which had a negative equity value in the last 5 years.

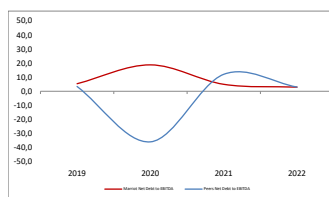


Figure 14: Marriott and peers Net Debt to EBITDA ratings
Source: Financial Reports

Economic Overview

The hotel industry can be seen as a subset of the broad market of Travel & Tourism, one of the most recently affected sectors in the economy due to the consequences of the Covid 19 forced lockdown on global mobility. Despite that, the T&T sector has proven to be particularly resilient in its post-pandemic recovery as it is persistently growing at a faster pace than the global economy (in nominal terms), according to the IMF forecasts.

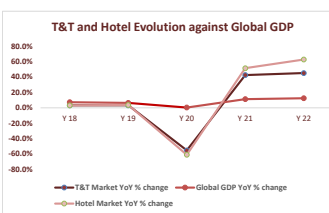


Figure 15: T&T and Hotel Evolutions against Global GDP
Sources: IMF, Statista

In addition to this optimistic high-level observation, it is crucial to consider other variables to consolidate our forecasts, for instance, in what concerns Marriott's expected revenue for the next few years, as there are still some challenges ahead, namely, regarding the current climate of high interest rates and inflation levels significantly above the target, which ultimately led the main central banks to monetary policy tightening decisions. Generally speaking, the most recent monetary policy updates play a double effect on both costs of corporate debt financing, consequently affecting Marriott's capacity to sign new contracts and avoid opening delays as well as portfolio deletions, and household debt, which affects individuals propensity to consume and leisure travel.

According to Bloomberg data, market players are somehow convinced that interest rates will remain at record highs for a longer period than initial expected, in spite of lower inflation prospects. However, the market assumes great likelihood that both the ECB and the FED will start interest rates cuttings in mid-2024 or even earlier, pricing a 100b.p. decline by the american body by the end of the next year (Smith, 2023).

On the grounds of our data-driven approach for the revenue forecast, it is worth mentioning some key aspects that have been considered for the medium-term outlook in some strategic

topics:

- APAC (including China)

In 2019, Chinese travellers represented the world's largest stake in the total amount of outbound tourists, contributing with 250B\$ to the global economy (accounting for 3% of the T&T revenue in that year), (Baschuk, 2023). This benchmark is of the utmost importance as 2023 marks the end of the zero-Covid-19 policy in China, as well as the implementation of some stimulus that act in favour of both inflows and outflows of travellers, for instance, the provision of a visa-free entry provided to some European countries and Malaysia, the abolition of the health declaration requirement for all travellers, the reinstatement of foreign cruise activities and the increased accessibility in the visa application process, (Dezan Shira & Associates Staff in China, 2023).

As a result, Chinese hotels have registered an average 68.4% occupancy rate YTD being aligned with pre-pandemic values for the first time and the YTD Marriott's systemwide occupancy disclosed for the third quarter in APAC. The average daily rate also increased to 133.3\$, (6.4% YTD), primarily driven by demand as inflation remains in low levels, (October CPI dropped 0.2% in comparison with October 2022), (Woo, 2023).

- Europe

By the end of 2022, Europe's T&T sector has already shown wide proof of its strong post-pandemic recovery which reached 80% of 2019 levels in terms of number of tourist arrivals, according to the World Travel and Tourism Council. Relatively to the other four regions where Marriott operates, Europe has presented historically lower real GDP growth rates, with exception to Latin America and the Caribbean before 2020, and it is expected to continue growing below the 2% mark after 2022, according to the IMF forecasts. Moreover, the hike in interest rates and persistent high inflation may have an uncertain and asymmetric effect in several economies within the EU, such as those more energy dependent and labour intensive, (Germany is a very good example of such an economy that came out of two successive quarters of recession, 2022Q4 and 2023Q1) (BNP Paribas, 2023). In addition, the German Government sent a strong conviction to the market, as soon as it ceased new emissions of inflation linked bonds, confirming that inflation will take longer to be under control. The current scenario of dollar appreciation against the euro might work in favour of the EU inbound tourism coming from the other side of the Atlantic.

- North America

The U.S. economy works as good proxy for the outlook prospects regarding the North America performance and it is expected to grow slightly above the European economy in real terms in the long-run, surpassing the 2% mark between 2026 and 2028, (International Monetary Fund, 2023). In fact, the U.S. economy is on track to outperform major investment banks forecasts as it is on the verge to close 2023 with a 2.8% real growth, taking the wave of the so called soft-landing. In addition to that, if inflation keeps following a slow-down trajectory, the hiking cycle of interest rates might be over, according to JP Morgan, whose position reinforces the market conviction concerning two consecutive cuttings of 0.5b.p. in the last two quarters of 2024.

Lodging industry

The hotel industry is composed by big and small players, with different segments and some pulsating market trends.

Looking into the tourism market in a deeper manner, we see a strong international tourism wave, with 2022 being a year of recovery. Despite still being 34% behind the global number of international tourists in the pre-pandemic era, this number is already 111% up from last year. Regarding receipts, we see a similar trend, but with them being only 25.6% down from 2019, showing a higher global receipt per tourist. This indicator favors Marriott, as it clearly shows that tourists are seeking higher quality options and more reliable lodging spots. The United States of America, where Marriott has the majority of its operation has a similar behavior, with less violent decreases on international tourists. Despite this, it is still the 3rd country in the world with more arrivals, despite it representing only 5% of total arrivals, and the 1st in terms of receipts.

Concerning the Caribbean region, where Marriott strongly invested in 2019, notably in Barbados where it added several properties to its portfolio, the number of yearly tourists in 2022 already surpassed the pre-COVID levels, which sustains the thesis that international markets will probably grow more than the USA and Canada market, as there is more margin to explore.

In terms of domestic tourism, we see a strong market in China and the United States, which can be explained by the big dimensions of both countries. This also means that Marriott still has a large market to explore.

Looking into workforce, we see a large number of employees in India, which is 5 times larger than the second most relevant country, Japan. The United States of America shows up in 5th place, with 3,887 tourism employees in 2020, which seems short for the market dimension and could put some future pressure on wages.

Market trends and events

- R&D

In 2022, Marriott International launched the Marriott Design Lab as part of its headquarters which aims to be an innovation hub where hotel rooms are conceived to provide an “intuitive in-room experience for guests” (McGovern, 2023). This project has raised several strategic corporate partnerships since its inception such as: Honeywell and LG whose know-how and vanguard equipment will enhance Marriott’s offer in terms of customized control in the guestroom and improved software solutions to better measure performance metrics.

The design of the room is now an in-house conception as highly detailed as possible and it works in favor of Marriott’s commitment regarding the best ESG practices improving construction standards, energy consumption and measurement and also reducing the average length of undertaken projects.

To sum up, there is a strong conviction concerning the importance of smart rooms for Marriott’s positioning as a top player in the upper tier segment and the pioneering Design Lab is a great source of added value to capture new franchisees and licensees as well as to sustain the attractiveness for competitor brand conversions.

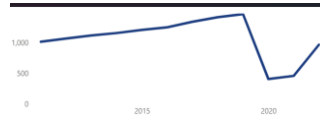


Figure 16 : Total inbound tourism arrivals, millions of people
Sources: UNWTO



Figure 17: Total inbound tourism receipts, billions of USD
Sources: UNWTO

Country	Arrivals (millions)	% share	Receipts (USD bn)	% share	Receipts per arrival (USD)
France	79.40	6%	597	5%	752
Spain	71.66	5%	729	7%	1,017
United States	50.87	3%	138.9	1%	2,691
Turkey	50.45	3%	47.4	4%	920
Italy	49.81	3%	48.6	4%	976
Mexico	38.33	4%	28.0	3%	731
United Kingdom	30.74	3%	67.6	6%	2,199
Germany	26.46	3%	37.5	3%	1,408
Greece	27.84	3%	18.6	2%	669
Austria	26.21	3%	19.9	2%	760
Utd Arab Emirates	22.95	2%	49.3	5%	2,177
Portugal	22.25	2%	22.3	2%	1,000

Figure 18 : Most popular tourist arrival destinations
Sources: UNWTO

- Asset light strategy

In recent years, the hotel industry has reshaped its business model, going from investing in properties and real estate to focusing more in the operational aspect of lodging, operating the vast majority of rooms under management or franchise agreements. The asset light strategy provides companies with several competitive advantages, with the first being economies of scale through cost savings, mainly in real estate related expenses. Growing through franchising allows the company to grow to new geographies without the risk of possessing an infrastructure in said country, which can be an offputting factor for most companies due to the high instability that is seen in certain regions. With these cost savings, companies can be more focused on spending their cash on certain aspects of the business that improve customer experience, and bring new clients in, such as marketing. In fact, with the asset-light strategy, companies are almost invulnerable to the real estate bubble risks, and would suffer considerably less, had this model been implemented earlier than the 2008 crisis. According to a study from Ernst & Young (Giri Varadajan, 2021), asset light companies have outperformed their peers on the last five years. This puts Marriott on a privileged position, as it has 99% of its rooms under franchise or management agreements, being one of the most asset light companies in the industry.

Looking into downsides, an asset light strategy would mean that there are fewer entry barriers, as players do not need big investments to provide services. This would not be a major problem for Marriott, however, as it is a very consolidated player in the market, with revenues above all its peers added up.

- Sustainability and Environmental Concerns

Sustainability and environmental worries are not a new global trend, being present for years in every industry and clients minds. As global warming threats keep rising, customers are on the search for more environmentally friendly establishments. In fact, a study from Michalis Skordoulis, Maria-Ioanna Andrepoulou and Dimistros Drosos shows us that 61.9% of people would be willing to pay more to stay in an environmentally friendly hotel, with only 7.6% disagreeing. In terms of extra payment, the vast majority of enquired would be willing to pay a 1-5% premium. This puts into light the importance of Marriott's carbon neutral goals. According to Marriott's website, the hotel giant has decreased its carbon intensity by 24.6% and actually increased water intensity by about 4%. Compared to Hilton, this is manifestly insufficient, as the competitor has managed to present a 44% carbon intensity reduction, as well as a 38% water intensity reduction. The goals also seem to point in Hilton's favour, as it aims to decrease carbon emissions by 75% until 2028, and water intensity by 50%, compared to Marriott's 30% and 15%. Marriott also only has 28.8% of its properties certified to a recognized sustainability standard, intending to reach the 100% mark by 2025. In conclusion, through market data and peers comparison, we can see that Marriott is lagging behind in environmental terms, which could hinder revenues on a not so distant future.

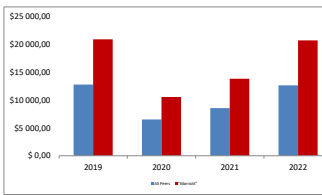


Figure 19 : Marriot vs all peers together (Revenues)
Sources: Financial Reports

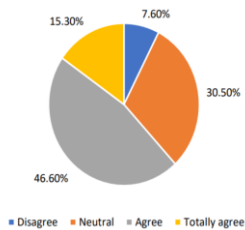


Figure 20 : Percentage of people who would pay more for a sustainable solution
Sources: Mihcalis Skordoulis et al study

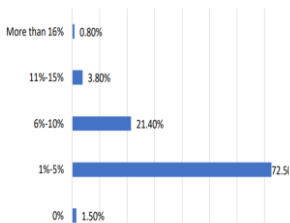


Figure 21 : Premium people would pay for a sustainable solution
Sources: Mihcalis Skordoulis et al study

- Major events

Every now and then, some major events happen worldwide and move thousands, if not millions, of people. The United States of America, where Marriott holds the majority of its properties, will hold the 2026 World Cup and the 2028 Olympics. Regarding the world cup, this is a tournament that attracts not only football fans, but also people that simply enjoy the party environment around it. It will be held in the USA, Canada and Mexico, which is favorable for Marriott, as it possesses properties in all of these locations. These properties range from highly luxurious, to cheaper options, having solutions for all tastes and kinds of customers. The fact that the World Cup is spread throughout several cities also plays in favor of the big hotel companies, which might manage to capture some loyalty effect from clients that attend several games, choosing the same hotel chain as a recognition of quality or simply due to the benefits that the loyalty guest programs provide. It is expected that Marriott, as the biggest player in the industry, captures a big part of the about 5M international tourists, as well as some of the domestic ones.

The 2028 Olympic Games will also be held in the USA, more specifically in Los Angeles, where Marriott has a diverse portfolio, ranging from Select Hotels to Luxury. This event usually brings a big audience, which once again will most likely have a part captured by Marriott. In comparison, the Paris Olympic Games in 2024 brought around 3M people, and 4B in additional spending³. This two events are part of the first Pillar (Promotion) of the National Travel and Tourism Strategy, with the remaining being Facilitation, Diversity and Resilience.

Comparable Valuation

In order to validate the results obtained from the intrinsic valuation, a look into comparable companies' values can be useful, as it can showcase big differences in said valuations, and tells us how the market portrays Marriott's value.

- Comparable Companies

The metrics used for the multiple valuation were the EV/EBITDA and the EV/Sales, which are the most common metrics for this effect.

Looking at the EV/EBITDA, one can see that Marriott's multiple (15.46x) is one of the highest in the industry, which is the result of lower EBITDA margins. Comparing it to its peers, the average multiple is lower, resulting in a 158.7\$ average share price. Using only the peers identified as most comparable, this number jumps up to 191.8\$, slightly below Marriott's actual share price.

Using the EV/Sales, we can see Marriott's dominance in terms of Sales, showcasing one of the lowest multiple's (2.93x), which results from a very high value of revenues generated. When looking at the multiples from its competitors, we can see that the average multiple is in line with the one that results from DCF valuation, resulting in a 237\$ share price. When looking at only the companied deemed the most comparable, the share price jumps to 278.5\$, which reinforces the argument that Marriott share might be undervalued. To sum up, looking at comparable companies, one cannot state with certainty that the DCF analysis is not valid, as the results are not clear, but looking at the average between both metrics (using only the most comparable

Marriott Multiple Valuation			
	EV/EBITDA	EV	Share Price
Minimum	6,26	23 438,9	76,1
Maximum	19,95	74 703,6	242,4
Average	13,06	48 894,9	158,7
Adjusted Average	13,05	48 865,5	158,6
Median	13,20	49 425,1	160,4
1st Quartile	11,20	41 949,4	136,1
3rd Quartile	15,27	57 184,1	185,6
Peers used in WACC	15,78	59 090,2	191,8

Figure 22: Comparable Companies : EV/EBITDA
Sources: Refinitiv

Marriott Multiple Valuation			
	EV/Sales	EV	Share Price
Minimum	1,46	30 424,4	98,7
Maximum	6,19	128 524,3	417,1
Average	3,52	73 170,0	237,5
Adjusted Average	3,47	72 119,3	234,1
Median	3,35	69 645,7	226,0
1st Quartile	2,31	47 918,3	155,5
3rd Quartile	4,30	89 387,2	290,1
Peers used in WACC	4,13	85 817,0	278,5

Figure 23: Comparable Companies : EV/Sales
Sources: Refinitiv

³ Euromonitor statistics

companies), we get a share price of 235\$, close to the one obtained through the DCF analysis.

▪ **Comparable Transactions**

The last 5 years have been exceptionally active in terms of hotel chain transactions. In 2022 Crown Resorts was bought by Blackstone, Hilton has been reinforcing its portfolio with Bluegreen Vacations and Diamond Resorts, and B&B, a budget hotel chain was snapped up by Goldman Sachs. In terms of on-going transactions, there has been movement between two of Marriott's competitors, with Choice Hotels trying to buy Whyndham, submitting an offer in October 2023, meanwhile refused. The multiples in this offer position Marriott's share price at 480,7\$ (EV/Sales) or 205,35\$ (EV/EBITDA), which seem to show that Marriott's stock might be undervalued. However, we must take into consideration the premium involved in a deal of this dimension.

Looking at the average share price in these transactions, we can see conclusions similar to those obtained in the comparable companies valuation: regarding EV/EBITDA, Marriott looks fairly valued and in line with our DCF valuation, while regarding EV/Sales, Marriott seems severely undervalued, resulting once again from its dominance in revenues, and lower EBITDA margins. These values sustain our idea that Marriott's stock might be slightly undervalued, as the average between both metric results in a 236.1\$ price, close to the one obtained in the DCF method.

Target	Buyer	EV/Sales	EV/EBITDA
Whyndham	Choice	7,15	15,92
Crown Resorts	Blackstone Inc	4,47	15,34
Extended Stay America Inc	Blackstone Inc	5,30	14,57
Blumar Hotels Group Limited	Blackstone Inc	2,71	10,33
Diamond Resorts International, Inc.	Blackstone Inc	4,19	12,45
Bluegreen Vacations Holding Corp (2023 Deal)	Hilton Grand Vacations Co LLC	2,15	5,82
WVH Franch Group Inc	Morison Vacations Worldwide Corporation	N/A	14,65
B&B Hotels US	N/A	N/A	N/A
Average	Goldman Sachs Merchant Banking Division	4,24	15,38
Marriott Share Price		235,0	146,3

Figure 24: Comparable Transactions
Sources: Mergermarket

MARRIOTT INTERNATIONAL INC

“TRAVEL AND TOURISM INDUSTRY”

STUDENTS: FRANCISCO CARVALHO | SIMÃO CORREIA

COMPANY REPORT

20 DECEMBER 2023

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Marriott International INC

The leader of tomorrow:

A deep dive into Marriott's pipeline dominance as the catalyst for market share supremacy

- This equity research concludes in favour of a HOLD recommendation to prospective investors, presenting a price target of \$229.93 as of December 2024, which compares with a current share price of \$221.14, leading to a potential return of 8.38%.
- After the Covid-19 hit of the lodging industry, 2023 seems to be the year of full recovery as occupancy rates have finally reached pre-pandemic levels and China has sent a good signal of confidence, as it ended the Zero-Covid-19 restrictions.
- The most recent geopolitical tension between Hamas and Israel and the ongoing invasion of Ukraine leave the door open for more civil attacks that can potential affect Marriott's operations in nearby countries.
- The evolution of the luxury tier and the forecasted increase in the number of HNWI's in North America and APAC, challenges Marriott to leverage the bet on highly customized experiences within the upper scale offer and the Ritz-Carlton Yacht Collection.
- Considering Marriott's technology-oriented solutions for the guest room experience and its pioneering investment in Marriott's Design Lab, it is believed that Marriott holds a distinctive feature to foster the number of conversions from competitors.

Company description

Marriott International Inc is the world's largest hospitality infrastructure with 1.6 million guestrooms spread across the globe. This 96-years old company was born in Washington as a small meals franchise and it has further evolved to be a top player in the hotel industry, holding operations in 130 countries and a portfolio with over 30 brands.

Recommendation: **HOLD**

Vs Previous Recommendation **HOLD**

Price Target FY24: **229.93 \$**

Vs Previous Price Target **0.00 €**

Price (as of 20 Dec 2023) **221.14 \$**

Source: Reuters

52-week range (€) 151.37-221.39

Market Cap (€m) 64 629

Outstanding Shares (m) 308

Source: Refinitiv



Source: Refiniv and Wall Street Journal

(Values in \$ millions)	2022	2023E	2024F
Revenues	20 773	23 540	25 545
EBITDA	3 744	4 454	5 076
Net Profit	1 970	3 131	3 699
EPS	6,4	10,2	12,0
Net Debt / EBITDA	2.9	2.1	1.5
Core ROIC	24.0%	34.7%	42.4%
Core RONIC	1 550%	-61.2%	-83.0%
Operational Margin	12.8%	14.5%	15.3%
Asset Turnover	187.4%	238.8%	276.1%
ROE	347%	271%	200%
Payout Ratio	143%	81%	81%

Source: Analyst estimates and annual reports

THIS REPORT WAS PREPARED EXCLUSIVELY FOR ACADEMIC PURPOSES BY FRANCISCO CARVALHO AND SIMÃO CORREIA, MASTER IN FINANCE STUDENTS OF THE NOVA SCHOOL OF BUSINESS AND ECONOMICS. THE REPORT WAS SUPERVISED BY A NOVA SBE FACULTY MEMBER, ACTING IN A MERE ACADEMIC CAPACITY, WHO REVIEWED THE VALUATION METHODOLOGY AND THE FINANCIAL MODEL. (PLEASE REFER TO THE DISCLOSURES AND DISCLAIMERS AT END OF THE DOCUMENT)

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Company Overview

Company History

Marriott International Inc is the sounding name of the largest hotel group as of December 2023, with around 1.6 million rooms available worldwide. Indeed, Marriott International has evolved through the past nine decades following the founders' moto "We Put People First", based on the conviction that a good costumer service demands good care of Marriott's associates and this has been the key value driving the group expansion, now covering over thirty brands with units placed across 138 countries and the most distinctive business segments, (ranging from the utmost *Luxury* scale to the Upper Midscale, according to the STR chain scales).

Back in 1927, the couple J. Willard and Alice Marriot got their business started as an *A&W Root Beer* franchise with a nine-seat stand in Washington D.C, which did not take too long to further evolve to a low-cost restaurant going by the name of "Hot Shoppes". During the Second World War, the brand entered a few management agreements to explore cafeterias at government buildings and other public infrastructures through the 50's, culminating in a public listing in 1953. As far as the operations were expanding to several locations, the couple built its first hotel unit, the Twin Bridges Marriott Motor Hotel with a contiguous Hot Shoppe, leveraging the bet on the lodging industry with the credibility their meals brand had conquered so far. At this point in time, it was the couple's son, Bill Marriot, who was in charge of overseeing the hotel expansion. In later 60's, both Marriott segments embraced an international expansion, firstly, with the acquisition of a flight kitchen in Venezuela and then with the opening of the first hotel unit outside the USA, the Paraiso located in Mexico. On one hand, the following years have been determinant to consolidate Marriott Corporation positioning in the meals business through restaurants and food service acquisitions, for instance, Saga Corporation, and the creation of the fast-food division under the brand Roy Rogers, ultimately, making Marriott the biggest food company in the U.S., in later 80's. On the other hand, Marriott was on the verge to set its focus on the lodging industry, leading the company to a restructuring plan which implied the disposal of fast food and family restaurants and subsequent investments in longer stay hotels and increasingly luxurious units in the upper-scale segments, such as the Ritz-Carlton Company LLC purchased at a 98% stake by the end of 1998. By this time, Marriott had already surpassed the \$10 billion revenue milestone.

To sum up, Marriott International as it is known today results from a spin-off of Marriott Corporation in 1993, conceiving two separate companies, Host Marriott Corporation – the real estate owner and the concessions operator at airports and toll roads and Marriott International – the multi-branded portfolio manager in the lodging industry.

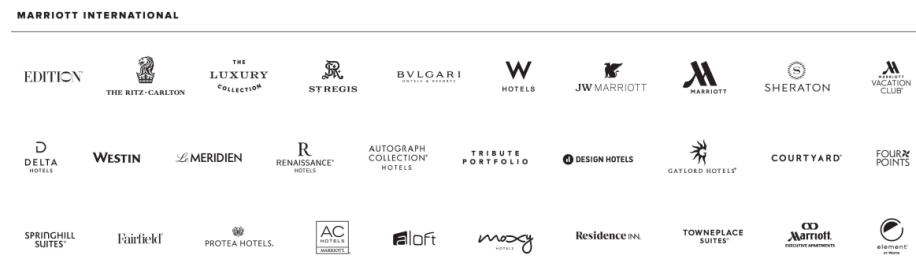


Fig1. Marriott’s portfolio¹

Business Model

Marriott International has been following a fee-driven, asset-light business model, (Marriott International, 2022), under which it usually operates and franchises hotels and other lodging facilities as well as branded residential real estate and timeshare. Hence, it is reasonable to divide Marriott’s business in three core operational segments as follows: Managed, Franchised/Licensed (including Yacht, Timeshare and Residential) and Owned/Leased.

The fee-driven model is based on two main sources of revenue. On one hand, managed units (accounting for 36.6% of total rooms) – the hotel owner and Marriott enter long-term agreements, typically for initial periods of 20-30 years, and the third-party pays Marriott a base management fee depending on the hotel revenue and an additional incentive management fee profit linked. Those management agreements, generally, contain third-party obligations regarding the reimbursement of costs that Marriott incurs to run the business, such as staff expenditures, daily supplies and any sort of cost related to centralized benefits. On the other hand, franchise and licensing agreements (accounting for 62.8% of total rooms) allow owners to operate their business under one of Marriott’s prestigious brands against the payment of an initial application fee as well as royalty fees (including room revenue and food). In both situations, third-party owners benefit from the centralized provisions for instance, the Marriott Bonvoy loyalty program, marketing channels, campaigns and the reservation system. In

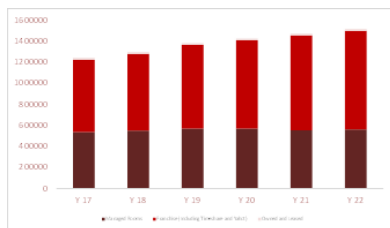


Figure 2: Properties by type
Source: Financial Reports

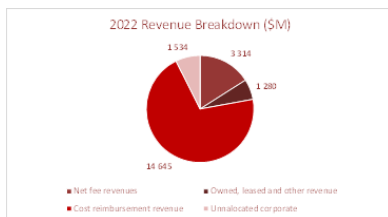


Figure 3: Revenue Breakdown
Source: Financial Reports

¹ Fig.1 has been extracted from Marriott’s website as of December 2023, but it does not reflect the creation of *Homes & Villas* by *Marriott International*, one of the most recent brands added to the company’s portfolio.

addition to that, franchise fees also include royalties from timeshare² and the most recent offer within the alternative luxury experience, the Ritz-Carlton Yacht Collection³ as well as fees on the revenues generated by branded residential real estate sales.

Finally, Marriott collects direct revenue as the owner and operator of a small portfolio of 13,432 rooms (51 hotels), which are expected to decrease at a -2.3% CAGR, between 2022 and 2026, following the asset-light trend.

▪ Worldwide Coverage

Marriott International compresses a portfolio of 1.6 million guest rooms across 31 brands whose operations are widespread across five regions – North America (U.S. and Canada), Caribbean and Latin America, Asia Pacific, Middle East & Africa and Europe, although it is generally assumed a simple split between the North America business, where the company was born and where it still concentrates the largest portion of its portfolio and the International business.

At present date, Marriott's portfolio exhibits a major dependence on the North America market, representing 63% of total available rooms, but the company seems to be committed to balance its geographic presence as far as it is growing at a historical CAGR of 5.71% outside the U.S. & Canada and 2.99% in the main region, between 2017 and 2022. Therefore, the forecasts that will be further discussed in the following sections of the joint report lay heavily in this historical trend, and it is actually believed the company will exhibit a 57% room allocation in the American region by the end of 2034.

Moreover, it worths mentioning the fact the systemwide operation is asymmetrically distributed across one region and another. Hence, the number of franchise rooms accounts for a major stake in the U.S. & Canada, around 78%, while the franchise percentage within the operation in the rest of the world represents no more than 39% of the asset light portfolio. This is due to different cultural approaches to the business in the lodging industry, which are more franchise-oriented in the U.S. where brand affiliation covers more than 70% of hotel rooms, as owners want to preserve some independence in their day-to-day activities. On the contrary, in several other regions, there is a prevalence of independent owners who are indeed more prone to benefit from Marriott's expertise in terms of hospitality management, which represents a vital growth opportunity for the company in less overcrowded markets. Therefore, it can be

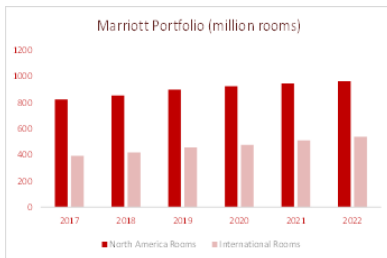


Figure 4: Marriott Portfolio
Source: Financial Reports

² Timeshare revenue arises from license agreements with Marriott Vacations Worldwide Corp., a former Marriott's subsidiary, generally, referred as "MVW".

³ The Ritz-Carlton Yacht Collection was launched in 2022 and there are already another two yachts in the pipeline, which are expected to be sailing in 2024 and 2025, respectively.

expected some competition shifting towards non-American regions, which will be ultimately reflected in increasing Average Daily Rates growing above the systemwide average in the long run.

▪ Pipeline Management

Marriott International is not only the leader in terms of guestrooms worldwide but also in terms of guestrooms already signed or under construction, placing the company in a strategic position to sustain its market share in an increasing competitive environment in the following years (figure 5). At present date, Marriott holds a pipeline of 516.700 rooms (excluding 40.300 approved but not yet subject to signed contracts), surpassing the 457.300 rooms of Hilton’s pipeline as of the past quarter. In addition, pipeline maturities of both companies represent a strong indicator to anchor expectations for gross additions in the short-term, and both players have around 230.000 rooms in the construction phase, highlighting Marriott’s challenging years ahead. In addition to that, there is some raising concern regarding the fact that Marriott is still signing less Management & Franchise agreements as it used to do before 2020, when the company reached an all-time peak of 250.000 new signings. This outlines the counter-cyclical effect of Marriott branding attractiveness for third-party owners, which saw brand-affiliation as safe choice in times of uncertainty following the first Covid-19 lockdown in 2020. Another relevant trend concerning pipeline additions has to do with the increasing weight of conversions from competitor brands accounting for 27% and 20% of total new signings and 2021 and 2022, respectively.

As a conclusion, this pipeline analysis corroborates the expectation concerning the number of International rooms for the future aligned with the key points highlighted in the aforementioned section – on average 55% of historical new signings correspond to non-America operations.

Board and Ownership Structure

The Board of Directors is headed by David S. Marriott, the grandson of the company’s founders and the third Chairman of the Board in Marriott’s 96-year history. David is a former President within the U.S. Full Service Managed by Marriott, and he has been a key player in the U.S. integration efforts of Starwood Hotels & Resorts acquisition (2016). The CEO Anthony Capuano has served in diverse roles of leadership since 1995 and holds a broad knowledge of the company operations as well as of the hospitality industry as whole. He also integrates boards of non-profit entities, such as the McDonald’s Corp. and other

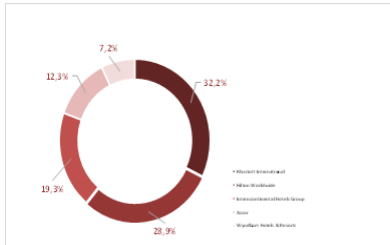


Figure 5: Marriott and competitors rooms in pipeline
Source: Statista

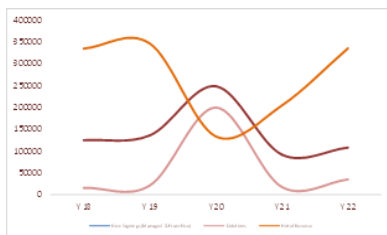


Figure 6: Marriott's pipeline management (\$M, number of rooms)
Source: Financial Report

relevant associations, enhancing Marriott's governance perspectives and brand reputation (Marriott International Inc., 2022).

Marriott exhibits a market capitalization of \$65B as of December 2023, (YahooFinance, 2023) and it has 308.12 million shares outstanding. Concerning the shareholder structure, the family has been losing its stake on the company during the past few years, as Marriott has caught the eye of giant institutional investors who account for 65% of the total capital of the firm, as of the second quarter of 2023. The most recent shareholder composition accessed through *Bloomberg* exhibits a high stake held by Vanguard Group (7.3%), Blackrock Fund Advisors (5.41%), JP Morgan Investment Management (2.43%), Fidelity Management (2.26%) and other asset management players which conveys a profound sense of credibility to the market, as institutional capital tends to follow ambitious standards for risk management policy and enhance the quality of the information disclosed to the public and Marriott's stakeholders in general. Despite this trend, the founder's two sons keep a family interest in Marriott's capital as they hold around 11.5% of shares outstanding, being the chairman David S. Marriott the top private owner.

Historical Performance

- Revenues and profitability analysis

Marriott's revenues have grown slightly from 2018 to 2022, displaying a 0.02% CAGR between this period. This growth was mainly due to a 1.91% CAGR of the main revenue caption, Gross Fees, and offset by a (4.99%) CAGR from the Owned and Leased Hotels, which highlights Marriot's asset light strategy, and the increasing importance it will have over the years. In terms of gross fees, we can clearly see a trend to increase the importance of franchised hotels, as it is the most representative caption of this segment, as well as the only one that grows during 2018-2022, showcasing a loss of importance of management contracts. While gross fee revenues vary similarly in both International and North America, we see a very clear trend in the Owned and Leased Sector, where Marriott increased its dominance in international soil, mainly due to the acquisition of several resorts in the Caribbean area. Summing up, Marriot's revenue breakdown not only gives us a clear image of their strategy going forward, but also shows the ability to recover from the COVID-19, launching the company into a bright future. Looking into its peers, we can see that all their revenues added up do not reach Marriot's reported revenue. This is mainly because of the higher Cost Reimbursements Marriot showcases in comparison to peers, once again portraying a strong image of an asset light strategy. Even if we remove that

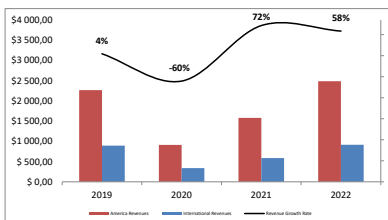


Figure 7: Gross Fee comparison: International vs NA
Source: Financial Reports

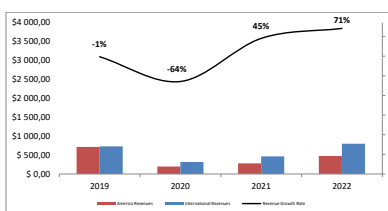


Figure 8: Owned and Leased: International vs North America

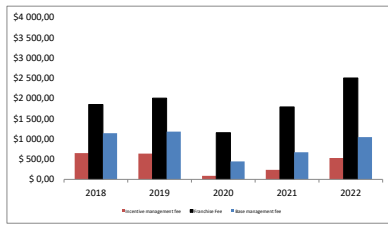


Figure 9: Gross Revenue Fee decomposition
Source: Financial Reports

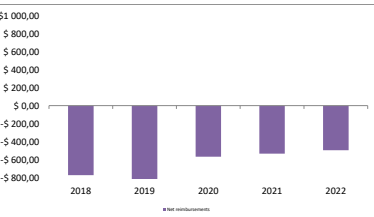


Figure 10: Net reimbursements
Source: Financial Reports

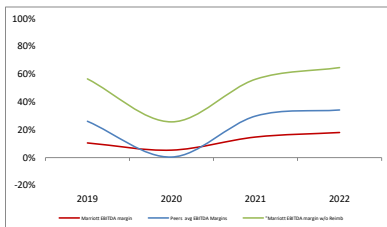


Figure 11: EBITDA margin comparison
Source: Financial Reports

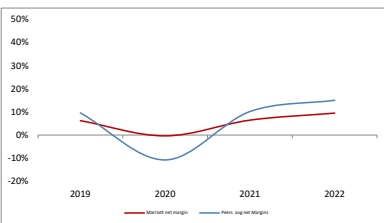


Figure 12: Net margin comparison
Source: Financial Reports

caption from total revenues, Marriott shows total dominance over all its peers, showing its position as the most solidified top lodging company in the world.

Diving into profitability measures, we can see what it seems to be some inefficiencies by Marriott when compared to its peers. In fact, the hotel giant has got a significantly lower EBITDA margin than the average of its peers, even though it is more stable, and will less violent fluctuations. This might, at first sight, indicate that Marriott is less able to generate operating results, but it is heavily influenced by the anomaly big reimbursements caption. If we isolate this effect from the EBITDA margin, we can see much bigger margins from Marriott, even surpassing competitors. This is the case not only because Reimbursements make up a very significant part of revenues, but also because the timing on the payments versus receivements on this matter has been off, pushing margins down, as payments are being made faster than Marriott is receiving the money, resulting in a negative reimbursement value. This also impacts Marriott's Cash Conversion Cycle, as it has, by far, the shortest time period to pay to suppliers, resulting in a very positive CCC. Regarding the ability to generate net income, we can see that Marriott has been surpassed by the competitor's, which are generating, on average, 15% of revenues as net income, compared to Marriott's 9%. This ratio is being pushed up by Choice, which is the most asset light competitor out of all, and Whyndham.

▪ ROIC and ROE

Marriott's total Return on Invested Capital has been positive in all considered historical period and growing from 2018 to 2022. This derives mainly from the increase in the Core ROIC, which was 24.02% in 2022. A high ROIC can be associated with the asset light model, as it can generate larger revenues without possessing a large balance sheet, reflected by low Invested Capital values. The average peer ROIC was 56% in 2022, due to a very high value coming from Intercontinental hotel (209%). Excluding this value, we see a ROIC of only 17% in 2022, showing that competitors are not doing as well as Marriott. Regarding only the Core ROIC, which shows us if the company is creating value, we see that it was, on average, higher in Marriott's peers than in Marriott itself, once again prompted by Intercontinental. Excluding this company from analysis, we can see Marriott's proven ability to create value, with a ROIC above its peers, and above the WACC.

Concerning ROE, we see that Marriott shows a heavily volatile number, due to the fact that it has a low equity value (close to 0), which makes the ratio very sensible to small changes. It was still higher than competitors average, proving that Marriott is more efficient with its equity book value.

▪ Liquidity

Marriott presented below 100% current ratio values in all analysed historical period, meaning that its current liabilities are not fully covered by its current assets. This can put Marriott in a fragile position, as it means it has difficulty in complying with short term obligations. Furthermore, Marriott’s Cash Conversion Cycle is positive, due to the fact that it takes little to no time paying to suppliers, which can worsen the situation, as Marriott is not financed by its suppliers, and needs cash availability to fully operate. Indeed, Marriott might not be prepared to deal with unforeseen situations. In the COVID-19 years, however, the company has been gradually increasing this ratio, using a more conservative and cautious approach, as the situation was unstable and unpredictable. Compared to its peers, Marriot is the one in the worst spot regarding liquidity.

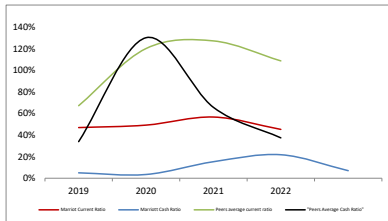


Figure 13: Marriott and peers current and cash ratio
Source: Financial Reports

In terms of Cash Ratio, Marriott has been improving its position by stacking cash, reinforcing its position by purchasing more than 2.5 Billion dollars worth of treasury stock. We must, however, take into consideration that Marriott’s ratios do not necessarily mean trouble, as the liability for guest loyalty program will most likely not result in a financial expenditure, at least not paid in cash. Without this caption, Marriott’s liquidity ratios would be very close to the 100% mark.

▪ Solvency

Looking at Marriott’s capital structure, we can see that it is a company which relies on financial leverage, a tendency that was worsened during the COVID pandemic, reaching highs in the Net Debt to EBITDA ratio, and lows in equity value. This tendency, however, already started to be reversed during 2022, driven by better operating results. In fact, Marriott’s credit rating has improved in 2022, going from a Baa3 to a Baa2 in Moody’s rating, which is positive as it may allow the company to access financing at lower costs. Compared to its peers, Marriott is within the average, and fairly better than its closest peer, Hilton, which had a negative equity value in the last 5 years.

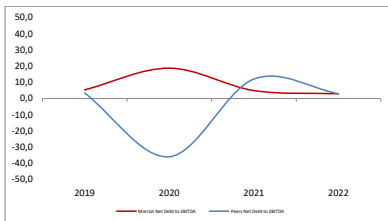


Figure 14: Marriott and peers Net Debt to EBITDA ratings
Source: Financial Reports

Economic Overview

The hotel industry can be seen as a subset of the broad market of Travel & Tourism, one of the most recently affected sectors in the economy due to the consequences of the Covid 19 forced lockdown on global mobility. Despite that, the T&T sector has proven to be particularly resilient in its post-pandemic recovery as it is persistently growing at a faster pace than the global economy (in nominal terms), according to the IMF forecasts.

In addition to this optimistic high-level observation, it is crucial to consider other variables to consolidate our forecasts, for instance, in what concerns Marriott's expected revenue for the next few years, as there are still some challenges ahead, namely, regarding the current climate of high interest rates and inflation levels significantly above the target, which ultimately led the main central banks to monetary policy tightening decisions. Generally speaking, the most recent monetary policy updates play a double effect on both costs of corporate debt financing, consequently affecting Marriott's capacity to sign new contracts and avoid opening delays as well as portfolio deletions, and household debt, which affects individuals' propensity to consume and leisure travel.

According to Bloomberg's data, market players are somehow convinced that interest rates will remain at record highs for a longer period than initial expected, in spite of lower inflation prospects. However, the market assumes great likelihood that both the ECB and the FED will start interest rates cuttings in mid-2024 or even earlier, pricing a 100b.p. decline by the American body by the end of the next year (Smith, 2023).

On the grounds of our data-driven approach for the revenue forecast, it is worth mentioning some key aspects that have been considered for the medium-term outlook in some strategic topics:

- APAC (including China)

In 2019, Chinese travellers represented the world's largest stake in the total amount of outbound tourists, contributing with 250B\$ to the global economy (accounting for 3% of the T&T revenue in that year), (Baschuk, 2023). This benchmark is of the utmost importance as 2023 marks the end of the zero-Covid-19 policy in China, as well as the implementation of some stimulus that act in favour of both inflows and outflows of travellers, for instance, the provision of a visa-free entry provided to some European countries and Malaysia, the abolition of the health declaration requirement for all travellers, the reinstatement of foreign cruise activities and the increased accessibility in the visa application process, (Dezan Shira & Associates Staff in China, 2023).

As a result, Chinese hotels have registered an average 68.4% occupancy rate YTD being aligned with pre-pandemic values for the first time and the YTD Marriott's systemwide occupancy disclosed for the third quarter in APAC. The average daily rate also increased to 133.3\$, (6.4% YTD), primarily driven by demand as inflation remains in low levels, (October CPI dropped 0.2% in comparison with October 2022), (Woo, 2023).

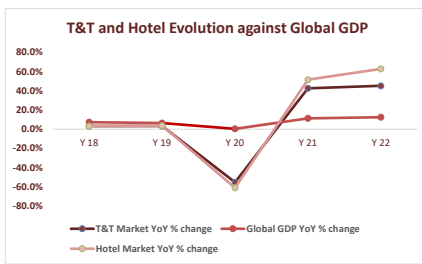


Figure 15: T&T and Hotel Evolutions against Global GDP
 Sources: IMF, Statista

▪ Europe

By the end of 2022, Europe's T&T sector has already shown wide proof of its strong post-pandemic recovery which reached 80% of 2019 levels in terms of number of tourist arrivals, according to the World Travel and Tourism Council. Relatively to the other four regions where Marriott operates, Europe has presented historically lower real GDP growth rates, with exception to Latin America and the Caribbean before 2020, and it is expected to continue growing below the 2% mark after 2022, according to the IMF forecasts. Moreover, the hike in interest rates and persistent high inflation may have an uncertain and asymmetric effect in several economies within the EU, such as those more energy dependent and labour intensive, (Germany is a very good example of such an economy that came out of two successive quarters of recession, 2022Q4 and 2023Q1) (BNP Paribas, 2023). In addition, the German Government sent a strong conviction to the market, as soon as it ceased new emissions of inflation linked bonds, confirming that inflation will take longer to be under control. The current scenario of dollar appreciation against the euro might work in favour of the EU inbound tourism coming from the other side of the Atlantic.

▪ North America

The U.S. economy works as good proxy for the outlook prospects regarding the North America performance and it is expected to grow slightly above the European economy in real terms in the long-run, surpassing the 2% mark between 2026 and 2028, (International Monetary Fund, 2023). In fact, the U.S. economy is on track to outperform major investment banks forecasts as it is on the verge to close 2023 with a 2.8% real growth, taking the wave of the so called soft-landing. In addition to that, if inflation keeps following a slow-down trajectory, the hiking cycle of interest rates might be over, according to JP Morgan, whose position reinforces the market conviction concerning two consecutive cuttings of 0.5b.p. in the last two quarters of 2024.

Lodging industry

The hotel industry is composed by big and small players, with different segments and some pulsating market trends.

Looking into the tourism market in a deeper manner, we see a strong international tourism wave, with 2022 being a year of recovery. Despite still being 34% behind the global number of international tourists in the pre-pandemic era, this number is already 111% up from last year. Regarding receipts, we see a similar trend, but with them being only 25.6% down from 2019, showing a higher

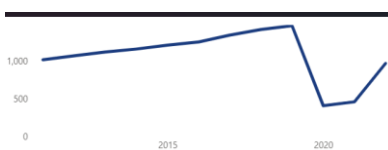


Figure 16: Total inbound tourism arrivals, millions of people
Sources: UNWTO

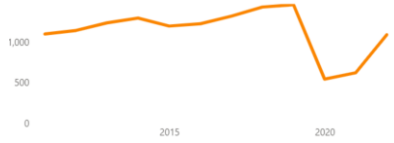


Figure 17: Total inbound tourism receipts, billions of USD
Sources: UNWTO

global receipt per tourist. This indicator favors Marriott, as it clearly shows that tourists are seeking higher quality options and more reliable lodging spots. The United States of America, where Marriott has the majority of its operation has a similar behavior, with less violent decreases on international tourists. Despite this, it is still the 3rd country in the world with more arrivals, despite it representing only 5% of total arrivals, and the 1st in terms of receipts. Concerning the Caribbean region, where Marriott strongly invested in 2019, notably in Barbados where it added several properties to its portfolio, the number of yearly tourists in 2022 already surpassed the pre-COVID levels, which sustains the thesis that international markets will probably grow more than the USA and Canada market, as there is more margin to explore.

In terms of domestic tourism, we see a strong market in China and the United States, which can be explained by the big dimensions of both countries. This also means that Marriott still has a large market to explore.

Looking into workforce, we see a large number of employees in India, which is 5 times larger than the second most relevant country, Japan. The United States of America shows up in 5th place, with 3,887 tourism employees in 2020, which seems short for the market dimension and could put some future pressure on wages.

Country	Arrivals (million)	% share	Receipts (USD bn)	% share	Receipts per arrival (USD)
France	79.40	2%	59.7	5%	752
Spain	71.66	2%	72.9	7%	1,017
United States	50.87	5%	136.9	13%	2,691
Türkiye	50.45	5%	41.4	4%	820
Italy	49.81	5%	46.6	4%	936
Mexico	38.33	4%	28.8	3%	751
United Kingdom	35.74	3%	67.6	6%	2,199
Germany	28.46	3%	31.5	3%	1,108
Greece	27.04	3%	18.6	2%	689
Austria	26.21	3%	19.9	2%	760
Utd Arab Emirates	22.65	2%	49.3	5%	2,177
Portugal	22.25	2%	22.3	2%	1,000

Figure 18: Most popular tourist arrival destinations
Sources: UNWTO

Market trends and events

- R&D

In 2022, Marriott International launched the Marriott Design Lab as part of its headquarters which aims to be an innovation hub where hotel rooms are conceived to provide an “intuitive in-room experience for guests” (McGovern, 2023). This project has raised several strategic corporate partnerships since its inception such as: Honeywell and LG whose know-how and vanguard equipment will enhance Marriott’s offer in terms of customized control in the guestroom and improved software solutions to better measure performance metrics.

The design of the room is now an in-house conception as highly detailed as possible and it works in favor of Marriott’s commitment regarding the best ESG practices improving construction standards, energy consumption and measurement and also reducing the average length of undertaken projects.

To sum up, there is a strong conviction concerning the importance of smart rooms for Marriott’s positioning as a top player in the upper tier segment and the pioneering Design Lab is a great source of added value to capture new franchisees and licensees as well as to sustain the attractiveness for competitor brand conversions.

▪ Asset light strategy

In recent years, the hotel industry has reshaped its business model, going from investing in properties and real estate to focusing more in the operational aspect of lodging, operating the vast majority of rooms under management or franchise agreements. The asset light strategy provides companies with several competitive advantages, with the first being economies of scale through cost savings, mainly in real estate related expenses. Growing through franchising allows the company to grow to new geographies without the risk of possessing an infrastructure in said country, which can be an offputting factor for most companies due to the high instability that is seen in certain regions. With these cost savings, companies can be more focused on spending their cash on certain aspects of the business that improve customer experience, and bring new clients in, such as marketing. In fact, with the asset-light strategy, companies are almost invulnerable to the real estate bubble risks, and would suffer considerably less, had this model been implemented earlier than the 2008 crisis. According to a study from Ernst & Young (Giri Varadajan, 2021), asset light companies have outperformed their peers on the last five years. This puts Marriott on a privileged position, as it has 99% of its rooms under franchise or management agreements, being one of the most asset light companies in the industry.

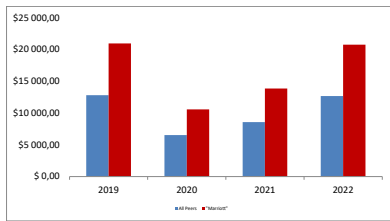


Figure 19: Marriot vs all peers together (Revenues)
Sources: Financial Reports

Looking into downsides, an asset light strategy would mean that there are fewer entry barriers, as players do not need big investments to provide services. This would not be a major problem for Marriott, however, as it is a very consolidated player in the market, with revenues above all its peers added up.

▪ Sustainability and Environmental Concerns

Sustainability and environmental worries are not a new global trend, being present for years in every industry and clients' minds. As global warming threats keep rising, customers are on the search for more environmentally friendly establishments. In fact, a study from Michalis Skordoulis, Maria-Ioanna Andrepoulou and Dimistros Drosos shows us that 61.9% of people would be willing to pay more to stay in an environmentally friendly hotel, with only 7.6% disagreeing. In terms of extra payment, the vast majority of enquired would be willing to pay a 1-5% premium. This puts into light the importance of Marriott's carbon neutral goals. According to Marriott's website, the hotel giant has decreased its carbon intensity by 24.6% and actually increased water intensity by about 4%. Compared to Hilton, this is manifestly insufficient, as the competitor has managed to present a 44% carbon intensity reduction, as well as a 38%

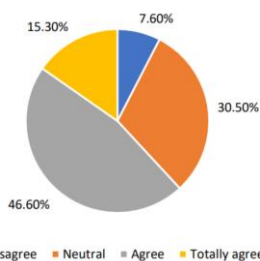


Figure 20 : Percentage of people who would pay more for a sustainable solution
Sources: Mihcalis Skordulis et al study

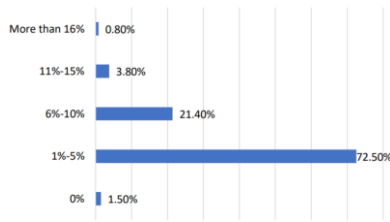


Figure 21: Premium people would pay for a sustainable solution
Sources: Mihcalis Skordulis et al study

water intensity reduction. The goals also seem to point in Hilton's favour, as it aims to decrease carbon emissions by 75% until 2028, and water intensity by 50%, compared to Marriott's 30% and 15%. Marriott also only has 28.8% of its properties certified to a recognized sustainability standard, intending to reach the 100% mark by 2025. In conclusion, through market data and peers comparison, we can see that Marriott is lagging behind in environmental terms, which could hinder revenues on a not so distant future.

▪ Major events

Every now and then, some major events happen worldwide and move thousands, if not millions, of people. The United States of America, where Marriott holds most of its properties, will hold the 2026 World Cup and the 2028 Olympics. Regarding the world cup, this is a tournament that attracts not only football fans, but also people that simply enjoy the party environment around it. It will be held in the USA, Canada and Mexico, which is favorable for Marriott, as it possesses properties in all of these locations. These properties range from highly luxurious, to cheaper options, having solutions for all tastes and kinds of customers. The fact that the World Cup is spread throughout several cities also plays in favor of the big hotel companies, which might manage to capture some loyalty effect from clients that attend several games, choosing the same hotel chain as a recognition of quality or simply due to the benefits that the loyalty guest programs provide. It is expected that Marriott, as the biggest player in the industry, captures a big part of the about 5M international tourists, as well as some of the domestic ones.

The 2028 Olympic Games will also be held in the USA, more specifically in Los Angeles, where Marriott has a diverse portfolio, ranging from Select Hotels to Luxury. This event usually brings a big audience, which once again will most likely have a part captured by Marriott. In comparison, the Paris Olympic Games in 2024 brought around 3M people, and 4B in additional spending⁴. These two events are part of the first Pillar (Promotion) of the National Travel and Tourism Strategy, with the remaining being Facilitation, Diversity and Resilience.

Valuation

Revenue Forecast

Marriott International has pursued a very aggressive market strategy based on portfolio strengthening, measured by the number of available guest rooms and

⁴ Euromonitor statistics

pipeline development, through an increasing number of Management and Franchise new signings over the years. Moreover, some news trends are arising in terms of pipeline planning, for instance, with an increasing number of conversions going on, representing 27% and 20% of the total new signings in 2022 and 2021, respectively. Marriott's 2022 annual report empathizes the dichotomous bet that has been made in the luxury tier (accounting for 7.4% of total systemwide signings) as well as in the select segment⁵, which is believed to be one of the major drivers of the company revenue growth in the next few years, (Marriott International, 2022).

▪ Occupancy Rates

As one starts looking into the revenue forecast, it becomes crucial to consider the three key performance indicators expected evolution for the next few years, namely, Occupancy Rate, Average Daily Rate and the product of the former two, RevPAR. As far as pre-pandemic occupancy rates were analyzed, it is possible to observe some stability over the years for every region of the world in each segment operated by Marriott, always taking into account that occupancy rates for the premium tier in North America tended to be slightly below the other two and the International market, typically registers lower occupancy than the North America (74% comparing to 71.7%, in 2019). Following a data-driven approach based as much as possible on market relevant forecasts for the lodging industry and economic indicators, the occupancy rates have been estimated for the period between 2024 and 2034 as weighted variations from the previous period in accordance to the estimated evolution for the real GDP as a good driver of supply increase, (both the local and global real GDP were weighted to enhance the accuracy of estimations) and the forecasts for the hotel industry revenue growth provided by Statista as a relevant driver of demand prospects, (when forecasting the occupancy for the upper scale tiers it was weighted the evolution of the High Net Worth Population – HNWIs, in addition to Statista's references as Marriott sets this group as the main target for the most exclusive offer). Overall speaking, the analysts' expectation is that the luxury segment in the U.S. and Canada will outperform the other two categories, following an outstanding evolution of the American society high-class, considering a CAGR for the number of HNIWs of 7.7% between 2022 and 2027. There is a wide conviction that consumer preferences are evolving towards non-conventional luxury offer and tailor-made experiences where location becomes secondary and the overall feeling turns out to be the most valuable asset, (JLL, 2023).

⁵ Marriott reinforced this position with the unprecedented acquisition of the City Express portfolio of 17.300 rooms in the Americas franchise, playing in the midscale segment for the first time.

To sum up, the average systemwide occupancy for North America will reach a steady state level of 76.45% since 2027 onwards widening the historical gap with the International set which does not seem to go above the 70.3%, although there is still some hope on the fair evolution of the APAC market whose real GDP average annual growth rate will be 4.2% between 2023 and 2028, above the world composite estimated by the IMF.

▪ Average Daily Rate (ADR)

The average daily rate is the lodging indicator whose recover from pre-pandemic levels occurred faster, even during 2022, which also holds true for the general industry in the United States, according to STR, (148.83\$ in 2022 vs 131.21\$ in 2019), consisting of high-level evidence of the correlation with inflation.

On the grounds of the assumption that ADR can have multiple drivers and varies significantly across the three business segments in the U.S and Canada, depending on the quality of the service being offered, it was decided to run a regression to explain how the ADR, in its logarithmic form, can be explained by three independent variables – Occupancy Rate representative of the demand effect in ADR fluctuations across quarterly observations⁶, the logarithm of the CPI for hotels and restaurants in the U.S. and an hotel rating (from 0 to 3) to distinguish the hotels contained in the sample in accordance to the belonging segment. It is relevant to mention the rating of 3 has been attributed to Ritz-Carlton observations, as this brand exhibits historical ADRs considerably above the average of the Luxury peer group, which has further increased the R square of the regression. The sample consists of 234 quarterly observations for 9 different brands directly extracted from Marriott’s quarterly reports, with exception for the U.S. Hotel and Restaurants CPI whose series was retrieved from FRED’s Economic Data section. Although it can be argued this model is based on a very limited set of observations for Marriott Hotels in the U.S., it is still considered valid as individual significance tests have acknowledge the three explaining variables are highly significant for any standard level of confidence, the fit of the regression is very high, (above 90%) and the presence of heteroscedasticity has been discarded.

Regression Statistics	
Multiple R	0.95458
R Square	0.91123
Adjusted R Square	0.91007
Standard Error	0.05603
Observations	234

Figure 22: Regression Statistics
Sources: Analysts Estimations

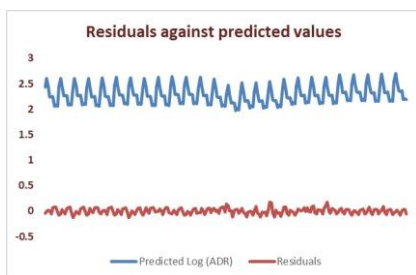


Figure 23: Residuals against predicted values
Sources: Analysts Estimations

Variables	Coefficients	Standard Error	t Stat	P-value
Intercept	-0.2017	0.2289	-0.8813	0.3791
OR (Demand)	0.2477	0.0206	12.0537	0.0000
Log (US CPI)	1.0377	0.1103	9.4089	0.0000
Hotel Quality	0.1750	0.0037	47.2799	0.0000

⁶ The OR also captures the effect of the Covid-19 lockdown in ADR and deletes the necessity to compute a dummy variable to identify observations contained between 2020Q2 and 2021Q4.

As far as the model was validated, it allowed to compute the systemwide ADR forecasts between 2023 and 2034 for each business sort. In the long run, the ADR is expected to grow in line with inflation⁷, as far as occupancy rates become steady after 2027, leading to a very similar CAGR between segments in the period under analysis, (3.01% for Luxury, 2.87% for Premium and 2.67% for Select).

The ADR forecast for Marriott’s International business relies entirely on the expectations for global inflation, following the trends discussed in the economic overview section, as occupancy rates are assumed to be almost constant, floating between 70.25% and 72% in the long run, placing those numbers very close to pre-pandemic historical values. In addition, this approach narrows the gap that has been enlarging between North America and International in recent years placing both statistics very close to each other in accordance to the observable pattern before 2020⁸.

Once again, it is empathized Marriott should place the upper-scale tier on top of its priorities as it represents a subset of the population less price-sensitive with an abiding desire for leisure travel who can accommodate increasing costs derived from high inflation periods. It is indeed a business unit that allows to hedge against inflation, accounting for one of the major financial risks that may trigger the company’s performance.

Owned Leased and Other

Notwithstanding the expected decrease in the number of owned and leased properties across all regions, the forecasted revenue under this caption is still expected to grow at a CAGR of 0.32% between 2023 and 2034, as the ADR evolution, (assuming systemwide occupancy rates), more than offsets the number of lost units until 2025, leading to steady-state null variations.

- Unallocated Corporate and Other

As part of the revenue generated through franchise and licensing agreements, there are other captions not included in Gross Fees that come from Timeshare and the most recent offer within the exclusive Ritz-Carlton Yacht Collection. Hence, Marriott Vacation Worldwide owes Marriott International royalty fees composed of an annual fixed amount inflation-linked and a variable part dependent on sales. As of 2022, 89% of MVW portfolio was related to Marriott

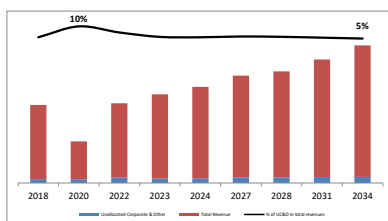


Figure 24: Unallocated Corporate and Other
Sources: Financial Reports and Analysts Estimations

⁷ For the forecasts section, the inflation considered for future years relied on the values of the US breakeven inflation for several horizons.

⁸ The U.S. and Canada achieved a full resumption of Covid-19 restrictions earlier than many regions in the rest of the world, such as Grand China and Asia Pacific, placing a gap between the ADR in those two countries and the International set.

International, which somehow benchmarks the percentage of the caption “Royalty fees” owed to Marriott. From 2023 onwards, the royalty fee was decomposed in expectations for inflation in three key regions – Europe and APAC, Americas and US and Hawaii and the respective evolution of the economy as a good driver of vacation rental sales. Apart from that, the luxury sail experience has been estimated to evolve in accordance with the number of boats in pipeline, which are expected to be available in 2024 and 2025, each one with more than 1.5x ERIMA’s capacity and tonnage.

▪ **Cost Reimbursement**

Cost reimbursements relate to certain expenses that Marriott incurs in order to help the operation of managed properties, which are later reimbursable by said properties. Therefore, Marriot does not intend to make a profit with these caption, with the differences between Cost Reimbursement Revenues and Reimbursed expenses resulting only from temporal differences between payment and receivment of said amounts. In order to forecast this caption, 2020 was used as a reference year for fixed costs (due to the low activity levels), determining that these represented about 60% of total costs in said year, varying only with inflation for the remaining period. The variable costs were then computed, using the average percentage of the historical period as a benchmark for the future. As the company does not intend to make a profit, the Cost Reimbursement Revenue is forecasted to be equal to that of the expenses.

▪ **General, administrative, and other**

This caption of the Income Statement mainly consists of personnel costs, as well as other administrative costs and general expenses, such as litigation settlements. For this reason, this is a caption that is expected to vary slightly over the years, showcasing the strong fixed costs component it possesses. Once again, 2020 was used as a benchmark year for said costs, not only because of the low activity, but also because there was a corporate restructuring in this time-period. Variable costs in this caption represent possible sub-contracts or increased personnel Marriott has to hire in order to efficiently respond to higher demand, and were computed as an average of this percentage over historical periods. The lack of workforce in the tourism industry might increase the value of this expense, pushing it above historical values, and resulting in a bigger variation, which is offset by lower forecasted inflation rates. This caption does not include Depreciation and Amortization expenses, which are forecasted as a percentage of PP&E and Intangibles, respectively.

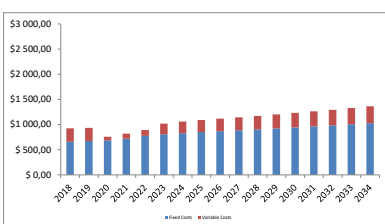


Figure 25: General, administrative, and other: variable and fixed costs
Sources: Financial Reports and Analysts Estimations

▪ Owned, leased and other Direct

The Owned, Leased, and other direct caption relate to the expenses directly associated with rooms owned or leased by Marriott. These are composed by both fixed expenses, such as lease payments, and variable expenses, such as internet or heating. Computing fixed costs based on the year with the lowest activity, 2020, and using 60% of the total as benchmark, we can get the variable expenses in each year, which represent on average half of the “Owned, Leased and Other Revenue”, which is a comparable yet slightly higher margin than that of the managed and franchised rooms, explained by the reflection of financing costs in this type of rooms. A decrease is expected between 2018 and 2034, as the loss in owned and leased rooms, following the asset light strategy, will more than offset the inflationary tendencies, resulting in a smaller impact of this caption in the total expenses as the years go by.

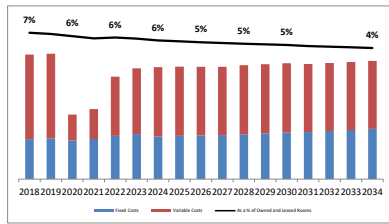


Figure 26: Owned, Leased and other direct: variable and fixed costs
Sources: Financial Reports and Analysts Estimations

▪ Contract Acquisition Costs & Contract Investment Amortization

Contract Acquisition Costs represent certain costs incurred in order to obtain franchise and management agreements. For this reason, the value of Contract Acquisition Costs is closely connected to the number of contracts Marriott signs, which is, in turn, associated to the number of franchised and managed rooms, as more contracts mean more capacity. With the predicted increase in managed and franchise rooms, especially in the latter, it is natural that this caption will represent a more important part of the balance sheet in 2034 than in 2023. Multiplying the number of managed and franchised rooms (proxy for the number of contracts) by the cost per room, calculated using the average real cost per room in the historical period and adjusting it for inflation, we get the contract acquisition costs. The Contract Investment Amortization represents the annual amortization of said contracts, which lose value over the years. This value was therefore calculated as a percentage of the balance sheet caption.

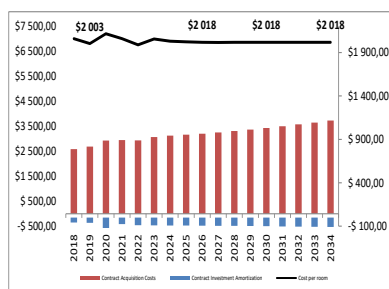


Figure 27: Contract acquisition Costs, Cost per room and respective amortization

▪ Liability for guest loyalty program

This caption represents the monetary amount that Marriott owes to its customers, typically repaid in services such as free nights, or free upgrades. Marriott has a guest loyalty program, named Marriott Bonvoy, which has been growing in the last few years, going from about 125 million members in 2018 to 177 million in 2022. Despite this growth, Marriott Bonvoy has been falling in the Best Hotel Rewards program of US News, going from the 1st place in 2018, to being the 3rd best reward program in 2023-2024. The liability associated with the hotel rewards program is usually closely related to the number of members, but also to the

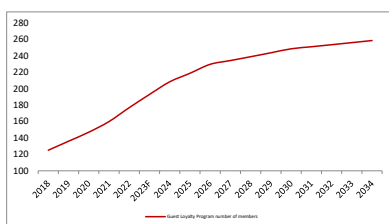


Figure 28: Guest liability program: Number of members forecast
Sources: Financial Reports and Analysts Estimations

amount of points each of them possess, as well as the value per point and the redemption rate. We expect Marriott's Bonvoy number of members to keep growing, starting at the average growth rate of historical period, but changing to a slower rate as years go by, reflecting the previously mentioned shifts in consumer preferences, as well as a limited and increasingly smaller pool of potential members. The other value driver, liability per member, is expected to grow at negative rates, a tendency seen in the historical period, and explained by the increase in members and the increase in touristic activity, meaning that a lot of points owned by customers are expected to be redeemed in the following years. The division between current and non-current liabilities shows our prospect for the next fiscal year, and is therefore heavily related to the tourism market. For that reason, it was used a GlobalData forecast for the global tourism market, and applied a 50% ponderation, meaning that current liabilities will grow 50% of the global tourism market growth, as not all that variation will be captured by Marriott in said year. The non-current liabilities are computed by the difference between total and current liabilities.

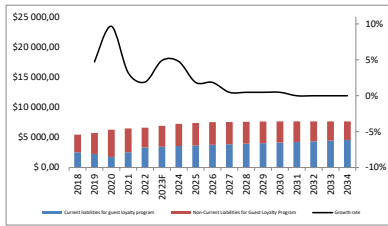


Figure 29: Guest liability program: Forecasted growth rate and current vs non-current liabilities. Sources: Financial Reports and Analysts Estimations

Intangibles (Brands and Goodwill)

A major part of Marriott's assets (60%) are intangibles, mainly represented by the 2 biggest captions: Goodwill and Brands. Goodwill typically arises when a company acquires another with a premium. Considering that M&A activity is hard to predict, we have decided to maintain this caption constant for the remaining projection period. Brands is a very important caption in Marriott's balance sheet, as it showcases the variety and value of Brands in Marriott's portfolio. Marriott currently has 31 brands under its name, having added the last one during 2023. It is expected that more will follow. In order to forecast this caption, and assuming that a new brand is added to the portfolio every 4 years, the net value per brand was computed, and it was used a 1% decrease each year since 2022, in order to account for amortization. The total number of brands is then multiplied by the value per brand.

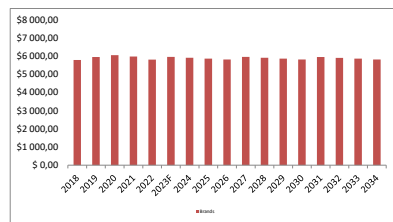


Figure 30: Brand value evolution Sources: Financial Reports and Analysts Estimations

PP&E, CAPEX and Leases

As previously mentioned, Marriott operates under an asset light strategy, meaning that it owns or leases a very small part of the rooms it operates (less than 1%). The PP&E value depends on several factors, such as land values, furniture and other improvements. Historically, and despite a big investment in owning Caribbean hotels in 2019, Marriott has been disposing of some of its owned hotels, especially in USA & Canada. While we do not expect Marriott to invest in

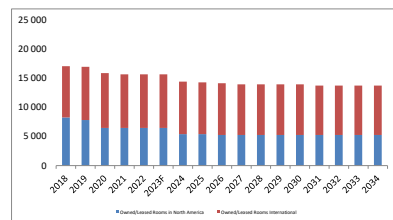


Figure 31: Owned/Leased Hotels in North America vs International Source: Financial Reports and Analysts Estimates

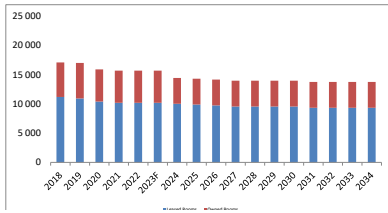


Figure 32: Total Owned vs Leased Hotels
Sources: Financial Reports and Analysts Estimations

new hotels, we do have to account for improvements on current ones, resulting in some CAPEX investments, specially in the first few years. We expect Marriott to dispose of more owned hotels, such as the Westin Peachtree Plaza in Atlanta, which is their biggest hotel. The city of Atlanta has been active in buying buildings, as it has a goal of providing 20,000 affordable housing units by 2030. As prices are hard to predict, we assumed this sale would be at the fair asset value, not resulting in any revenue generated. Leases follow a similar rationale. In fact, in the last few years, there were no new lease agreements, and some, mainly in South Africa, have been broken by the company. We expect this trend to continue, reducing the value of lease assets and liabilities.

Intrinsic Valuation

After computing a DCF Valuation, which we deemed as the most reasonable way of determining Marriot's share value, we have arrived at the conclusion that Marriot's stock price is worth 229.93\$ as of December 2024. With the expected payment of 9.75\$ of dividends per stock during 2024 and considering that the stock is trading at 221.14\$ as of 17th of December 2023, the expected one year return is 8.4%.

Free Cash Flows

In order to perform a DCF Valuation, one must calculate the core Free Cash Flows of a company, which represent its ability to generate cash through core operations. Analysing this value, it can be seen that Marriott will generate increasingly bigger Core Free Cash Flows, until it reaches the steady state in 2034.

WACC

- Risk Free Rate

For the estimation of a risk-free rate, it was decided to use the most risk-free asset denominated in the same currency of the cash flows available, which is typically assumed to be the US 10Y Government bond. According to Refinitiv, the yield for this security, as of 6-11-2023 is 4,65%.

- Market Risk Premium

The market risk premium represents the additional return that an investor gets for investing in the market portfolio when compared to the risk-free rate. According to Damodaran (July 2023), the US market risk premium is 5%.

- Cost of Debt

US 10Y Gov	
Date	Bid Yield
06-Nov-2023	4.65%
03-Nov-2023	4.57%
02-Nov-2023	4.67%

Figure 33: US Government Bonds (Risk free rate)
Sources: Refinitiv

In order to compute the cost of debt (Rd) we have followed two approaches, having used the previously mentioned risk-free rate and market risk premium for the computation of both debt betas.

In the first method, we have used the Yield to Maturity of a bond issued by Marriott in 2021, which matures in 2033 (10 years from now), as the company's cost of debt. This value amounted to 6.19% and represents the return that holders of this security demand to hold Marriott's debt. After that, we need to adjust this value by the probability of default, and the loss in case this default happens. For this effect we have used Moody's 2020 report on debt, which states that a Baa2 rated company, such as Marriott, holds a 0,191% chance of defaulting, and a loss of 61,60% in case this default happens. The adjusted cost of debt was, therefore, estimated to be 6,17% and the respective implied debt beta was of 0,31.

In the second method we have used Damodaran estimate for the cost of debt, which is 5,50%, and represents an implied debt beta of 0,17.

In order to account for both methods, the average implied debt beta was used, which multiplied by the market risk premium and after adding the risk-free rate, resulted in a final cost of debt of 5,84%.

- **Cost of equity**

For the cost of equity estimation, it was needed to calculate Marriott's levered Beta, which is a good reference of a firm's exposure to systematic risk, considering the impact of financial leverage. Hence, the beta can be derived from a linear regression analysis, which demanded the computation of five-year monthly historical market returns represented by the S&P 500 Index and the same five-year monthly returns for Marriott's stock and its closest peers, namely Hilton Worldwide, Hyatt Hotels, Wyndham Hotels & Resorts Inc and Intercontinental Hotels Group.

Following the analysis, both Marriott and its competitors returns were regressed against the returns of the market benchmark. The slope of the regression is in the so-called leveraged beta or simply the coefficient or correlation. Marriott's beta turned out to slightly above the industry, 1.57 in comparison with 1.43.

- **Perpetual Growth Rate, ROIC and RONIC**

We expect Marriott's cash flows to stabilize and grow at a constant rate in 2034. The RONIC and Reinvestment Rate assume the values of (116%) and (4%), respectively, as we forecasted the Invested Capital to decrease throughout the

Our calculation	Damodaran
Risk Free Rate (10Y US Bond)	4.65%
Market Risk Premium (Convention)	3.00%
YTM (70M issued in 2021 with maturity in 2033 - Refinitiv)	6.19%
Probability of default (Baa2 according to Moody's 2020 report)	0.02%
Loss given default (Baa2 according to Moody's 2020 report)	61.60%
Rd	6.17%
Implied Debt Beta	0.31
	5.50% Final Rd
	0.17 Avg Debt Beta
	5.84%

Figure 34: Cost of Debt inputs
Sources: Damodaran, Moody's, Refinitiv

ROIC (Core)	91%
RONIC (Core)	-116.20%
RR	-3.6%
g	4.2%

Figure 35: ROIC and terminal growth rate inputs
Sources: Analysts estimations

years. This results in a terminal growth rate of around 4%. Considering that the forecasts for the World long term real GDP growth are 3.8%, and inflation prospects are 2.2%, meaning that nominal GDP will grow at a 6.1% rate, Marriott will perpetually grow below the economy. This is not an issue, as the highest growth forecasted will be in the African continent, where Marriott does not have much activity. When considering only the North American nominal GDP growth, which is 4%, the predicted terminal growth rate arises as a good proxy.

The core ROIC is expected to be 91% in 2034, which is well above the WACC, meaning Marriott is creating value to its shareholders, as the return on invested capital is higher than the cost of it.

Equity Value

After calculating the operational cash flows, as well as the terminal value, and discounting them at the WACC rate, we get the core Enterprise Value. To get the Equity Value, it is necessary to account for the Non-Core operations and Net Debt. For this, we have used the 2024 book values, as in these cases, book values are a fairly good proxy for market values. After this operation, we reach a B69.6\$ in equity value, which divided by the 308M shares reported in 2022, result in a 229.93\$ share price. With a payout ratio of 81%, the average industry payout rate of the last two years, the transactions with shareholders in 2024 were just above B3\$, resulting in a 9.75\$ dividend per share.

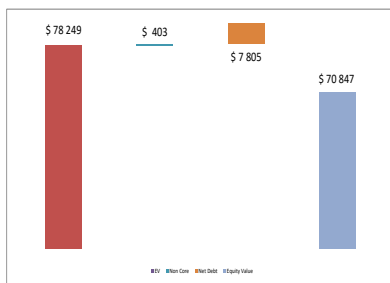


Figure 36: Equity Value calculation
Sources: Analysts Estimations

Comparable Valuation

In order to validate the results obtained from the intrinsic valuation, a look into comparable companies' values can be useful, as it can showcase big differences in said valuations, and tells us how the market portrays Marriott's value.

Comparable Companies

The metrics used for the multiple valuation were the EV/EBITDA and the EV/Sales, which are the most common metrics for this effect.

Looking at the EV/EBITDA, one can see that Marriot's multiple (15.46x) is one of the highest in the industry, which is the result of lower EBITDA margins.

Comparing it to its peers, the average multiple is lower, resulting in a 158.7\$ average share price. Using only the peers identified as most comparable, this number jumps up to 191.8\$, slightly below Marriott's actual share price.

Using the EV/Sales, we can see Marriott's dominance in terms of Sales, showcasing one of the lowest multiple's (2.93x), which results from a very high

Marriott Multiple Valuation			
	EV/EBITDA	EV	Share Price
Minimum	6.26	23,438.9	76.1
Maximum	19.95	74,703.6	242.4
Average	13.06	48,894.9	158.7
Adjusted Average	13.05	48,865.5	158.6
Median	13.20	49,425.1	160.4
1st Quartile	11.20	41,949.4	136.1
3rd Quartile	15.27	57,184.1	185.6
Peers used in WACC	15.78	59,090.2	191.8

Figure 37: Comparable Companies: EV/EBITDA
Sources: Refinitiv

Marriott Multiple Valuation			
	EV/Sales	EV	Share Price
Minimum	1.46	30,424.4	98.7
Maximum	6.19	128,524.3	417.1
Average	3.52	73,170.0	237.5
Adjusted Average	3.47	72,119.3	234.1
Median	3.35	69,645.7	226.0
1st Quartile	2.31	47,918.3	155.5
3rd Quartile	4.30	89,387.2	290.1
Peers used in WACC	4.13	85,817.0	278.5

Figure 38: Comparable Companies : EV/Sales

value of revenues generated. When looking at the multiples from its competitors, we can see that the average multiple is in line with the one that results from DCF valuation, resulting in a 237\$ share price. When looking at only the companies deemed the most comparable, the share price jumps to 278.5\$, which reinforces the argument that Marriott share might be undervalued. To sum up, looking at comparable companies, one cannot state with certainty that the DCF analysis is not valid, as the results are not clear, but looking at the average between both metrics (using only the most comparable companies), we get a share price of 235\$, close to the one obtained through the DCF analysis.

▪ Comparable Transactions

The last 5 years have been exceptionally active in terms of hotel chain transactions. In 2022 Crown Resorts was bought by Blackstone, Hilton has been reinforcing its portfolio with Bluegreen Vacations and Diamond Resorts, and B&B, a budget hotel chain was snapped up by Goldman Sachs. In terms of on-going transactions, there has been movement between two of Marriott's competitors, with Choice Hotels trying to buy Wyndham, submitting an offer in October 2023, meanwhile refused. The multiples in this offer position Marriott's share price at 480,7\$ (EV/Sales) or 205,35\$ (EV/EBITDA), which seem to show that Marriott's stock might be undervalued. However, we must take into consideration the premium involved in a deal of this dimension.

Target	Buyer	EV/Sales	EV/EBITDA
Wyndham	Choice	7.13	16.90
Crown Resorts	Blackstone Inc	4.47	19.86
Extended Stay America Inc	Blackstone Inc	5.70	14.57
Bourne Leisure Group Limited	Blackstone Inc	2.71	18.23
Diamond Resorts International, Inc.	Hilton Grand Vacations Co LLC	9.9	12.26
Bluegreen Vacations Holding Corp (100% Stake)	Hilton Grand Vacations Inc	2.16	6.91
WHV Resort Group Inc	Marriott Vacations Worldwide Corporation	n/a	18.65
B&B Hotels SAS	Goldman Sachs Merchant Banking Division	2.08	10.4
Average		4.24	15.33
Marriott Share Price		285.4	186.4

Figure 39: Comparable Transactions
Sources: Mergermarket

Looking at the average share price in these transactions, we can see conclusions similar to those obtained in the comparable companies valuation: regarding EV/EBITDA, Marriott looks fairly valued and in line with our DCF valuation, while regarding EV/Sales, Marriott seems severely undervalued, resulting once again from its dominance in revenues, and lower EBITDA margins. These values sustain our idea that Marriott's stock might be slightly undervalued, as the average between both metric results in a 236.1\$ price, close to the one obtained in the DCF method.

Risks & Scenario Analysis

Data Breaches

According to Trustwave's report "2023 Hospitality Sector Threat Landscape: Trustwave Threat Intelligence Briefing and Mitigation Strategies", 31% of lodging corporations have acknowledged a data breach across their company existence and 89% have been affected more than once in a single year, with average financial penalties (both legal implications and indirect costs accounted) of \$3.4 million.

Marriott International compresses a huge infrastructure that heavily relies on the most disruptive technology to ensure the normal flow of the operations as well as the most advanced cybersecurity procedures to avoid third-parties access to guests' personal data. The likelihood of a data breach occurrence under an asset-light business model is enhanced by the fact that franchisees and licensees may fail to behave in accordance with applicable standards, therefore, damaging Marriott's brands reputation (Marriott International Inc., 2022).

In fact, Marriott has proven to be vulnerable to this sort of threats, as it has been involved in one large-scale data breach taking place in 2014, involving Starwood brands⁹. Nevertheless, the security alert came out just four years later and it has further evolved to the confirmation that Starwood's internal guest reservation database had actually been accessed by external parties. Consequently, over half a million guest entries including payment card data and passport numbers were breached and Marriott has faced a severe financial penalty of \$23.9 million, (lower than the initial 100 million pounds fine) decreed by the Information Commissioner's Office (ICO) (Page, 2020) as well as stock losses.

More recently, Marriott reported another incident with sensitive information involving 5.5 million users (the "Unauthorized Application Access Incident") due to an inappropriate login using some franchise employees' credentials, resulting in ongoing lawsuits whose financial impact over the amount already paid is still uncertain (Marriott International Inc., 2022).

As a brief note, the occurrence of these breaches represent a major challenge for Marriott as it demands higher investments in information security and technology as well as in compliance initiatives concerning M&A activities and new signings as Marriott's business model heavily depends on third-party entities – the Starwood Data Security Incident could have taken larger consequences if Starwood's fragile reservation system was merged with Marriott's in-house database immediately after the acquisition.

Sensitivity Analysis

	8.75%	8.50%	8.25%	8.00%	7.75%	7.50%	7.25%	7.00%	6.75%	6.50%
1.75%	276.72	282.50	288.25	294.00	299.75	305.50	311.25	317.00	322.75	328.50
1.80%	280.50	286.25	292.00	297.75	303.50	309.25	315.00	320.75	326.50	332.25
1.90%	285.25	291.00	296.75	302.50	308.25	314.00	319.75	325.50	331.25	337.00
2.00%	290.00	295.75	301.50	307.25	313.00	318.75	324.50	330.25	336.00	341.75
2.10%	294.75	300.50	306.25	312.00	317.75	323.50	329.25	335.00	340.75	346.50
2.20%	299.50	305.25	311.00	316.75	322.50	328.25	334.00	339.75	345.50	351.25
2.30%	304.25	310.00	315.75	321.50	327.25	333.00	338.75	344.50	350.25	356.00
2.40%	309.00	314.75	320.50	326.25	332.00	337.75	343.50	349.25	355.00	360.75
2.50%	313.75	319.50	325.25	331.00	336.75	342.50	348.25	354.00	359.75	365.50

Figure 40: Sensitivity Analysis
Source: Analysts Estimations

In order to present a more complete DCF analysis, one should make a sensitivity estimate, as results are heavily reliant on inputs. In this case, we have changed both WACC and the terminal growth rate, g, by 0.25p.p and 0.1p.p respectively. In both cases, we see stock price variations ranging from 203\$ to 316\$. In this case, the potential upside would always be bigger than the potential downside, suggesting that Marriot's share price might be fairly or undervalued.

⁹ Starwood Hotels has been acquired by Marriott under a \$13b billion deal in 2016.

Scenario Analysis

As far as the future is uncertain due to multiple external situations ranging from geopolitical and cybersecurity threats, climate changing conditions and economic instability, it is of the utmost importance to formulate an alternative worst-case scenario, assuming some deterioration on the key performance indicators that have been considered so far for Marriott's base scenario. Bearing this in mind, and concerning the ongoing Russian invasion of Ukraine and the most recent civil tensions between Israel and Hamas which therefore constrain global mobility and affect or may affect nearby countries where Marriott holds operations, the worst-case scenario was built on the assumption that forecasted average daily rates between 2023 and 2034 would suffer a haircut of 10% in both North America and International regions and the occupancy rates would be diminished in 2 percentage points in each segment. As a result, the share price decreases 13% to \$200.28. As of the present date, there is no evidence that the Covid-19 virus may resurface not even with the same intensity as previous new variants, it is assumed that China's definitive deletion of the zero Covid-19 policy as a strong signal of recovery for the T&T industry.

Peer Identification

Marriott's peer group was selected based on the output of the Sum of the Absolute Rank Differences approach (SARD). A group of 11 companies aggregated by the Bloomberg Industry Classification (BICS) was considered to compute the Market Capitalization as a proxy of market size, Net Debt to EBITDA as a risk measure as well as Earnings per Share and the EBITDA Margin as a profitability surrogate. Finally, the companies were attributed a rank and sorted from the one with the least absolute difference against Marriott to the one whose overall score was larger, creating a sample of peers that includes the following companies: Hilton Worldwide, Intercontinental Hotels Group, Hyatt Hotels, Choice Hotels Group and Wyndham Hotels & Resorts Inc.

Final recommendations

Marriott, as well as the tourism sector, has faced some difficulties in recent years due to the COVID-19 outbreak. However, in the past year, revenues have recovered to reach pre-COVID levels, and the future seems bright. While Marriott seems to have a big growth potential, with growing revenues, a solid customer base and some trends playing in its favour, there are some downsides and risks one cannot ignore. Marriott has been falling behind in terms of sustainability requirements and has recently been involved in data breach scandals which

could hinder its future value. There is also an expectation that the International sector will be the one with the highest growth, but this could easily change due to the instability that is currently being experienced in global markets. Furthermore, there is still uncertainty about inflation and the future of interest rates. For all these reasons, our final recommendation for this stock is HOLD. According to our calculations, the stock will be worth 229.93\$ in FY2024, which added to the 9.77\$ dividend per share will result in a total return of 8.4%.

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Financial Statements

Income Statement

in millions (\$)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
CORE OPERATIONS																	
Revenues	\$30,758.00	\$30,972.00	\$30,571.00	\$33,857.00	\$30,773.00	\$33,540.32	\$35,544.91	\$36,633.80	\$37,685.40	\$38,472.32	\$39,643.29	\$39,560.59	\$31,779.01	\$32,910.04	\$34,129.04	\$35,430.36	\$36,773.40
Gross Fee Revenues	\$31,555.00	\$32,297.00	\$31,252.00	\$32,488.00	\$33,403.00	\$40,783.31	\$42,608.87	\$44,888.89	\$55,162.24	\$5,389.35	\$5,681.20	\$5,909.93	\$6,251.41	\$6,650.01	\$6,885.93	\$7,235.43	\$7,591.11
Contract Investment Amortization	\$58.00	\$62.00	\$132.00	\$79.00	\$89.00	\$89.89	\$91.60	\$92.60	\$93.75	\$95.17	\$96.89	\$98.66	\$100.55	\$102.55	\$104.65	\$106.86	\$109.16
as a % of contract acquisition costs	-2.4%	-2.1%	-4.1%	-2.4%	-3.0%	-2.9%	-2.9%	-2.9%	-2.9%	-2.9%	-2.9%	-2.9%	-2.9%	-2.9%	-2.9%	-2.9%	-2.9%
Net Fee Revenues	\$31,007.00	\$32,235.00	\$31,120.00	\$32,370.00	\$33,314.00	\$39,893.45	\$42,517.27	\$44,796.29	\$55,068.50	\$5,294.17	\$5,584.31	\$5,811.27	\$6,150.86	\$6,547.47	\$6,780.78	\$7,128.57	\$7,482.95
Owned, Leased and Other	\$1,571.00	\$1,556.00	\$515.00	\$749.00	\$1,280.00	\$1,342.69	\$1,417.95	\$1,415.13	\$1,403.20	\$1,396.81	\$1,410.23	\$1,410.91	\$1,411.27	\$1,389.94	\$1,390.03	\$1,390.08	\$1,390.11
YoY % change	-0.9%	-6.0%	45.4%	70.8%													
Cost reimbursement revenue	\$15,005.00	\$15,586.00	\$7,807.00	\$9,780.00	\$16,645.00	\$16,939.14	\$18,270.74	\$18,964.68	\$19,643.83	\$20,189.82	\$21,036.60	\$21,706.22	\$22,564.10	\$23,394.64	\$24,273.95	\$25,111.55	\$26,184.19
as a % of revenues	47%	47%	26%	29%	54%	50%	53%	54%	55%	55%	55%	56%	57%	57%	57%	57%	57%
Unallocated corporate and other	\$1,085.00	\$596.00	\$1,247.00	\$1,247.00	\$1,534.00	\$1,275.03	\$1,338.94	\$1,447.71	\$1,569.87	\$1,591.51	\$1,612.14	\$1,632.18	\$1,652.78	\$1,667.99	\$1,683.77	\$1,700.15	\$1,717.16
as a % of revenues	3%	2%	4%	4%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
as a % of liability for guest loyalty program	19.8%	10.4%	17.0%	19.2%	23.2%	18.4%	18.4%	19.6%	20.8%	21.0%	21.2%	21.4%	21.8%	21.9%	22.1%	22.4%	22.4%
Costs and expenses	\$18,392.00	\$19,172.00	\$10,487.00	\$12,107.00	\$17,311.00	\$19,325.98	\$20,706.13	\$21,436.02	\$22,140.29	\$22,771.49	\$23,604.41	\$24,311.61	\$25,210.47	\$26,063.73	\$26,984.95	\$27,965.89	\$28,982.92
Owned, Leased and Other Direct	\$1,306.00	\$1,316.00	\$677.00	\$754.00	\$1,074.00	\$1,160.98	\$1,174.03	\$1,179.51	\$1,178.26	\$1,177.90	\$1,184.61	\$1,204.99	\$1,215.43	\$1,207.30	\$1,217.87	\$1,228.65	\$1,239.64
YoY % change	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General, administrative and other	\$927.00	\$988.00	\$762.00	\$823.00	\$891.00	\$1,023.26	\$1,063.94	\$1,094.12	\$1,122.09	\$1,147.16	\$1,176.80	\$1,204.52	\$1,235.41	\$1,265.91	\$1,297.66	\$1,330.59	\$1,364.36
as a % of revenues	4.2%	4.2%	2.5%	2.4%	2.9%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Depreciation (excluding amounts reimbursed)	\$109.00	\$225.00	\$213.00	\$89.00	\$79.00	\$81.52	\$76.72	\$77.40	\$76.16	\$75.51	\$75.68	\$75.54	\$75.58	\$74.82	\$74.79	\$74.80	\$74.80
as a % of gross PP&E	3.1%	7.2%	8.7%	3.8%	2.7%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Amortization and Other (excluding amount included in Reimbursed Expenses)	\$117.00	\$116.00	\$133.00	\$131.00	\$114.00	\$111.00	\$120.70	\$120.32	\$119.94	\$121.09	\$120.71	\$120.33	\$119.96	\$121.06	\$120.68	\$120.30	\$119.92
as a % of intangible assets	0.7%	0.7%	0.8%	0.8%	0.7%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Restructuring, merger-related charges, and other	\$155.00	\$138.00	\$267.00	\$8.00	\$12.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Reimbursed expenses	\$15,778.00	\$16,439.00	\$9,455.00	\$10,322.00	\$15,141.00	\$16,539.14	\$18,270.74	\$18,964.68	\$19,643.83	\$20,189.82	\$21,036.60	\$21,706.22	\$22,564.10	\$23,394.64	\$24,273.95	\$25,111.55	\$26,184.19
Core Result Before Taxes	\$2,366.00	\$1,800.00	\$84.00	\$1,760.00	\$3,462.00	\$4,214.34	\$4,838.78	\$5,197.78	\$5,545.11	\$5,760.84	\$6,038.88	\$6,248.98	\$6,568.55	\$6,846.31	\$7,144.09	\$7,464.47	\$7,900.48
Statutory Tax	\$496.86	\$378.00	\$116.64	\$58.00	\$77.00	\$885.01	\$1,016.14	\$1,091.53	\$1,164.47	\$1,209.78	\$1,268.16	\$1,312.29	\$1,379.39	\$1,437.73	\$1,500.26	\$1,567.54	\$1,636.00
Statutory Tax %	21%	21%	14%	3%	2%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%
Tax adjustments	\$35.18	\$21.18	\$75.96	\$25.96	\$71.62	\$64.29	\$96.78	\$103.96	\$110.00	\$115.22	\$120.78	\$124.98	\$131.37	\$136.93	\$142.88	\$149.29	\$155.81
Core Result	\$1,834.97	\$1,448.18	\$142.32	\$1,396.54	\$2,663.38	\$3,434.62	\$3,919.41	\$4,210.20	\$4,491.54	\$4,666.28	\$4,891.49	\$5,061.67	\$5,200.52	\$5,445.51	\$5,786.71	\$6,046.22	\$6,510.29
NON CORE OPERATIONS																	
Gains and other income, net	\$194.00	\$154.00	\$9.00	\$10.00	\$11.00	\$16.50	\$17.90	\$18.67	\$19.40	\$19.96	\$20.78	\$21.42	\$22.27	\$23.07	\$23.92	\$24.83	\$25.77
as a % of revenues	0.6%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest income	\$26.00	\$26.00	\$27.00	\$28.00	\$26.00	\$30.92	\$32.00	\$35.01	\$37.25	\$39.64	\$42.18	\$44.88	\$47.75	\$50.81	\$54.07	\$57.53	\$61.22
as a % of notes receivable	18.4%	22.4%	23.8%	16.3%	15.2%	18.2%	19.1%	19.1%	19.1%	19.1%	19.1%	19.1%	19.1%	19.1%	19.1%	19.1%	19.1%
Equity in earnings (losses)	\$103.00	\$13.00	\$14.00	\$24.00	\$18.00	\$9.25	\$4.05	\$3.49	\$2.95	\$2.49	\$2.10	\$1.79	\$1.51	\$1.28	\$1.08	\$0.92	\$0.78
as a % of equity investments	6.7%	-3.2%	-4.4%	3.0%	26.2%	1.7%	-1.5%	-1.7%	-1.7%	-1.7%	-1.7%	-1.7%	-1.7%	-1.7%	-1.7%	-1.7%	-1.7%
Non core result before taxes and OCI	\$219.00	\$193.00	\$105.00	\$34.00	\$55.00	\$52.28	\$54.86	\$57.17	\$59.61	\$62.08	\$65.06	\$68.00	\$71.54	\$75.16	\$79.07	\$83.28	\$87.76
Statutory Tax	\$66.99	\$40.53	\$22.05	\$2.94	\$15.00	\$10.98	\$11.52	\$12.00	\$12.52	\$13.04	\$13.66	\$14.30	\$15.02	\$15.78	\$16.60	\$17.49	\$18.43
Statutory Tax %	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%
Tax adjustments	\$89.11	\$17.59	\$26.10	\$19.52	\$31.14	\$0.30	\$0.31	\$0.32	\$0.34	\$0.35	\$0.37	\$0.39	\$0.41	\$0.43	\$0.45	\$0.47	\$0.50
Non core result before taxes and OCI	\$129.89	\$145.48	\$56.85	\$20.58	\$12.12	\$41.99	\$43.65	\$45.49	\$47.43	\$49.40	\$51.77	\$54.17	\$56.92	\$59.80	\$62.91	\$66.36	\$69.83
Foreign currency translation adjustments	\$391.00	\$35.00	\$293.00	\$212.00	\$389.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other adjustments, net of tax	\$21.00	\$5.00	\$3.00	\$2.00	\$2.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Non core result	\$288.88	\$168.88	\$169.15	\$24.22	\$374.69	\$41.99	\$43.65	\$45.49	\$47.43	\$49.40	\$51.77	\$54.17	\$56.92	\$59.80	\$62.91	\$66.36	\$69.83
FINANCIAL OPERATIONS																	
Interest expense	\$340.00	\$394.00	\$445.00	\$420.00	\$403.00	\$410.38	\$434.84	\$450.03	\$475.05	\$484.80	\$494.39	\$509.65	\$520.00	\$530.00	\$540.00	\$550.00	\$560.00
as a % of Debt (F-1)	-4.2%	-4.0%	-4.0%	-3.8%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%	-4.0%
Loss on extinguishment of debt	\$0.00	\$0.00	\$0.00	\$164.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Financial result before taxes	\$340.00	\$394.00	\$445.00	\$584.00	\$403.00	\$410.38	\$434.84	\$450.03	\$475.05	\$484.80	\$494.39	\$509.65	\$520.00	\$530.00	\$540.00	\$550.00	\$560.00
Statutory Taxes	\$71.40	\$83.74	\$95.45	\$122.64	\$205.00	\$86.15	\$102.32	\$108.99	\$116.36	\$123.81	\$131.40	\$139.13	\$147.00	\$155.00	\$163.00	\$171.00	\$179.00
Statutory Tax %	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%
Financial Result	\$268.60	\$310.26	\$349.55	\$461.36	\$403.00	\$324.23	\$332.52	\$341.04	\$358.70	\$363.00	\$363.00	\$370.65	\$373.00	\$375.00	\$377.00	\$379.00	\$381.00

Balance Sheet

in millions (\$)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
CORE BUSINESS																	
Operating Cash	\$116.00	\$225.00	\$211.42	\$277.14	\$415.46	\$470.81	\$519.90	\$532.68	\$553.71	\$569.45	\$592.87	\$611.21	\$635.58	\$658.20	\$682.58	\$708.61	\$735.47
Accounts and notes receivable, net	1.5%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Contract acquisition costs and other	\$1,133.00	\$2,395.00	\$1,768.00	\$1,982.00	\$2,711.00	\$2,566.31	\$2,794.24	\$2,934.52	\$3,020.63	\$3,124.05	\$3,243.11	\$3,372.83	\$3,519.31	\$3,684.44	\$3,866.83	\$4,062.83	\$4,276.06
Average Collection Period	41 days	45 days	64 days	48 days	45 days	45 days	45 days	45 days	45 days	45 days	45 days	45 days	45 days	45 days	45 days	45 days	45 days
Prepaid expenses and other	\$249.00	\$252.00	\$172.00	\$251.00	\$235.00	\$268.97	\$278.04	\$283.48	\$281.09	\$279.81	\$282.50	\$282.63	\$282.70	\$278.43	\$278.45	\$278.46	\$278.47
Average number of days	70 days	70 days	89 days	125 days	81 days	79 days	73 days	73 days	73 days	73 days	73 days	73 days	73 days	73 days	73 days	73 days	73 days
Current Core Assets	\$4,098.00	\$4,272.00	\$4,153.42	\$4,210.34	\$4,221.46	\$4,296.08	\$4,589.29	\$4,739.69	\$4,864.42	\$4,973.30	\$5,118.67	\$5,284.27	\$5,465.07	\$5,662.99	\$5,882.99	\$6,128.99	

Cash Flows

<i>in millions (\$)</i>	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Core result before taxes	\$2,366.00	\$1,800.00	\$84.00	\$1,750.00	\$3,462.00	\$4,214.34	\$4,838.78	\$5,197.78	\$5,545.11	\$5,760.84	\$6,038.88	\$6,248.98	\$6,568.55	\$6,846.31	\$7,144.09	\$7,464.47	\$7,790.48
Statutory Taxes	-\$496.86	-\$378.00	-\$17.64	-\$367.50	-\$727.02	-\$885.01	-\$1,016.14	-\$1,091.53	-\$1,164.47	-\$1,209.78	-\$1,268.16	-\$1,312.29	-\$1,379.39	-\$1,437.73	-\$1,500.26	-\$1,567.54	-\$1,636.00
Core tax adjustments	-35	27	76	-26	-72	84	97	104	111	115	121	125	131	137	143	149	156
Core NOPLAT	\$1,833.97	\$1,449.18	\$142.32	\$1,356.54	\$2,663.36	\$3,413.62	\$3,919.41	\$4,210.20	\$4,491.54	\$4,666.28	\$4,891.49	\$5,061.67	\$5,320.52	\$5,545.51	\$5,786.71	\$6,046.22	\$6,310.29
D&A	\$226.00	\$341.00	\$346.00	\$220.00	\$193.00	\$202.59	\$197.42	\$197.71	\$196.10	\$196.60	\$196.39	\$195.87	\$195.54	\$195.87	\$195.47	\$195.10	\$194.73
Gross Core Free Cash Flow	\$2,059.97	\$1,790.18	\$488.32	\$1,576.54	\$2,856.36	\$3,616.21	\$4,116.83	\$4,407.92	\$4,687.64	\$4,862.88	\$5,087.88	\$5,257.55	\$5,516.06	\$5,741.38	\$5,982.18	\$6,241.32	\$6,505.02
CAPEX	-\$173.00	-\$177.00	-\$78.00	-\$161.00	-\$128.35	-\$49.60	-\$19.28	\$35.29	\$18.56	-\$4.88	\$3.97	-\$1.02	\$21.82	\$0.76	-\$0.29	-\$0.06	-\$0.06
Changes in NWC	-\$78.00	-\$400.42	\$664.28	\$341.68	\$479.68	\$132.01	\$93.10	\$120.75	\$99.81	\$110.04	\$111.76	\$110.92	\$119.70	\$119.66	\$122.82	\$122.82	\$126.93
Net Changes in Brands	-\$280.00	-\$238.00	-\$51.00	\$53.00	-\$267.77	-\$74.02	-\$74.01	-\$74.00	-\$261.77	-\$74.02	-\$74.01	-\$74.00	-\$255.95	-\$74.02	-\$74.01	-\$73.99	-\$73.99
Other changes in Core IC	-\$670.00	\$1,444.00	-\$1,486.00	-\$712.00	\$683.03	\$403.37	\$161.05	\$132.32	\$10.57	\$29.02	-\$6.61	\$24.72	-\$10.10	-\$24.08	-\$19.75	-\$20.35	-\$20.35
Operating FCF	\$589.18	\$1,470.90	\$625.82	\$2,378.04	\$4,639.50	\$4,528.58	\$4,568.78	\$4,902.00	\$4,730.05	\$5,148.05	\$5,292.65	\$5,576.68	\$5,616.85	\$6,004.50	\$6,270.09	\$6,537.55	\$6,537.55
Changes in Goodwill	-\$9.00	-\$127.00	\$102.00	\$201.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operating FCF + Changes in Goodwill	\$580.18	\$1,343.90	\$727.82	\$2,579.04	\$4,639.50	\$4,528.58	\$4,568.78	\$4,902.00	\$4,730.05	\$5,148.05	\$5,292.65	\$5,576.68	\$5,616.85	\$6,004.50	\$6,270.09	\$6,537.55	\$6,537.55
Non Core NOPLAT	\$164.88	\$169.15	-\$2.42	-\$374.69	\$41.59	\$43.65	\$45.49	\$47.43	\$49.40	\$51.77	\$54.17	\$56.92	\$59.80	\$62.91	\$66.26	\$69.83	\$69.83
Non Core changes in IC	-\$84.00	\$360.00	\$58.00	\$44.00	\$48.70	\$35.30	\$21.12	\$18.74	\$14.11	\$8.53	\$3.99	\$0.65	-\$2.71	-\$5.86	-\$8.67	-\$11.25	-\$11.25
Non Operating FCF	\$80.88	\$529.15	\$55.58	-\$330.69	\$90.29	\$78.95	\$66.61	\$66.17	\$63.51	\$60.29	\$58.16	\$57.57	\$57.09	\$57.06	\$57.60	\$57.60	\$58.58
FCF to investors	\$661.06	\$1,873.04	\$783.40	\$2,248.35	\$4,729.79	\$4,607.53	\$4,635.38	\$4,968.17	\$4,793.56	\$5,208.34	\$5,350.81	\$5,634.25	\$5,673.94	\$6,061.55	\$6,327.68	\$6,596.13	\$6,596.13
Interest expense/net of interest income	-\$294.00	-\$445.00	-\$584.00	-\$403.00	-\$410.26	-\$334.84	-\$380.92	-\$235.05	-\$184.80	-\$147.39	-\$99.65	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tax Shield	\$82.74	\$93.45	\$122.64	\$0.00	\$86.15	\$70.32	\$58.99	\$49.36	\$38.81	\$30.95	\$20.93	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Changes in net debt	\$2,475.00	-\$1,288.58	-\$413.28	\$886.32	-\$1,852.34	-\$1,338.82	-\$1,136.97	-\$1,246.47	-\$935.78	-\$1,171.25	-\$1,180.61	-\$1,266.34	-\$1,120.94	-\$1,310.11	-\$1,362.73	-\$1,413.78	-\$1,413.78
Net changes in equity	-\$2,824.80	-\$232.91	\$91.24	-\$2,731.67	-\$2,553.35	-\$3,004.19	-\$3,276.48	-\$3,536.02	-\$3,711.79	-\$3,920.65	-\$4,091.48	-\$4,367.91	-\$4,553.00	-\$4,751.44	-\$4,964.95	-\$5,182.35	-\$5,182.35
FCF from investors	-\$661.06	-\$1,873.04	-\$783.40	-\$2,248.35	-\$4,729.79	-\$4,607.53	-\$4,635.38	-\$4,968.17	-\$4,793.56	-\$5,208.34	-\$5,350.81	-\$5,634.25	-\$5,673.94	-\$6,061.55	-\$6,327.68	-\$6,596.13	-\$6,596.13

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Report Recommendations

Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

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