

**MASTER OF SCIENCE IN
FINANCE**

**MASTERS FINAL WORK
PROJECT**

**EQUITY RESEARCH:
NH HOTEL GROUP, S.A.**

DIANA MARTINS DA SILVA

OCTOBER 2021

**MASTER OF SCIENCE IN
FINANCE**

**MASTERS FINAL WORK
PROJECT**

**EQUITY RESEARCH:
NH HOTEL GROUP, S.A.**

DIANA MARTINS DA SILVA

**SUPERVISOR:
PHD.TIAGO RODRIGO ANDRADE DIOGO**

OCTOBER 2021

Abstract

The following Equity Research report contains a valuation of NH Hotel Group S.A., ("NHH"), and it was conducted following the ISEG's Master in Finance final work standards and written in line with the guidelines from the CFA Institute.

NHH is headquartered in Spain and is part of the hotels' industry. Leader in the urban segment, it is among the Top 10 European hotel chains and Top 30 worldwide.

With the hotel industry going through tough times, the NHH group was chosen in order to understand the impact of the pandemic since it has a significant presence in Europe, specifically in Portugal and Spain, where to control de pandemic situation, it was needed to lockdown, significantly decreasing tourism and consequently negatively affecting the industry.

Through the DCF model, computing the FCFF, a 2022YE price target of €4.88/sh was reached, representing 28% upside potential, with high-risk, from the close price on August 11th, 2021, €3.80/sh, therefore it was reached a **BUY** recommendation. Besides this method, other models were used, including the Dividend Discount Model (DDM), the Adjusted Present Value (APV), the Free Cash Flow to Equity (FCFE), and a relative valuation through peers' multiples.

To complement the report, a sensitivity analysis was included to a few selected risks to the price target, such as variances in the long-term sustainable growth rate (g) and changes in the weighted average cost of capital (WACC).

The information used throughout the report was publicly available as of August 11th, 2021. Thus, any succeeded information has not been considered.

JEL classification: G10 ; G32; G34;

Keywords: Equity Research; Valuation; Mergers & Acquisitions; NH Hotel Group; Hotels;

Resumo

O projeto que se segue, contém uma avaliação financeira do NH Hotel Group S.A., (“NHH”) e foi realizado de acordo com os padrões de trabalho final de Mestrado em Finanças do ISEG e escrito de acordo com as orientações do CFA institute.

O NHH é uma empresa sediada em Espanha que integra a indústria hoteleira. Uma das líderes no seu segmento, está atualmente presente em 29 países e integra top 10 europeu de cadeias de hotéis e o top 30 mundial.

Atravessando-se os tempos difíceis para a indústria hoteleira, a escolha do grupo NHH passou pela curiosidade de perceber o impacto da pandemia numa empresa com imensa presença na Europa nomeadamente Portugal e Espanha, países estes que para controlar a situação pandémica viram-se em *lockdown* diminuindo drasticamente o turismo e consequentemente afetando negativamente a indústria.

Através da análise financeira e da aplicação do modelo DCF, foi concluído que o NHH tem uma recomendação de investimento de “**COMPRA**”, com um preço expectável de €4.88/ação no final do ano de 2022, com uma potencial valorização de 28% face ao preço de €3.80/ação a 11 de Agosto de 2021, considerando um risco elevado. Para além deste método, outros modelos foram aplicados incluindo o Dividend Discount Model (DDM), o Adjusted Present Value (APV), o Free Cash Flow to Equity (FCFE) e ainda uma avaliação por múltiplos de empresas homólogas da indústria.

Para complementar o relatório foi também incluída uma análise de sensibilidade a alguns riscos a que o preço expectável está sujeito, nomeadamente alterações da taxa de crescimento a longo prazo (g) e alterações no custo média ponderado do capital (WACC).

Toda a informação utilizada ao longo do relatório estava publicamente disponível a 11 de Agosto de 2021, pelo que qualquer informação posterior à data não foi considerada para o desenvolvimento do projeto.

Classificação JEL: G10 ; G32; G34;

Palavras-Chave: Equity Research; Avaliação de Empresas; Fusões e Aquisições; NH Hotel Group; Hotéis;

Acknowledgements

Para começar, e porque sem eles nunca teria iniciado esta etapa, um agradecimento muito especial ao meu pai, à minha mãe e ao meu irmão, por todo o apoio, paciência e compreensão ao longo dos últimos anos. Nem sempre foi fácil, mas saber que o vosso apoio era irrevogável fez real o impossível.

Às minhas avós, à minha madrinha e ao meu padrinho, a todos os meus primos e tios, o meu mais sincero e profundo obrigada pela vossa contribuição para esta etapa.

Às minhas colegas de casa, por celebrarem comigo todos os momentos da vida e por serem um apoio constante durante este ciclo. Seremos, para sempre, *beavers in loves*.

Às minhas colegas amigas de mestrado, com as quais formei uma verdadeira equipa, imprescindível para o nosso sucesso, um obrigada não chega, parabéns a nós.

Aos meus amigos de São João da Madeira, os de sempre, que são mais que as mães, e que mesmo longe sempre acompanharam e apoiaram este percurso, obrigada.

Aos meus amigos de Lisboa, e principalmente, aos discípulos da D.Laura, por me terem acolhido nesta cidade e me terem mostrado tudo o que ela tem de melhor. Foram a minha casa longe de casa e por isso estarei para sempre agradecida.

Ao professor Tiago Diogo, pelo apoio e supervisão deste desafio.

A Lisboa e ao ISEG, por todas as memórias.

Index

1.	Research Snapshot	1
2.	Business Description	2
	The Company	2
	The History	2
	Business Segments	2
	Key drivers of profitability	3
	Strategy	3
	Shareholder Structure	4
	Dividend Policy	4
3.	Management and Corporate Governance	4
	Governance Model	4
	The Board of Directors	4
	The Executive Compensation	5
	Sustainability and ESG metrics	5
4.	Industry Overview and Competitive Positioning	6
	World GDP Growth	6
	Household Disposable Income	6
	World Population	6
	Global Corporate Profit	6
	Tourism	6
	World Hotels Demand	7
	World Hotels Supply	7
	Hotels Price	8
	Industry Structure	8
	M&A Activity	8
	Industry Trends	8
	Competitive Positioning	9
	SWOT Analysis	10
	Porter's 5 Forces	10
	PESTEL Analysis	11
5.	Investment Summary	12
	Valuation Methods	12
	Risks to Achieve Price Target	12
6.	Valuation	12
	Forecast Analysis	13
7.	Financial Analysis	15
	Operational Efficiency	15
	Profitability	15
	Solvency and Liquidity	15
8.	Investment Risks	16
	Appendices	1
	Appendix 1: Statement of Financial Position	1
	Appendix 2: Common-Size Statement of Financial Position	2
	Appendix 3: Income Statement	3
	Appendix 4: Common-Size Income Statement	3
	Appendix 5: Cash Flow Statement	4

Appendix 6: Key Financial Ratios	4
Appendix 7: Forecasting Assumption Statement of Financial Position	5
Appendix 8: Forecasting Assumption Income Statement	6
Appendix 9: Forecasting Assumption Revenues	6
Appendix 10: Forecasting Assumption CAPEX and D&A	7
Appendix 11: Debt schedule	7
Appendix 12: Market – Based Valuation	8
Appendix 14: Absolute Valuation Methods	10
Appendix 15: Remuneration Mix	13
Appendix 16: World Population growth & GDP per capita and HDI per capita	13
Appendix 17: NHH's Peer Group	13

List of Figures

Figure 1 - 2-year monthly share price	1
Figure 2 - NHH's Price Target (€)	1
Figure 3 – Revenues (€m)	1
Figure 4 - NHH Overview	2
Figure 5 - Rooms by brand	2
Figure 6 - Revenues by segment	2
Figure 7 - Revenues by geography	3
Figure 8 - Key Drivers changes	3
Figure 9 - Recovery Strategy	3
Figure 10 - Top 5 shareholders	4
Figure 11 - Shareholding structure	4
Figure 12 - Dividend per share & Payout ratio	4
Figure 13 - Governance Model	4
Figure 14 - Remuneration Mix (% of Total Remuneration)	5
Figure 15 - Average Remuneration	5
Figure 16 - NHH's Sustainable Business	5
Figure 17 - Real GDP growth (Annual percent change)	6
Figure 18 - Global arrivals per year (m)	6
Figure 19 - Rest of the world - Corporate profits (\$B)	6
Figure 20 - U.S Corporate Profits (\$B)	6
Figure 21 - International arrivals	7
Figure 22 - Global industry RevPAR (\$) * a RevPAR movements are illustrative of lodging demand	7
Figure 23 - Number of hotels worldwide	7
Figure 24 - Global rooms supply (m rooms)	7
Figure 25 - Average hotel prices	8
Figure 26 - The top five hotel groups have increased their market sh by 5 pp.	8
Figure 27 - Hotel Industry Value Chain	8
Figure 28 - FTSE4GOOD index entries p/ year	9
Figure 29 - Peer Group	9

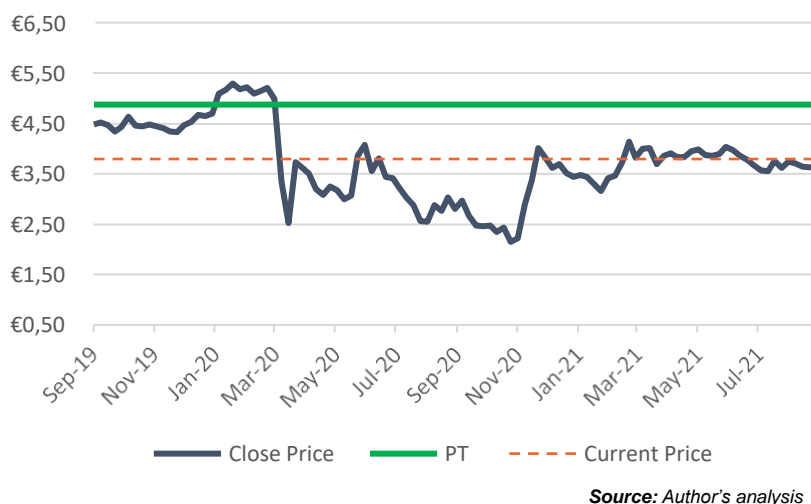
Figure 30 - Porter's Five Forces	10
Figure 31 - 2020YE PT	12
Figure 32 - Valuation Methods	12
Figure 33 - FCFE Approach	13
Figure 34 - Revenues by other segments	13
Figure 35 - APV approach	13
Figure 36 - DDM Approach	14
Figure 37 - Market - Based Valuation	14
Figure 38 - Operational Efficiency ratios	14
Figure 39 - Profitability ratios	15
Figure 40 - Liquidity indicators	15
Figure 41 - Risk Matrix	16
Figure 42 - World GDP (YoY growth) and RevPAR evolution	16
Figure 43 - RevPAR (\$) and Inflation evolution	17
Figure 44 - Price Target sensitivity to WACC and g	17
Figure 45 - Price target sensitivity to RevPAR and number of rooms	18
Figure 46 - Monte Carlo Statistics	18
Figure 47 - Oracle Crystal Ball Monte Carlo	18

Abbreviations

A	ADR	Average Daily Rate
	APV	Adjusted Present Value
B	B	Billion(s)
	BICS	Bloomberg Industry Classification System
C	BoD	Board of Directors
	CAGR	Compound Annual Growth Rate
	CEO	Chief Executive Officer
D	COO	Chief Operating Officer
	DDM	Dividend Discount Model
E	EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortisation
	ESG	Environmental, Social and Governance
F	EV	Enterprise Value
	FCFF	Free Cash Flow to Firm
	FCFE	Free Cash Flow to Equity
G	FY	Forecasted Year
	GDP	Gross Domestic Product
H	HDI	Household Disposable Income
I	IMF	International Monetary Fund
M	M	Millions (\$)
	M&A	Mergers and Acquisitions
	MINT	Minor International Public Company Limited
P	PT	Price Target
R	RCA	Real Capital Analytics
	RevPAR	Revenue Per Available Room
S	SARD	Sum of Absolute Rank Differences
U	US	United States of America
W	WACC	Weighted Average Cost of Capital
Y	YE	Year End
	YoY	Year over Year

1. Research Snapshot

Figure 1- 2-year monthly share price



Based on a forecasted period of 5 years (2021YE-2025YE), the issue recommendation for the NH Hotel Group S.A., (NHH.MC) is BUY with a **2022YE PT of €4.88/sh** using the DCF model, implying a **+28% upside potential** from the close price at August 11th, 2021 of **€3.80/sh** with **High-Risk** (Figure 2).

NHH, headquartered in Madrid, is part of Minor Hotels and has more than 360 hotels across 30 countries. It is also a consolidated multinational operator and one of the leading urban hotels chains in the world. However, the COVID pandemic has negatively affected the industry, as the hospitality demand has declined sharply due to lockdowns, travel restrictions and social distancing.

By performing this forecast, assuming the pandemic is under control with successful vaccination, it is predictable that NH Hotel Group S.A. recovers by 2025, with an average increase per segment in RevPar of 30% CAGR 2020YE-2025YE, which is the primary key driver of the group, overcoming the severe lockdown months, continuing the leading position.

Out with the COVID, in with the revenue

The Covid-19 pandemic brought the need to implement a strategy of reopening & recovery. Therefore, revenues are expected to increase at a +24.61% 2021F-2025F CAGR (Figure 3). After the 2020F slowdown of the key drivers, **Occupancy rate**, and **ADR**, it is expected its improvement, leading the **RevPAR** to grow at an average by segment +29.84% CAGR. In addition, at the end of the predicted period, Spain represents over 19% of NHHs' revenues, being the most significant geographic segment.

Price Target	€4.88
Current Price (Aug. 11 th)	€3.80
Weekly Price range	€2.15 - €5.30
Upside potential	28%
Annualized return	21%
	High-risk

Figure 2 - NHH's Price Target (€)

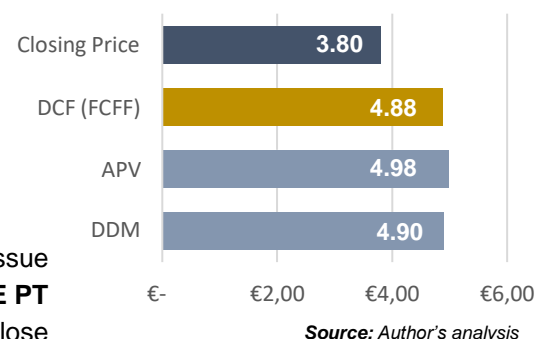
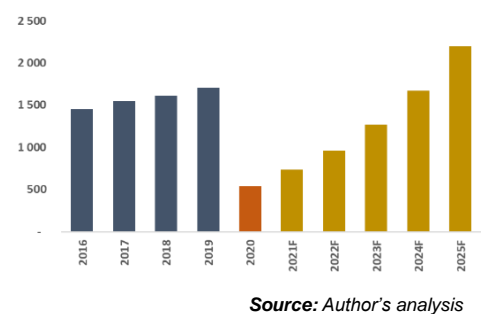


Figure 3 – Revenues (€m)



2. Business Description

The Company

NH Hotel Group S.A. ("NHH"), part of MINOR Hotels since 2018, is a leader in the urban segment in Europe and Latin America with a diversified portfolio in the upscale segment. The group operates over 360 hotels with 55,956 rooms, where 14% are managed contracts, 22% owned and 64% leased contracts, in 29 countries. It is among the **Top 10 European hotel chains** and **Top 30 worldwide** (Figure 4).

The group is divided into six brands, **Nhow hotels**, in the upper-upscale segment, that is design hotels with an unconventional and contemporary architecture and luxury by prestigious architects, **NH Collection**, also in the upper-upscale segment, known as the premium hotels' segment of the group located in the main capital cities of Europe and Latin America. In the midscale three and upscale four-star urban hotels, the group has the brand **NH Hotels**, for those who are looking for an excellent location with the best price-quality relation, due to the agreement with Minor Hotels, **Anantara Hotels Resorts and Spas**, **Avani Hotels and Resorts** and **Tivoli Hotels and Resorts** belong as well to NHH portfolio (Figure 5).

For 2020FY, NH Hotel Group reported a total of **536,150 thousand euros in revenues**, representing a decrease of 68.61% compared to 2019FY sales. As a result, a net loss of 440,401 thousand euros was registered for 2020FY; however, in 2019FY, the profit for the period was 92,901 thousand euros.

The History

In 1978, Antonio Catalán founded the NH Hotel Group (**Navarra Hoteles**) with the opening of the Ciudad de Pamplona Hotel. During the following decades, the group managed to consolidate its presence in Spain and grow worldwide.

The group's prominent presence in Latin America, which can be traced to 1998 with the Equity International Properties fund for investing in the region, was reinforced with the acquisition of the Latin America chain Hoteles Royal in 2015.

In 2018, the Minor International ("Minor") tender offer 100% of NH Hotel Group, currently the group's main shareholder. The two groups entered an agreement at the beginning of 2019 to establish relations.

In April of the same year, NH Hotel Group signed a lease agreement entering into the luxury segment, and in June, it formalised the transfer of 13 hotels in Portugal from the Tivoli portfolio to NH Hotel Group, operating Minor hotels in Portugal.

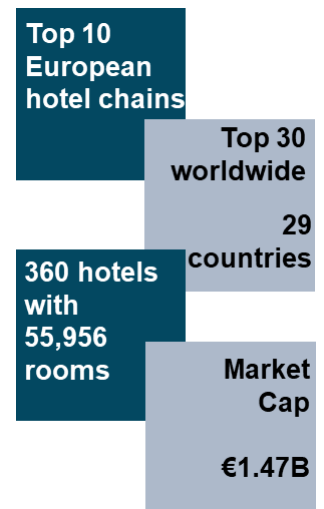
In the last year of 2020, the group also signed an agreement to operate the former Boscolo portfolio, 100% of the shares, which runs eight luxury hotels in prime areas of central Europe.

Business Segments

In 2005, NHH centred its activities on two main segments, real estate and hotels, considering the nature of the products and services offered and the clients to whom they were directed. The latter segment had revenues of €536.150, deriving from several sources such as **Occupancy** (64.94% of 2020 total revenues), **Catering** (20.74% of 2020 revenues), **Meeting rooms and others** (8.78% of 2020 revenues), and **Rentals and other services** (5.54% of 2020 revenues) (Figure 6)

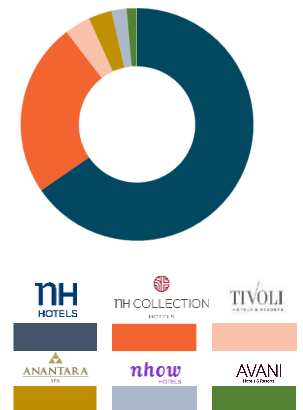
The group does a further breakdown of the hotels' segment into secondary segments. These sub-segments represent a geographic area in which NHH operates, them being **Spain** (24.95% of 2020 total revenues), **Benelux** (21.39% of

Figure 4 - NHH Overview



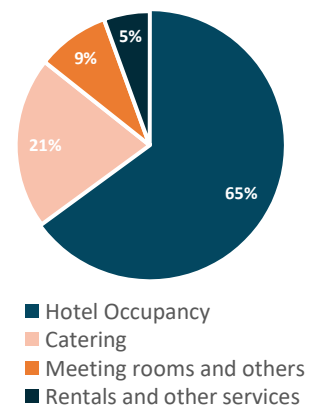
Source: NHH's registration

Figure 5 - Rooms by brand



Source: Author's analysis

Figure 6 - Revenues by segment



Source: Author's Analysis

2020 total revenues), **Italy** (15.50% of 2020 total revenues), **Germany** (21.89% of 2020 total revenues), **Latin America** (5.58% of 2020 total revenues), and **Rest of Europe and Others** (10.69% of 2020 total revenues). As a result, all business units decreased their revenues from 2019 to 2020 by 69.62%, 69.09%, 72.81%, 63.74%, 75.32%, and 60.80%, respectively, representing an average drop of 68.61% due to the pandemic situation. (Figure 7).

Key drivers of profitability

The group considers some key business drivers such as portfolio and asset management, Occupancy, ADR and RevPAR, expenses, cost savings, food and beverage sales, seasonality and weather, currency translation, and guest loyalty. The three main drivers of the Hotel Industry are Occupancy rate, Average Daily Rate, and Revenue Per Available Room (Figure 8).

Occupancy Rate is the quotient of the total number of Room Nights sold during a specified period divided by the total number of rooms available for each day during that period. It measures the utilisation of the group hotels' available room capacity. NHH management uses Occupancy to evaluate demand at a specific hotel, mainly driven by conferences and other events in the hotels' proximity. Occupancy fell 65.13% YoY.

Average Daily Rate (ADR) is the quotient of total room revenues for a specified period divided by total room nights sold during that period. ADR trends indicate how much customers are willing to pay for accommodation. Thus ADR is used to assess the pricing levels that the group can generate. In 2020 ADR dropped about 20.41% YoY.

Revenue Per Available Room (RevPAR) is found as the product of the ADR for a specified period with the Occupancy for that period. This measure is considered the core revenue for hotels; therefore only includes room revenues, excluding secondary revenues, such as food and beverage, meeting rooms, rentals, parking, and other guests services. RevPAR is a commonly used performance measure in the hotel industry.

RevPAR changes driven principally by changes in Occupancy have different implications for overall revenue levels than those driven predominantly by changes in ADR. The increase in Occupancy would lead to increases in room revenues which may also result in secondary revenues increase. Higher values of ADR typically have a more significant effect on margins and profitability, but variable operating costs remain relatively stable.

From 2018 to 2019, RevPAR increased 4.83%; however, due to the worldwide panorama, from 2019 to 2020 dropped 72.22%.

Strategy

A new phase of transformation began in 2014, focused on brand segmentation, portfolio optimisation, substantial investments in repositioning and systems and a renewed pricing strategy. After this phase, a second one started in 2017, dedicated to the company's strengths and boosting the critical levers in value creation for the business. NHH's priority was driving the company's revenues and increasing its efficiency while leveraging its strengths.

At the moment, the company has started a new phase which consists of attracting the growing Asian demand to European markets, thus increasing the customer base, economies of scale with commercial partners, travel agencies and suppliers, access

Figure 7 - Revenues by geography

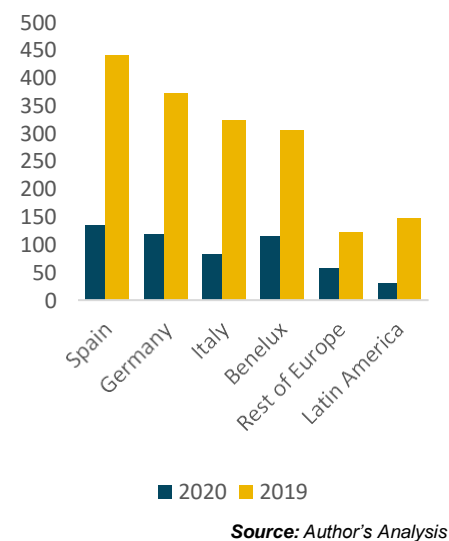


Figure 8 - Key Drivers changes

	2018	2019	2020
RevPar (€)	70,4	73,8	20,5
Occupancy (%)	71,7	71,7	25
ADR (€)	98,1	102,9	81,9

Source: Company Annual Report 2020

Figure 9 - Recovery Strategy

Recovery Strategy
The group will benefit from:
Strong market positioning in the European countries.
Excellent locations and high brand awareness.
High domestic demand (2019: Germany 70%; Spain 60%; Italy and Benelux 50%)
Recovery phase driven initially by:
Domestic + Intra-European demand (2019: c.70-75%) as International mobility remains low.
B2C segment (c.60-70%). B2B (c.30-40%) will take longer to recover due to macro and initial lower size of events.

Source: Company Annual Report 2020

to the luxury segment, including the integration of all Tivoli hotels operations in Europe under NH management.

Due to COVID-19, the group had to implement a reopening & recovery strategy where it will benefit from the strong market position in Europe, focusing on domestic demand (Figure 9)

Shareholder Structure

Since 2018 Minor International Public Company Limited (MINT) is the most significant shareholder of NHH resulted from an IPO through its wholly-owned subsidiary MHG Continental Holding (Singapore) Pte Ltd., representing 94.13% of the group's share capital with a free float of 5.87%. (Figure 11)

At the end of 2020, 392,180 bearer shares were issued and traded in Continuous Market of the Spanish Stock Exchanges (BME: Bolsas y Mercados Españoles), 0.96% held by 12 institutions (Figure 10). All of the Shares have identical economic rights and voting.

Dividend Policy

Due to the uncertain worldwide situation, NHH does not establish a specific target payout. The group paid a dividend of **€0.15/sh for 2019FY**; however, for 2020YE, the group did not distribute dividends.

With trailing twelve-month payments, the company has an inconstant historical payment of dividends having a pique of €0.25/sh in 2018, representing a decrease of 40% between **2018YE** and **2019YE**. The payout ratio for **2019YE** was 52.34%, registering a significant decrease since the previous year of 36.82%. (Figure 12)

The group presents no information regarding future dividends payments.

3. Management and Corporate Governance

Governance Model

NHH governance model divides powers between different corporate bodies. The company's highest management and representation entity is the Board of Directors (BoD), where Mr. Alfredo Fernández Agras assumes the position of Chairman. The Audit and control committee, and the Appointments, remuneration, and corporate governance committee are under the responsibility of the Chairman Mr. Fernando Lacadena Azpeitia and the Chairman Mr. José María Cantero de Montes-Jovellar, respectively. The shareholders of the Issuer appoint members of the BoD at general shareholders' meetings for a 3-year term.

The Board of Directors

The BoD is the company's highest governing and representative body and is established as a supervisory and control body. It is composed of 9 members, of whom three are independent. Elections, reelections or resignations are discussed at the General Shareholders' meeting; the last one was in July 2020 and has approved the reelection of Mr. Ramón Aragonés Marín as Executive Director and his designation as Chief Executive Officer.

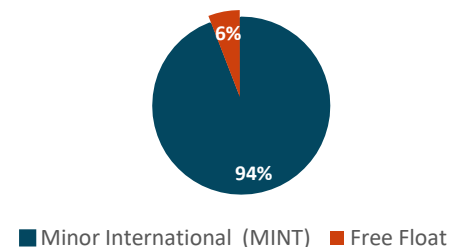
The BoD has committees among its members, **Audit and control committee**, and **Appointments, remuneration and corporate governance committee**. All of the committees' tasks, authorisations and processes are determined by the BoD (Figure 13).

Figure 10 - Top 5 shareholders

Holder	% Outstanding
MINOR International (MINT)	94.13
Banco SANTANDER SA	0.52
First State Investments	0.18
Vanguard Group	0.13
Praude Asset Management	0.13

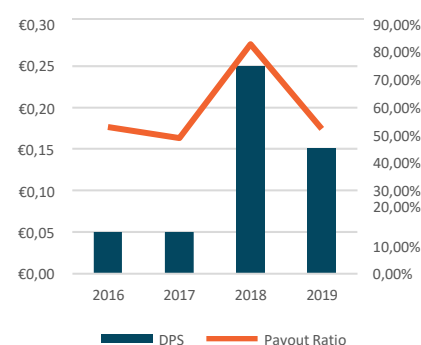
Source: Bloomberg

Figure 11 - Shareholding structure



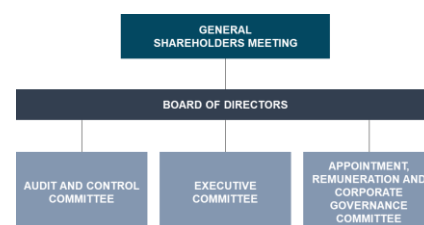
Source: Company Annual Report 2020

Figure 12 - Dividend per share & Payout ratio



Source: Author's analysis

Figure 13 - Governance Model



Source: Company Annual Report 2020

The **audit and control committee**, formed by two independent members, one non-executive and one proprietary, supervises the company's management, internal auditing, and risk management systems and proposes the statutory auditor (PWC) appointment to the General Meeting. It is also responsible for preparing and reporting financial information.

The **appointments, remuneration and corporate governance committee**, formed by two independent members, one proprietary and one non-executive, ensure that the selection procedures for the BoD are fair and unbiased; it may also present succession proposals to the Board. Furthermore, it determines the remuneration of the Chairman and the chief executive Director and performs an annual review of the remuneration policy for directors and senior managers. Additionally, this committee reviews and evaluates the corporate governance and corporate social responsibility of the Issuer and ensures that standards for listed companies are met.

The Executive Compensation

The Director's remuneration policy approved by the Appointments, Remuneration, and Corporate Governance Committee consists of a Fixed Remuneration combined with a variable annual remuneration, a Long-term incentive plan updated every three years, and remuneration in kind. (Appendix 15)

In a scenario where target objectives are met, the percentage of remuneration at risk compared to total remuneration would be 56.52%, in the case of the CEO, and 47.37% in that of the COO. In a scenario where maximum target achievement is obtained, the percentage of remuneration at risk compared to the CEO and COO's total remuneration would be 64.98% and 56.23%, respectively. (Figure 14)

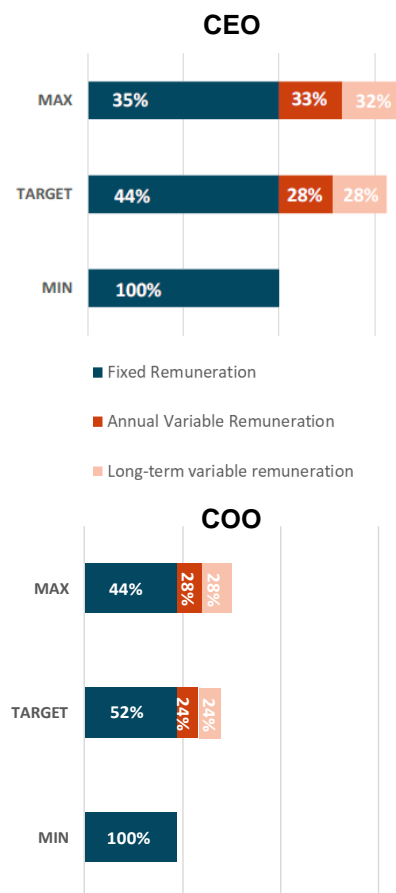
For 2020, all the members of the Management Committee have reduced their remuneration by more than 50%. The Chairman receives fixed annual remuneration of € 200,000 and the chairs of the committees € 90,000. On average, women receive 9.93% more than men at the management committee. (Figure 15)

Sustainability and ESG metrics

NH Hotel Group was recognised as one of the most sustainable companies in the world and earned third place in the Corporate Sustainability Assessment (CSA) 2020. The Strategy of the Group rests on "NH ROOM4 a better world", this sustainable business is divided into three lines of action: **NH ROOM4 People** that stands for the promotion of internal professional development and the creation of social projects in the communities, **NH ROOM4 Planet**, which represents the sustainable products, reduction in consumption and the fight against climate change of the group, and **NH ROOM4 Responsible Shared Success** symbolise human rights and ethical business principles throughout the value chain involving costumers, owners and suppliers, promoting responsible alliances. All are framed under the same premise of sustainable and ethical principles, responsible culture, and a citizenship mindset. (Figure 16)

Concerning Bloomberg's ESG Disclosure rating, NHH's score is 47.52 (out of 100).

Figure 14 - Remuneration Mix (% of Total Remuneration)



Source: Company Remuneration Report 2020

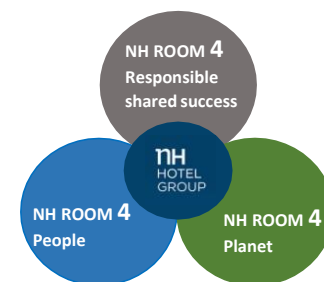
Figure 15 - Average Remuneration

2020	
Women	Men
-	-
286,08 €	260,22 €
2019	
Women	Men
53,00 €	50,50 €
604,20 €	569,84 €

□ BoD¹ □ Management Committee

Source: Company Remuneration Report 2020

Figure 16 - NHH's Sustainable Business



Source: NHH's Sustainable Business report 2020

¹ In 2020 there was no women in the BoD.

4. Industry Overview and Competitive Positioning

World GDP Growth

Over the years, the global economy has faced a growth deceleration, experiencing an annual average growth of **+3.09% from 2010 to 2020**. The COVID-19 pandemic triggered an all-time low in 2020. Economic activity dropped to unprecedented levels due to the lockdowns implemented throughout the world, inciting unemployment, lowering discretionary spending, and prompting business closures, resulting in **Real GDP growth of -4.3%, -8.3%, and -4.4% for the U.S., Euro Area, and the world, respectively** (IMF, 2020).

Although global economic output is expected to recover from the collapse caused by COVID-19, it will remain below pre-pandemic trends (3.73% from 2010 to 2019). According to the IMF World Economic Outlook, the Global GDP growth forecast for the 2022-2025 period will have no significant fluctuations with an average of +3.58%. Nevertheless, the 2021F global GDP growth is expected to reach +6% (Figure 17).

Household Disposable Income

Household Disposable Income (HDI) per capita had been following the same positive trend as the GDP due to increased consumer spending. However, HDI YoY growth in the **2Q2020 was -2.7% in the OECD**, with the growth contributions changing this year due to COVID-19. In addition, the compensation of employees and the gross operating surplus and mixed income had a negative contribution despite having been positive in the latest years, whereas net social contributions were positive. (Appendix 16)

World Population

The World population rose at a 0.808% CAGR during 2017-2020. The population is expected to reach 7,875m in 2021F (+1.028% YoY), and 8,184m in 2025F (2021F-2025F CAGR prediction of 0.98%), with an average of 9.30% of this growth will be in Europe and 8.35% in South America. (Appendix 16)

Global Corporate Profit

Amidst the pandemic, the corporate profits are presenting values lower than expected for the period. As an important driver for the business travels, these profits are an excellent foreteller of revenues the industry may generate in the short term. The CAGR oscillated throughout the years, presenting low levels every time a crisis breaks out, such as the 2008 financial crisis and the current COVID-19 one (Figure 19 and 20). It is important to refer that there has been an overall positive trend since 2001 and that right after every crisis, the CAGR seems to be extremely high in the short term, as shown in 2009-2010 and as it is expected in 2021F.

Tourism

Tourism is a booster of the global economy, creating employment opportunities and generating tax revenues. However, it is one of the most affected industries by the current changing environment and the resulting uncertainty conditions. Because of this, its dependence on macro-economic stability is usually among the first industries to suffer impacts from an economic crisis, pandemics, among others.

After recovering from the 2008 crisis, tourism was one of the most accelerated industries to grow. Moreover, the rise in the tourism demand, aligned with the GDP

Figure 17 - Real GDP growth (Annual percent change)

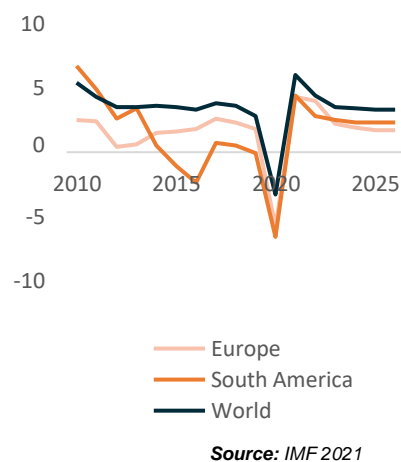


Figure 18 - Global arrivals per year (m)

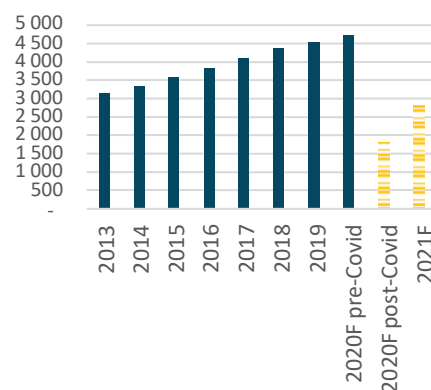


Figure 19 - Rest of the world - Corporate profits (\$B)

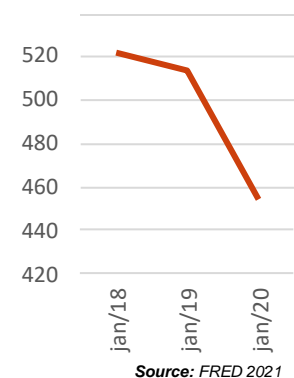
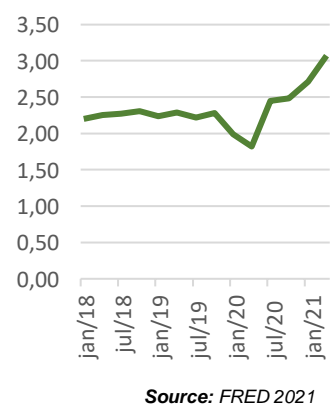


Figure 20 - U.S Corporate Profits (\$B)



and global HDI growth, led to an increase in the air transport industry, represented by the rise in global passengers carried.

It was expected that the industry would continue to grow, with a forecast of 4,723M of passengers carried in 2020 (+3.96% YoY); however, because of its vulnerability, the sector was severely affected by the pandemic, carrying only 1,793M (-60.49% YoY) with substantial losses of investments, profits, and jobs.

According to the World Tourism Organization, tourism suffered its most profound crisis in 2020 in international arrivals. World, Europe, and America's visitors dropped 72.5%, 68.40% and 68.50% respectively in 2020YE but are forecasted to rebound in the following year, with a 73.9%, 71.90% and 41.20% forecasted YoY growth¹ correspondingly. However, the rate of recovery is forecasted to slow down over the years (Figure 21).

World Hotels Demand

The hotel industry is cyclical, and after a decade of growth, with a CAGR of 6% during 2009-2017, it now faces a downcycle triggered by COVID-19. The drop in GDP and HDI will negatively affect the demand, translating into lower consumer spending and leisure travelling. Reflecting on the lower demand, the number of consumers dropped to 595.1m (-46.8% YoY). Nevertheless, the industry revenue is expected to grow at a 12.51% CAGR during 2021F-2025F (Figure 22), leading to a forecasted market volume of \$456,275m by 2025F. \$126,182m market volume would be in Europe, \$114,512m in the U.S. and \$14,458m in South America, representing a 39.48% CAGR 2021F-2025, a 22.67% CAGR 2021F-2025F, and a 28.82% CAGR 2021F-2025F, respectively.

Since price wars would result in lower average room rates, they are not expected to be practised. Thus, RevPAR will reflect the occupancy recovery. The global industry RevPAR dropped 53,6% from 2019YE to 2020YE (Figure 22). However, it is expected to recover until at least 2023 (FitchRatings, 2020). After that, the revenue recovers, and the return of travel depend on the success of vaccination. It is expected that luxury and upscale segments have a slower recovery when compared to midscale or economic segments.

World Hotels Supply

The supply side in the industry, represented by the number of hotels worldwide, is inelastic and has been growing at a CAGR of 1.2% during 2008-2018 (Figure 23). As the costs of entering the market represent a barrier to the entrance, this can be interpreted as a big chain's investments with some niche investments.

However, there is a rising risk for small companies and low segments of big hotels in the sharing economy in the lodging industry. Airbnb has grown in popularity in the last decade, reaching 150m in 2018, growing at a CAGR of 58% during 2012-2018. As a result, this new type of lodging may saturate some markets.

It is also essential to understand who is supplying in this industry, with different region markets displaying a significant disparity. For example, in Europe, most of the hotels are independent (68% of the total market), whereas, in the U.S., branded hotels take the lead (74% of the total market)

However, according to STR, before the world lockdown due to the pandemic, the global rooms supply, reflecting the attractiveness of the hotel industry, has increased from 2019YE to 2020YE 1.58% (Figure 24)

Figure 21 - International arrivals

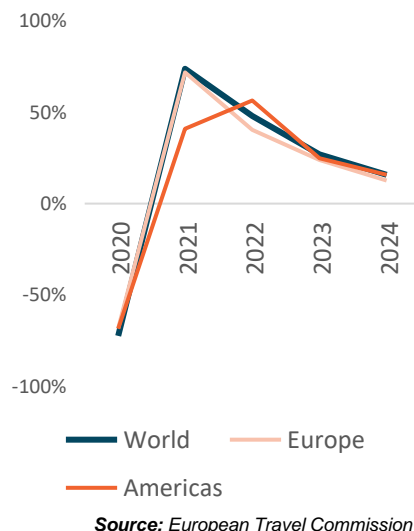


Figure 22 - Global industry RevPAR (\$) * a RevPAR movements are illustrative of lodging demand

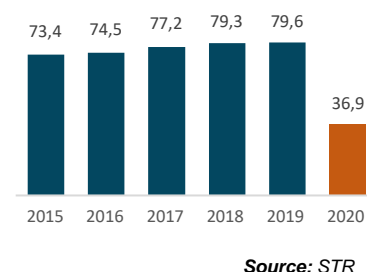


Figure 23 - Number of hotels worldwide

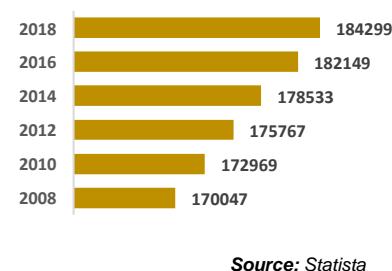


Figure 24 - Global rooms supply (m rooms)



Hotels Price

The Hotel Industry prices are very susceptible to changes over time and are strongly tied with macro-economic factors.

Globally, there is a positive trend when looking into the 2018-2019 period; however, the overall panorama changes with the COVID-19. Trying to face the lack of demand, hotels are obliged to lower their prices. In Europe, from April of 2020, the beginning of the pandemic, to August 2020, the lowest price of the last year, the price decreased from €102.59 to €90,60, representing an 11.69% decrease. After that, December had the highest price, of €118.93. At the beginning of 2021, prices decreased from €116.10 in January to €112.86 in April; after controlling the pandemic, a recovery is expected.

In South America, another geographic area where NH has a strong presence, the same trend happened. However, the lowest pique of €41.42 was reached in May 2020, less 20.60% than in April 2020. Around December 2020, the price has a full recovery of the 2020 April price, nevertheless, following the Europe tendency at the first trimester of 2021, achieving a price of €49.16 in April 2021, revealing a reduction of 9.97% (Figure 25).

Industry Structure

The hotel industry (Figure 27) is characterised as a monopolistic competition market. In 2020 it was valued in around \$240B and is composed of many firms. Thus, it is considered a fragmented industry, having 53% of rooms affiliated with a global or regional chain. In 2020, the top five hotel groups (IHG, Marriott International Inc., Hilton Worldwide Holdings Inc., Wyndham Hotels & Resorts Inc., and Accor S.A.) had increased their market share by 5 pp. (Figure 26).

The hotel industry can also be categorised by price level, ranging from the Luxury segment to the Economy segment. The reliance on brand loyalty and the degree of differentiation in the offering differ throughout them, more noticeable in the more high-end segments.

M&A Activity

As competition intensifies, distribution channels proliferate, and consumers become more demanding. Therefore, to establish a competitive advantage and aim for future growth, it is crucial to actively build a strong portfolio of distinctive, preferred brands for both owners and guests.

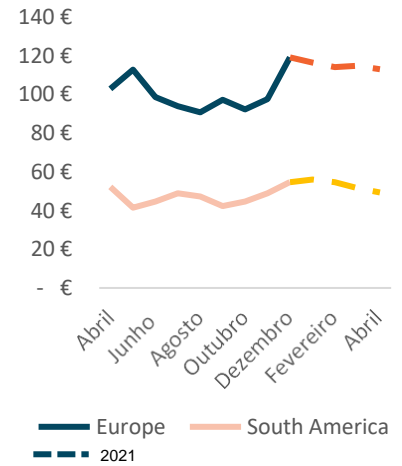
According to Real Capital Analytics, hotel M&As showed a relatively steady upward trend compared with commercial M&As, having increased \$50B in ten years, up to \$70B in 2019.

Due to COVID-19, this increase stopped in 2020. However, despite this abrupt slowdown, it was expected that M&A would increase due to the financial struggling of small companies and its dependence on more prominent companies to face the lack of demand. This would be proven true in the first half of 2021 where M&A values already tripling those of the entire year of 2020, reaching a value of \$43.4B in over 300 deals.

Industry Trends

The industry is leaving its standardised form and moving to customisation and differentiation.

Figure 25 - Average hotel prices



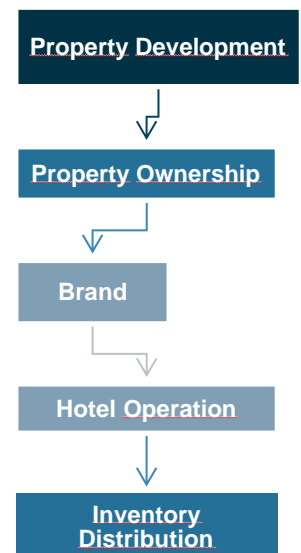
Source: Trivago

Figure 26 - The top five hotel groups have increased their market sh by 5 pp.



Source: IHG Annual Report 2020

Figure 27 - Hotel Industry Value Chain



Source: WhitBread website 2021

The ESG standards are vital for measuring the sustainability and social impact of investment in a company, being a growingly popular way for investors to evaluate businesses. To improve their standards, hotels should promote gender equality and belong in sustainability indexes like **FTSE4GOOD** (Figure 28).

The industry continues to invest in technology to improve the customer experience and the efficiency of its operations, such as smartphone applications for online check-in, contactless payments, voice control or reviews. EHL says that consumers accustomed to unlocking their smartphones using face ID will expect the same in several services, for example, accessing their hotel rooms, since contactless services have become commonly used. Also, by the increased use of the technology over the past months, it is expected that business travel will decrease since video conferencing are becoming more widely used during the pandemic.

Competitive Positioning

Peers Identification

The Sum of Absolute Rank Differences (SARD) approach was used to identify NH's industry peers. According to the CFA Institute, the "(...) SARD approach produces substantially more accurate valuation estimates than the traditional industry classification approach" (Appendix 17).

Firstly, a larger group of companies was selected using BICS (Bloomberg Industry Classification System). After having a compilation of 50 companies some variables were calculated as proxies for profitability, risk, and size, them being ROE, Debt to Equity, and Market Capitalization, respectively. The companies were ranked according to the least SARD, with a smaller sum meaning a potential peer that can be viewed as similar for a market-based valuation. This approach resulted in a group that includes six companies: **PPHE Hotel Group, HILTON Grand Vacations, MELIA Hotels, SCANDIC Hotels Group AB, Marriott Vacations World, and Whitbread Group PLC** (Figure 29).

Peers Strategy

In a world of increasing uncertainty and competition, accelerated by the global pandemic, hotels remain focused on constant sustained growth. Players of the industry share several similarities in their strategies, such as the continuous investment in new technology.

Meliá Hotels focuses on its upscale segments, directing its growth strategy towards the Mediterranean and Caribbean while also focusing on a corporate strategy related to sustainability, ecological and social issues.

PPHE hotel group is centring its priorities on short term strategies such as manage BS risks and protect the cash position implementing cash flow protection plans, for example, withdrawn dividend payments, voluntary salary reductions of senior management and reduce the CAPEX to essential repairs since the portfolio was recently renovated, take advantage of the government support. Furthermore, adjust the company to the macroeconomic environment by introducing complete contactless services and launching tactical promotions focusing on revenue generation.

Scandic Hotels Group AB has medium to long-term financial plans based on three main targets: an annual net sales average growth of 5% excluding M&A, an average adjusted EBITDA margin of at least 11% and net debt EBITDA multiple between 2-3x. Besides this, Scandic is centred on a recovery plan based on rent reductions, improvement of liquidity and financing, and expected governmental support.

Figure 28 - FTSE4GOOD index entries p/ year



Source: Companies' reports

Figure 29 - Peer Group

Company	SARD
NH Hotel Group SA	0
PPHE Hotel Group LTD	20
Hilton Grand Vacations	25
Melia Hotels International	25
Scandic hotels Group AB	27
Whitbread PLC	32
Marriott Vacations World	33

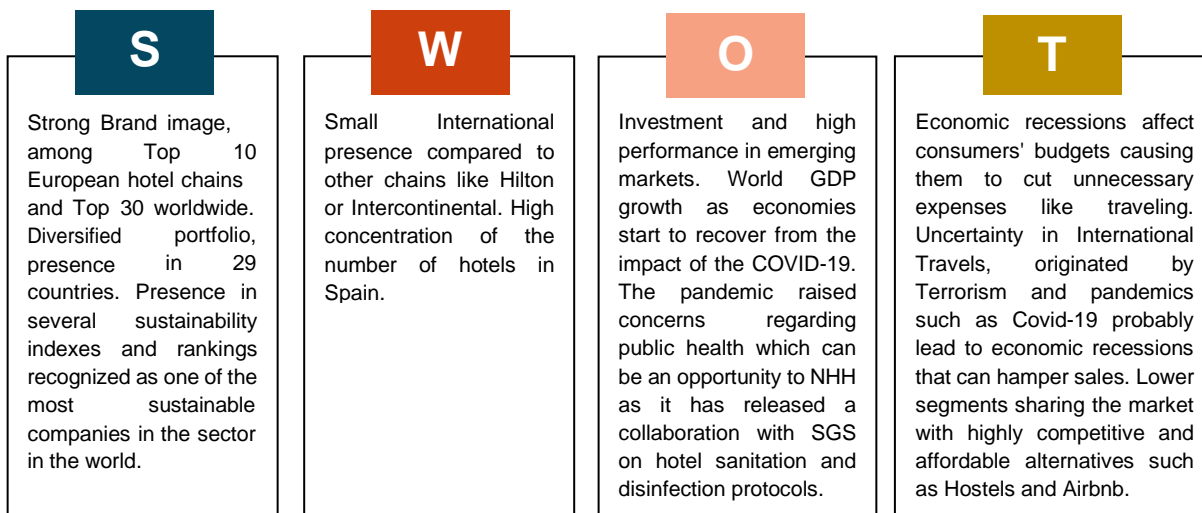
Source: Author's analysis

Hilton Grand Vacations divides its strategies into four stages: safeguard, protect their owns, guests, and team members, keeping the cleaning standards. Streamline and protect are seen as the "priorities to win the fight today" traduces to maintain its strong liquidity position, maximise the inventory assets, and protect recurring revenue streams and embedded value. The Last, "the priority to win the fight in the future," grow demand and implement opportunities to create value.

One of **Marriot Vacation Worldwide** long-term growth strategies is to strengthen the digital infrastructure, expand distribution channels, grow affiliations and management contracts, and keep a strong liquidity position.

Whitbread Group PLC has a consistent plan to create sustainable shareholder value in the long term. The first strategy is to gain market share and thus keep growing and innovating UK markets with the number one hotel operator. The second strategy focuses on the growth in the German market since it has high levels of fragmentation and no market-leading budget hotel brand. Last of all, enhancing the capability to support long term growth through financial flexibility and the ability to invest.

SWOT Analysis



Porter's 5 Forces

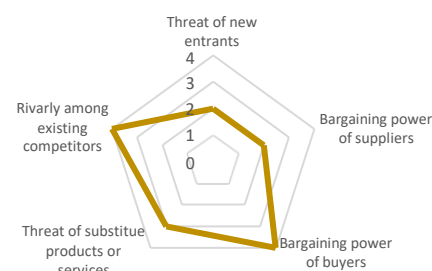
Threat of new entrants | LOW (2)

New entrants in the hotel industry face significant barriers, such as high initial investment needs and fixed costs. In addition, they also face a disadvantage when choosing a location, an essential feature of differentiation in this industry, due to the limited space available for construction when comparing to companies with already established hotels. Because of this, and considering the negative impact of COVID-19 on the industry's attractiveness, the threat of newcomers is low.

Bargaining power of suppliers | LOW (2)

Suppliers of the hotel industry vary from project execution to services directed for the customer, such as food and beverage. A single hotel can enter into agreements with several suppliers, but they do not face high bargaining power of suppliers despite this. This is mainly due to the high number of suppliers in the industry. However, hotels should consider that a good relationship with suppliers can be translated into cost advantage compared to its competitors and higher quality services (Göral, 2015).

Figure 30 - Porter's Five Forces



Source: Author's analysis

Bargaining power of buyers | Significant (4)

The hotel's service offering has been turning more homogeneous over the years. That, added to low switching costs and the increasing of platforms that allow customers to share their reviews and provide feedback on the service, makes customers sensible to prices variations. This condition was aggravated by the pandemic, with businesses trying to remain afloat. Thus, hotels are mostly price takers, and buyers have high bargaining power.

Threat of substitute products or services | Moderate (3)

The threat of substitutes presents different levels on different segments, being higher in the lowest ones, mainly due to hostels and Airbnb, which appeals to a younger demographic that usually does not travel in big groups. In general, hotels face a moderate threat of substitute services.

Rivalry among existing competitors | Significant (4)

Competition in the hotel industry is fierce due to the low differentiation and switching costs. Being a fragmented industry with high capital costs, there is pressure to sell capacity through price reductions, enhancing the competition's intensity.

PESTEL Analysis

P

Political changes, such as elections, regulatory measures or taxes adjustments have an impact on hotels consumers (business and tourists).

E

Economic environment such as recessions affects the segmentation and targeting strategies of hotels. Economic difficulties impact on people's selection of hotels reducing the demand.

S

The competition with Airbnb, many travelers, specifically new generations is very interesting in travel around the world, and they do prefer the privacy accommodation and the less expensive price of Airbnb.

T

Availability of software's that help managed reservations, staff, and consumer needs. The use of social media to reach out current and potential clients may reduce the advertising costs.

E

Environmental and weather changes may have an impact in hotels industry since many hotels are only open in specific seasons of the year (summer or snow season). Huge pressure from governmental entities and environmental activists to ensure a minimal carbon footprint and waste.

L

VISA restriction rules in some countries like USA and UK. EU and UK hotels must comply with the GDPR. The failure to provide data safety may cost a lot. Legal procedures to open new hotels. Laws regarding the Health and Safety at work. Reduced legal taxes to Airbnb hosts and other platforms that constitute a cost to hotel groups.

5. Investment Summary

NH's recommendation stands for BUY through Discounted Cash Flow Model (DCF) with a **PT of €4.88/sh for 2022FY** representing a 28% upside potential or a potential annualised return of 21% to NH's stock price of **€3.80/sh at August 11th, 2021** with **high risk**, as the industry's performance fluctuates immensely due to its cyclicity and seasonality (Figure 31).

The current undervaluation of the group is in line with the world situation, which had a substantial impact on the industry since many countries were locked down trying to fight the pandemic, not allowing people to travel, and consequently forcing the closing of the hotels.

In a pre-pandemic scenario, NH revenues grew at a 3.36% 2016–2019 CAGR; however, 2020YE was a tough year, leading the company to reach 68.61% lower than 2019YE revenues.

Valuation Methods

To achieve a PT of €4.88/sh, a DCF model on a global FCFF was followed

To complement the analysis, other valuation models were computed, absolute and relative methods, achieving **PT varying from €4.88/sh to €7.44/sh**, all with upside potentials except when using the FCFE, which was expected since this method is best used when valuing financial institutions because capital structure is embedded with cash. (Figure 32)

Risks to Achieve Price Target

Several risks may affect the investment recommendation in the hotel industry. Currently, the most potent risk affecting hotels is the **COVID-19** pandemic and all the uncertainty and unpredictable future.

Besides that, the industry is susceptible to other risks, such as economic risks, the cycle of the economy directly affects the hotels demand and, therefore, the profitability. In addition, due to the worldwide presence, NHH is also affected by the fluctuations in the exchange rates and inflation rates.

Market, regulatory, and operational risks are examples of many risks that NH is exposed to, affecting the long-term sustainable growth rate, thus the enterprise value and the share price.

6. Valuation

Since the group does not disclose its segment's financial statements, the valuation was computed globally considering a forecast period of 5 years, from 2021YE to 2025YE. To guarantee a completed valuation, both absolute and relative valuations were computed. It is essential to clarify that no hyperinflation was considered for valuation purposes since the Argentina inflation slows for the third month to below the forecast (Bloomberg, 2021), and constant exchange rates were also considered during the predicted years.

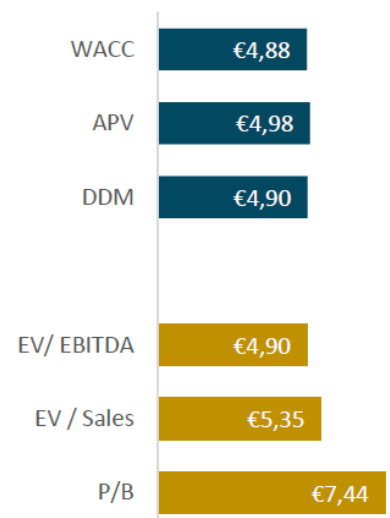
For the absolute valuation, based on the company's financial statements, three methods were considered: **Discounted Cash Flow (DCF)**, the **Adjusted Present Value (APV)** and the **Dividend Discount Model (DDM)**.

Figure 31 - 2020YE PT



Source: Author's analysis

Figure 32 - Valuation Methods



Source: Author's analysis

WACC Method

The first method used to compute NHH's PT was the DCF model with the FCF, computed for each year of the forecasted period (2021F-2025F) and a stable growth rate for the terminal period (Appendix 14). This method yields a 2022F PT of **€4.88**, representing a **28% upside potential** which turns into a 21% annualized return (Figure 33).

Forecast Analysis

Revenues

The revenues of the hotel group were calculated as the number of hotel rooms of each geographic segment multiplying the RevPar of each geographic segment as well. The number of rooms was projected to increase in each area since the group was expanding before the COVID, and once it recovers, it is expected to continue. The industry is expected to recover in the next year. Thus, NH's RevPar was assumed to recover the values of 2019 in 2025FY, meaning a CAGR of 29.84%. Besides the hotel occupancy, Catering, meeting rooms, and rentals are part of revenues as well, and those are expected to grow at a 23.48% CAGR between 2020YE and 2025YE (Figure 34) (Appendix 9). As a result, the total revenues will reach a value 4x higher than in 2020YE, corresponding to a 5-year CAGR of 32.62%.

CAPEX

Over the last years, NH has been investing, thus increase its number of hotel rooms; however, due to the pandemic, it is expected that next year's CAPEX amount will be lower than historical values until the company recovers from the crisis. In addition, it is expected to reach the 2020YE CAPEX amount in 2023YE. Furthermore, the 2025YE CAPEX is 1.79x higher than in 2020YE (Appendix 10).

WACC rate assumptions

The estimated cost of equity (K_e) was calculated using the CAPM model, which includes a 0.73% Risk-Free rate (R_f), estimated through the historical 10 years average monthly observations of the **German Bund 10-year yield** it remains constant over the years, 6.25% **Market Risk Premium** (MRP) and 1.23% **Country Risk Premium** (CRP), also remain constant. To calculate MRP and CRP, a range of countries was selected based on the geographic segments of NH and values were retrieved from (Fernandez, Martinez & Acín, 2021). The Adjusted Beta of 1.334 results from the Blume Adjusted Beta formula and was calculated through a regression NH monthly price with the IBEX index from September 1st of 2016 until September 1st of 2021 (60 observations). For each forecast period year, a different K_e was calculated based on different beta leverage, *ceteris paribus*, which led to a different WACC per year once the capital structure varies YoY (Appendix 13).

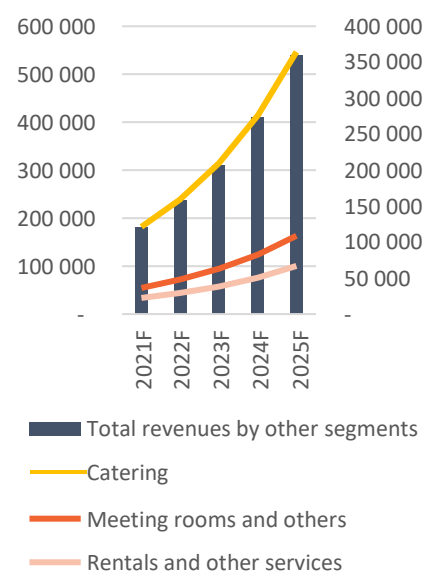
The **Cost of Debt (K_d)** was estimated yearly based on the credit default spread method. Adding the R_f already mentioned to the company default spread and the country default spread, both from Damodaran's database. The annual company default spread was defined based on the interest coverage ratio of each year, achieving values between 0.75 and 22.03 in 2021F and 2025F, respectively, therefore a k_d of **2.83% for the perpetuity period** (Appendix 13).

Figure 33 - FCF Approach

PT @ WACC	
Enterprise Value	2 477 131
Net Debt	(562 856)
Equity Value	1 914 275
#Shares Outs.	392 180
Price Target	4,88 €
Price 11 Aug, 21	3,80 €
Upside Potential	28%

Source: Author's analysis

Figure 34 - Revenues by other segments



Source: Author's analysis

Figure 35 - APV approach

PT @ APV	
Enterprise Value	2 516 756
Net Debt	(562 856)
Equity Value	1 953 900
#Shares Outs.	392 180
Price Target	4,98 €
Price 11 Aug, 21	3,80 €
Upside Potential	31%

Source: Author's analysis

Terminal Value

A long-run sustainable growth rate was estimated for the perpetuity period through the Stable Growth rate considering ROE calculated by DuPont Approach, reaching a value of **1.91%** (Appendix 13).

Discounted Cash Flow Model

The first model of the DCF method was the Free Cash Flow to the Firm (FCFF). This approach was applied to the company as a whole (Appendix 14). The FCFF was computed for each year of the forecasted period applying a stable growth rate for the terminal period (TV). Through this method, a **2021YE PT of €4.95/sh** was reached (Figure 33).

Flow – to – Equity Model

To complement the DCF model, the Enterprise Value was also computed through the Free Cash Flow to Equity. However, this method is considered difficult to apply since the capital structure is embedded within the cash flow. Thus, it fits better for financial institutions' valuation (Appendix 14).

Dividend Discount Model

The group did not pay dividends in 2020YE and did not disclose future payments, possibly because of the uncertainty around the industry. Furthermore, it was assumed no payments for the 2021YE since the NI was not recovered yet, however from 2022YE to 2025YE, it was supposed that the payout ratio would be the same as the 4year historical average (2016FY-2019FY). Applying an H-Model Gordon Growth model with a short-term dividend growth rate associated with the world GDP growth and a long-term dividend growth rate computed through the Stable Growth Model (Appendix 14), a **PT of €4.90/sh** was estimated with an **upside potential of 28.96%**, which is in line with the PT calculated through the FCFF (Figure 36).

Adjusted Present Value

NH was also valued through the APV method (Appendix 14). This approach was applied once the company maintained the amount of debt. The 2022F PT obtained through this model was **€4.98/sh with an upside potential of 31%, very similar to the result obtained with the FCFF and DDM** (Figure 35).

Market-Based Valuation

In addition to the absolute methods computed, a **market-based valuation** was employed using the peer group previously defined and comparing market multiples (Appendix 12).

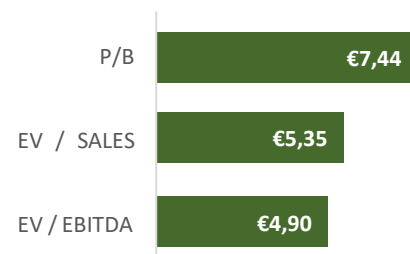
The first multiple chosen was the **EV/ EBITDA**, with a peer average of 12.69x, making an Equity Value for NH of €2M thus, PT of €4.90 with an upside potential of 28% was the most accurate with the absolute valuation. In addition, the **EV/SALES** with an average of 2.77x, resulting in a **PT of €5.35 with an upside potential of 40%**. Finally, the **P/B** and **P/E** were also computed, however, the values were not so close to the absolute valuation, **P/B reached a value of 7.44%** turning into an **upside potential of 96%**. (Figure 37)

Figure 36 - DDM Approach

PT @ DDM	
gL	1,91%
gs	3,60%
H	2,5
TV	4,77 €
PV DPS	0,46 €
PV TV	4,44 €
Price Target	4,90 €
Price 11 Aug, 202	3,80 €
Upside Potential	28,96%

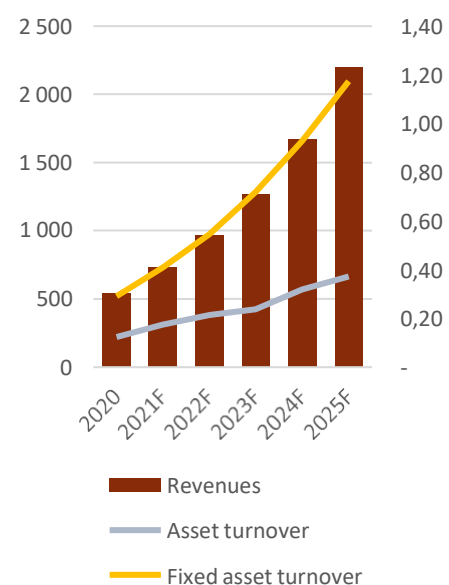
Source: Author's analysis

Figure 37 - Market - Based Valuation



Source: Author's analysis

Figure 38 - Operational Efficiency ratios



7. Financial Analysis

Operational Efficiency

After the increase in NHH sales, from around €1.45B to €1.71B over the historical period **2016-2019 (3.36% CAGR 2016-2019)**, the industry dropped its revenues in 2020YE to **€0.51B (-68.61% YOY)**. However, with the pandemic situation's improvement, a sales increase is expected, total recovering the 2019YE amount, in 2025F representing a **+32.62% CAGR 2020YE-2025F** (Figure 38). Furthermore, the improvement of NHH operational efficiency is shown by the increase of the **Asset turnover** from 0.18x in 2021F to 0.37x in 2015F. In addition, another measure of operating performance is the **Fixed Assets turnover**, which grew at a **+3.81% CAGR 2016-2019**. Therefore, NHH can register an improvement in its ability to generate sales from its fixed-assets investments, such as PP&E, since it is expected to increase Fixed Assets turnover by **+24.61% 2020–2025 CAGR** (Appendix 6).

Profitability

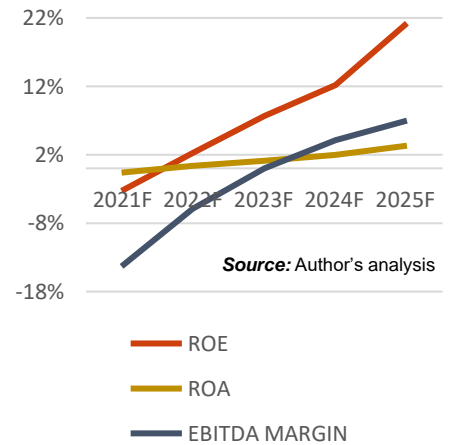
NHH's profitability ratios mirror what happened worldwide. During the historical period, the **EBITDA margin** dropped from 15.24% in 2016YE to -14.31% in 2020YE. However, assuming the recovery in the following years, the ratio is projected to reach 7% in 2025F. The same happens with **ROE**, calculated through the DuPont Approach. In the historical years, the ratio fell from 3.15% in 2016YE to -55.15% in 2020YE. In the next five years, the ROE is expected to achieve a value of 20.14%. In addition, since **ROA** had an increase from 1.39% to 2.12% (+8.82% CAGR 2016YE-2019YE), during the forecasted period it is expected the same increased tendency with a **+53.30% CAGR 2022F-2025F**, NHH has been made adequate use of its assets in terms of profitability and is projected to persist (Figure 39) (Appendix 6).

Solvency and Liquidity

A senior bond is expected to mature in 2023F, which will greatly impact NHH's **liquidity**. **Current, quick and cash ratios** will grow at a 15.84%, 16.23% and 30.69% 2021F-2025F CAGRs, respectively. However, in 2024F, all three ratios will sharply decrease, having a late recovery in 2025F (Figure 40).

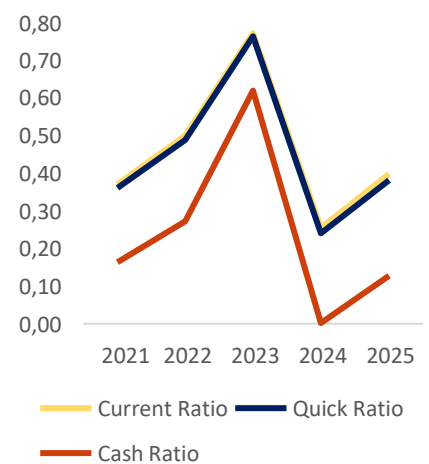
Looking at the interest coverage ratio, in 2021F, the company expects a value of 0.75x since it is starting the recovery. However, in 2025F is projected an interest coverage ratio of 22.03x, which reflects the improvement of the company on paying its interest expense. The **Debt-to-Equity** ratio is also expected to behave the same way, rising at a 4.12% 2021F-2025F CAGR (Figure 40) (Appendix 6).

Figure 39 - Profitability ratios



Source: Author's analysis

Figure 40 - Liquidity indicators



Source: Author's analysis

8. Investment Risks

Economic Risks

Lack of Economic Growth (ER01)

The GDP's growth is very strongly related to the industries output. Therefore, having a recession in the whole market will undoubtedly lower the demand and supply sides, making it harder to generate revenues (Figure 42). Consequently, it could compromise the company's objectives.

Exchange Rates and Inflation Rates (ER02)

NH operates in countries subject to fluctuation in exchange rates (Mexico, Colombia or Argentina), and therefore the financial results could be affected (Figure 43).

Tax Law (ER03)

Tax laws vary from country to country; changes in VAT, taxes and fees that increase the group's costs may negatively affect the NH's results.

Regulatory Risks

Change in accounting standards (RR01)

New accounting regulations such as IRFS16 or IAS29 could significantly impact the group's financial statements.

New Regulations (RR02)

Regulations related to hotel markets such as buildings, tourism or services regulations can make it hard for the group to adjust from market to market. These regulations are constantly under revision and may change frequently.

Market Risks

Sharing Economy (MR01)

NH is subject to intense competition. The sharing economy concept has gained attention in the hotel industry over the past few years due to its low regulation and tax obligations. Airbnb is an example that has proven to be a very profitable niche market competing against traditional accommodation suppliers and could impact demand for such traditional hospitality or even force to improve their business model to keep in the competition. In addition, large market concentrations due to M&A could also threaten NH's market share.

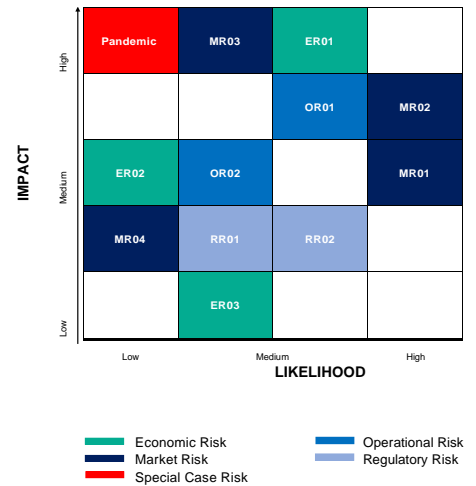
Harsh Competition (MR02)

A low differentiation characterises the industry in the services and the lack of switching costs, making the price and quality highly influential in the market, translating into a very competitive market. Therefore, differentiation is crucial to a competitive advantage.

Geopolitical risks and the uncertainty of international travel (MR03)

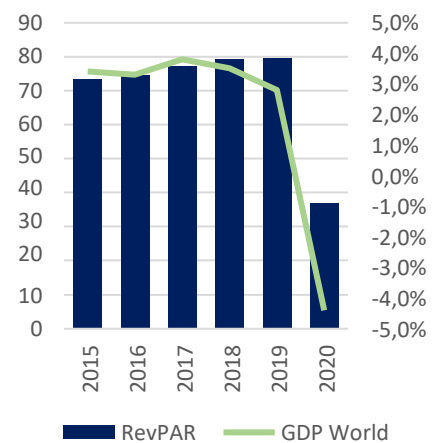
Political instability, terrorism, and pandemics such as COVID-19 are external factors that may cause a reduction in sales due to the "panic effect" on tourism, therefore, financial results. This kind of risk may lead to an increase in insurance premiums demotivating leisure and business travel.

Figure 41 - Risk Matrix



Source: Author's analysis

Figure 42- World GDP (YoY growth) and RevPAR evolution



Source: IMF 2021

New Entrants (MR04)

High initial investments are a solid barrier for entry to new players. New entrants must differentiate themselves from the already established competition. This is a risk to companies already in the market since they have to keep the innovation not to allow themselves to be overtaken by new entrants.

Pandemic

The current pandemic is a powerful example of uncertainty in international travel. The world had to stop because of the COVID-19. Thus, macroeconomic variables are suffering, and consequently, several industries have been struggling with financial difficulties, specifically the hotels' industry. Even though it has a very low probability of happening frequently, companies should be prepared because it can last for an extended period.

Operational Risk

IT System (OR01)

Cyberattacks and data leaks such as a breach of the General Data Protection (GDPR) are constantly increasing and getting more sophisticated. Once an attack happens, consumers lose their confidence, the hotel gets a low reputation and could face legal actions that may be expensive. Besides consumer confidence, NH also depends on the success and availability of the website and the IT system. For example, NH is currently operating with the SAP system, and if there is a crash in SAP, the group might have to stop the activity.

Staff Shortage (OR02)

The ability to attract and retain talents is a crucial driver in terms of customer satisfaction and confidence. Hotels are forced to invest in personnel development, postponing or cancelling some projects when there is no HR to maintain a certain quality.

Price Target Sensitivity

Considering the risks previously described, a sensitivity analysis was performed to varying factors that may affect the price target.

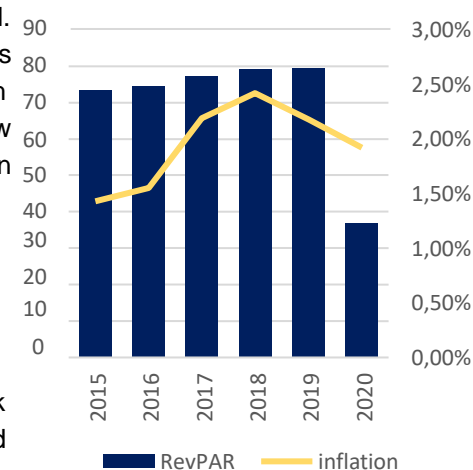
The **WACC** rate set to 7.35% in the **base case** could lead to an increase of €0.12-0.13/sh for each decrease of 10bps, *ceteris paribus*. In addition, an increase of 10 bps in the **WACC** rate in the base case would lead to a decrease of €0.10-0.12/sh.

Figure 44 - Price Target sensitivity to WACC and g

		WACC									
		4,88 €	6,95%	7,05%	7,15%	7,25%	7,35%	7,45%	7,55%	7,65%	7,75%
g	1,51%	4,94 €	4,82 €	4,71 €	4,60 €	4,49 €	4,39 €	4,29 €	4,20 €	4,11 €	
	1,61%	5,05 €	4,92 €	4,81 €	4,69 €	4,59 €	4,48 €	4,38 €	4,28 €	4,19 €	
	1,71%	5,16 €	5,03 €	4,91 €	4,79 €	4,68 €	4,57 €	4,47 €	4,37 €	4,27 €	
	1,81%	5,27 €	5,14 €	5,02 €	4,90 €	4,78 €	4,67 €	4,56 €	4,45 €	4,35 €	
	1,91%	5,39 €	5,26 €	5,13 €	5,00 €	4,88 €	4,76 €	4,65 €	4,54 €	4,44 €	
	2,01%	5,52 €	5,38 €	5,24 €	5,11 €	4,99 €	4,87 €	4,75 €	4,64 €	4,53 €	
	2,11%	5,65 €	5,50 €	5,36 €	5,23 €	5,10 €	4,97 €	4,85 €	4,74 €	4,62 €	
	2,21%	5,78 €	5,63 €	5,48 €	5,34 €	5,21 €	5,08 €	4,96 €	4,84 €	4,72 €	
	2,31%	5,92 €	5,76 €	5,61 €	5,47 €	5,33 €	5,19 €	5,07 €	4,94 €	4,82 €	

Source: Author's analysis

Figure 43 - RevPAR (\$) and Inflation evolution



Source: IMF 2021

Regarding the **long-run sustainable growth rate** established to 1.91% in the base case, it is estimated that an **increase (decrease) of 10 bps would lead to an increase (decrease) of €0.10-0.12/sh, ceteris paribus.** (Figure 44)

Another sensitivity analysis to examine the price behaviour is the variation of the RevPAR value and the number of rooms. Therefore, for the RevPAR vs number of rooms analysis, it was taken as base case the values of Spain, since it is the higher segment of the group. The number of rooms considered to the base case was 15 250; it is expected that an **increase (decrease) of 500 rooms** may lead to an **increase (decrease) of €0.10-0.11/sh.** In addition, an increase of €2.5 at the revenue per available room in the base case will represent an increase of **€0.05/sh.** (Figure 45)

Figure 45 - Price target sensitivity to RevPAR and number of rooms

	RevPAR									
	4,88 €	11,04 €	16,04 €	21,04 €	26,04 €	28,54 €	31,04 €	33,54 €	36,04 €	38,54 €
13 750	4,27 €	4,36 €	4,45 €	4,54 €	4,59 €	4,63 €	4,67 €	4,72 €	4,76 €	
14 250	4,35 €	4,45 €	4,54 €	4,64 €	4,68 €	4,73 €	4,78 €	4,82 €	4,87 €	
# Rooms	14 750	4,43 €	4,53 €	4,63 €	4,73 €	4,78 €	4,83 €	4,88 €	4,93 €	4,98 €
	15 250	4,51 €	4,61 €	4,72 €	4,83 €	4,88 €	4,93 €	4,99 €	5,04 €	5,09 €
	15 750	4,59 €	4,70 €	4,81 €	4,93 €	4,98 €	5,04 €	5,09 €	5,15 €	5,21 €
	16 250	4,67 €	4,79 €	4,91 €	5,02 €	5,08 €	5,14 €	5,20 €	5,26 €	5,32 €
	16 750	4,75 €	4,87 €	5,00 €	5,13 €	5,19 €	5,25 €	5,31 €	5,38 €	5,44 €

Source: Author's analysis

Monte Carlo Simulation

Using the Crystal Ball, a Monte Carlo simulation was performed as a complementary analysis of the group's valuation. (Figure 47)

This analysis considers the simultaneous changes in the Cost of Capital (WACC), the long-run sustainable growth rate (g) and the tax rate.

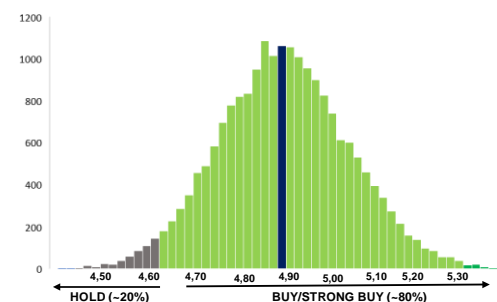
The output of 20,000 observations is an average value of **€4.88**, which is in line with the PT already estimated, a **28% upside potential** with around 80% certainty. (Figure 46)

Figure 46 - Monte Carlo Statistics

MC Statistics	
Trials	20,000
Mean	4,88 €
S. Dev	0,15 €
10 th percentile	4,70 €
90 th percentile	5,07 €
Upside Potential	28,42%

Source: Author's analysis

Figure 47 - Oracle Crystal Ball Monte Carlo



Source: Author's analysis

Appendices

Appendix 1: Statement of Financial Position

(Thousands €)	2 016	2 017	2 018	2 019	2 020	2021F	2022F	2023F	2024F	2025F
ASSETS										
Goodwill	117 736	111 684	109 432	106 577	101 069	101 069	101 069	101 069	101 069	101 069
Intangibles	126 453	151 083	110 569	83 807	128 137	112 350	101 210	94 542	92 404	95 114
Investment Property	-	-	-	2 964	2 950	2 950	2 950	2 950	2 950	2 950
PP&E	1 701 428	1 583 164	1 637 718	1 713 123	1 615 924	1 577 467	1 559 114	1 565 396	1 602 437	1 678 482
Right-of-use assets	-	-	-	1 701 499	1 693 820	1 848 657	2 139 254	2 477 044	2 869 921	3 327 133
Investments accounted for using the equity method	10 646	9 419	8 971	7 517	41 773	41 773	41 773	41 773	41 773	41 773
Non-current financial investments	91 056	75 895	54 126	37 402	37 649	37 649	37 649	37 649	37 649	37 649
Deferred tax assets	152 389	137 996	138 724	220 040	273 013	273 013	273 013	273 013	273 013	273 013
Other non-current assets	18 939	16 448	13 427	-	-	-	-	-	-	-
Total non-current assets	2 218 647	2 085 689	2 072 967	3 872 929	3 894 335	3 994 928	4 256 032	4 593 436	5 021 216	5 557 183
Non-current assets classified as held for sale	46 685	109 166	55 974	47 811	-	-	-	-	-	-
Inventories	9 870	9 809	10 435	11 123	7 957	4 782	6 285	8 270	10 893	14 364
Trade Receivables	146 197	132 582	106 601	106 496	29 937	54 326	71 406	93 956	123 760	163 193
Non-trade receivables	54 510	42 786	38 195	55 928	70 499	31 769	35 484	40 389	46 872	55 450
Tax Receivables	29 231	23 743	19 451	28 961	50 547	11 817	15 532	20 437	26 920	35 498
Other non-trade debtors	25 279	19 043	18 744	26 967	19 952	19 952	19 952	19 952	19 952	19 952
Short-term Financials investmets	1 918	-	-	-	-	-	-	-	-	-
Accounts receivable from related entities	0	0	978	2 493	955	939	1 234	1 624	2 139	2 820
Cash & Cash Equivalents	136 733	80 249	265 869	289 345	320 851	76 019	143 806	607 605	1 138	113 245
Other current assets	12 677	11 423	12 109	5 771	5 383	5 383	5 383	5 383	5 383	5 383
Total current assets	408 590	386 015	490 161	518 967	435 582	173 218	263 598	757 227	190 185	354 455
TOTAL ASSETS	2 627 237	2 471 704	2 563 128	4 391 896	4 329 917	4 168 146	4 519 630	5 350 663	5 211 402	5 911 639
EQUITY										
Share capital	700 544	700 544	784 361	784 361	784 361	784 361	784 361	784 361	784 361	784 361
Reserves & Retained Earnings	557 883	577 522	730 694	493 947	127 940	102 670	109 911	135 077	177 073	257 261
Other Equity instruments	27 230	27 230	-	-	-	-	-	-	-	-
Conversion differences	(133 765)	(157 542)	(60 854)	(58 407)	(162 932)	(162 932)	(162 932)	(162 932)	(162 932)	(162 932)
Treasury shares and shareholding	(39 983)	(39 250)	(2 530)	(1 647)	(367)	(367)	(367)	(367)	(367)	(367)
Equity attributable to the shareholders of the Parent Company	1 111 909	1 108 504	1 451 671	1 218 254	749 002	723 732	730 973	756 139	798 135	878 323
Non-controlling interests	43 967	43 472	52 351	57 239	49 582	49 582	49 582	49 582	49 582	49 582
TOTAL EQUITY	1 155 876	1 151 976	1 504 022	1 275 493	798 584	773 314	780 555	805 721	847 717	927 905
LIABILITIES										
Debt instruments and other marketable securities	763 637	387 715	342 485	345 652	349 062	352 533	353 947	355 535	0	0
Bank borrowings	72 720	71 246	71 473	106 695	623 011	369 610	342 126	332 678	320 992	308 512
Leasing liabilities	0	0	0	1 814 399	1 809 120	1 974 497	2 284 875	2 645 659	3 065 280	3 553 614
Other financial liabilities	1 435	12 481	1 762	1 160	904	904	904	904	904	904
Other non-current liabilities	34 037	38 976	47 296	7 637	10 601	10 601	10 601	10 601	10 601	10 601
Provisions for contingencies and charges	52 900	50 413	51 178	48 241	47 255	47 255	47 255	47 255	47 255	47 255
Deferred tax liabilities	174 987	167 433	177 478	180 082	171 519	171 519	171 519	171 519	171 519	171 519
Total non-current liabilities	1 099 716	728 264	691 672	2 503 866	3 011 472	2 926 919	3 211 227	3 564 151	3 616 551	4 092 405
Liabilities associated with non-current assets classified as held for sale	2 661	2 377	2 456	2 584	-	-	-	-	-	-
Debt instruments and other marketable securities	2 233	246 195	73	141	143	1 894	1 720	355 535	0	0
Bank borrowings	23 226	11 724	4 881	3 111	25 927	26 070	7 860	10 371	12 480	7 472
Leasing liabilities	0	0	0	252 970	250 619	273 529	316 526	366 505	424 636	492 285
Other financial liabilities	1 076	11 618	710	251	105	105	105	105	105	105
Trade and other payables	229 769	222 951	252 704	257 499	188 493	111 710	146 831	193 200	254 486	335 571
Accounts payable from related entities	0	0	0	1 050	613	644	846	1 113	1 466	1 933
Tax payables	44 938	45 860	59 453	40 875	22 589	22 589	22 589	22 589	22 589	22 589
Provisions for contingencies and charges	11 462	8 971	2 713	5 021	6 277	6 277	6 277	6 277	6 277	6 277
Other current liabilities	56 280	41 768	44 444	49 035	25 095	25 095	25 095	25 095	25 095	25 095
Total current liabilities	371 645	591 464	367 434	612 537	519 861	467 913	527 849	980 791	747 134	891 328
TOTAL LIABILITIES	1 471 361	1 319 728	1 059 106	3 116 403	3 531 333	3 394 832	3 739 076	4 544 942	4 363 685	4 983 733
EQUITY + LIABILIT.	2 627 237	2 471 704	2 563 128	4 391 896	4 329 917	4 168 146	4 519 630	5 350 663	5 211 402	5 911 639

Appendix 3: Income Statement

(Thousands €)	2016	2017	2018	2019	2020	2021F	2022F	2023F	2024F	2025F
Revenues	1 447 903	1 546 086	1 613 388	1 708 078	536 150	732 195	962 387	1 266 310	1 668 002	2 199 467
Other operating income	7 687	11 101	6 132	9 352	7 852	8 131	8 421	8 720	9 031	9 352
Net gains on disposal of non-current assets	41 526	30 148	85 982	(709)	(475)	0	0	0	0	0
Procurements	(66 857)	(75 712)	(74 810)	(76 765)	(25 378)	(34 236)	(44 999)	(59 210)	(77 992)	(102 842)
Staff Costs	(415 889)	(427 140)	(422 671)	(448 762)	(268 174)	(199 196)	(261 821)	(344 504)	(453 786)	(598 372)
Depreciation and Amortisation charges	(114 170)	(123 085)	(116 301)	(297 080)	(302 477)	(117 160)	(112 189)	(109 199)	(108 426)	(110 242)
Net Profit/(Losses) from asset impairment	(2 686)	9 005	(304)	4 889	(76 258)	0	0	0	0	0
Other operating expenses	(791 011)	(815 011)	(852 924)	(624 175)	(249 481)	(356 265)	(468 270)	(616 151)	(811 603)	(1 070 198)
Variation in the provision for onerous contracts	4 163	4 216	4 342			0	0	0	0	0
Other operating expenses	(795 174)	(819 227)	(857 266)	(624 175)	(249 481)	0	0	0	0	0
EBIT	106 503	155 392	238 492	274 828	(378 241)	33 469	83 528	145 967	225 226	327 164
Gains on financial assets and liabilities and other	9 856	(1 927)	(373)	8 529	-222	-222	-222	-222	-222	-222
Profit (loss) from companies accounted for using the equity method	119	(349)	(499)	22	(7 468)	0	0	0	0	0
Financial Income	3 310	2 995	6 039	4 204	1 716	1996	2623	3451	4546	5995
Change in fair value of financial instruments	435	(7)	0	306	323	0	0	0	0	0
Financial expenses	(72 304)	(76 747)	(59 997)	(135 472)	(135 545)	-22878	-30070	-39567	-52118	-68723
Results from exposure to hyperinflation			25 674	(85)	796	0	0	0	0	0
Net exchange differences (Income/(Expense))	(3 561)	(6 360)	1 053	(2 341)	(3 774)	0	0	0	0	0
Impairment of financial investments				(18 572)	6926	0	0	0	0	0
PROFIT BEFORE TAX FROM CONTINUING OPERATIONS (EBT)	44 358	72 997	210 389	131 419	(515 489)	12 364	55 859	109 630	177 433	264 213
Corporation tax	(7 935)	(33 512)	(85 314)	(38 568)	75 154	6 717	(4 729)	(16 435)	(27 425)	(52 367)
Tax rate	17,9%	45,9%	40,6%	29,3%	14,6%	25,0%	25,0%	25,0%	25,0%	25,0%
PROFIR FOR THE PERIOD FROM CONTINUING ACTIVITIES	36 423	39 485	125 075	92 851	(440 335)	19 082	51 131	93 195	150 008	211 847
Profit (loss) for the year from discontinued operations net of tax	(2 274)	(278)	(568)	50	(66)	0	0	0	0	0
PROFIT FOR THE PERIOD	34 149	39 207	124 507	92 901	(440 401)	(25 270)	17 789	61 827	103 171	196 999

Appendix 4: Common-Size Income Statement

	2016	2017	2018	2019	2020	2021F	2022F	2023F	2024F	2025F
Revenues	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
Other operating income	0,5%	0,7%	0,4%	0,5%	1,5%	1,1%	0,9%	0,7%	0,5%	0,4%
Net gains on disposal of non-current assets	2,9%	1,9%	5,3%	0,0%	-0,1%	0,0%	0,0%	0,0%	0,0%	0,0%
Procurements	-4,6%	-4,9%	-4,6%	-4,5%	-4,7%	-4,7%	-4,7%	-4,7%	-4,7%	-4,7%
Staff Costs	-28,7%	-27,6%	-26,2%	-26,3%	-50,0%	-27,2%	-27,2%	-27,2%	-27,2%	-27,2%
Depreciation and Amortisation charges	-7,9%	-8,0%	-7,2%	-17,4%	-56,4%	-16,0%	-11,7%	-8,6%	-6,5%	-5,0%
Net Profit/(Losses) from asset impairment	-0,2%	0,6%	0,0%	0,3%	-14,2%	0,0%	0,0%	0,0%	0,0%	0,0%
Other operating expenses	-54,6%	-52,7%	-52,9%	-36,5%	-46,5%	-48,7%	-48,7%	-48,7%	-48,7%	-48,7%
Variation in the provision for onerous contracts	0,3%	0,3%	0,3%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Other operating expenses	-54,9%	-53,0%	-53,1%	-36,5%	-46,5%	0,0%	0,0%	0,0%	0,0%	0,0%
EBIT	7,4%	10,1%	14,8%	16,1%	-70,5%	4,6%	8,7%	11,5%	13,5%	14,9%
Gains on financial assets and liabilities and other	0,7%	-0,1%	0,0%	0,5%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Profit (loss) from companies accounted for using the equity method	0,0%	0,0%	0,0%	0,0%	-1,4%	0,0%	0,0%	0,0%	0,0%	0,0%
Financial Income	0,2%	0,2%	0,4%	0,2%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Change in fair value of financial instruments	0,0%	0,0%	0,0%	0,0%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%
Financial expenses	-5,0%	-5,0%	-3,7%	-7,9%	-25,3%	-3,1%	-3,1%	-3,1%	-3,1%	-3,1%
Results from exposure to hyperinflation	0,0%	0,0%	1,6%	0,0%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%
Net exchange differences (Income/(Expense))	-0,2%	-0,4%	0,1%	-0,1%	-0,7%	0,0%	0,0%	0,0%	0,0%	0,0%
Impairment of financial investments	0,0%	0,0%	0,0%	-1,1%	1,3%	0,0%	0,0%	0,0%	0,0%	0,0%
PROFIT BEFORE TAX FROM CONTINUING OPERATIONS (EBT)	3,1%	4,7%	13,0%	7,7%	-96,1%	1,7%	5,8%	8,7%	10,6%	12,0%
Corporation tax	-0,5%	-2,2%	-5,3%	-2,3%	14,0%	0,9%	-0,5%	-1,3%	-1,6%	-2,4%
Tax rate	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
PROFIR FOR THE PERIOD FROM CONTINUING ACTIVITIES	2,5%	2,6%	7,8%	5,4%	-82,1%	2,6%	5,3%	7,4%	9,0%	9,6%
Profit (loss) for the year from discontinued operations net of tax	-0,2%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
PROFIT FOR THE PERIOD	2,4%	2,5%	7,7%	5,4%	-82,1%	-3,5%	1,8%	4,9%	6,2%	9,0%

Appendix 5: Cash Flow Statement

(Thousands €)	2021F	2022F	2023F	2024F	2025F
Operating Activities					
+EBIT	12 364	55 859	109 630	177 433	264 213
+D&A	117 160	112 189	109 199	108 426	110 242
-Income Tax	6 717	(4 729)	(16 435)	(27 425)	(52 367)
-DNWC	(59 220)	12 730	16 807	22 213	29 390
Operational cash flow	77 022	176 049	219 201	280 647	351 478
Investment Activities					
-CAPEX	62 916	82 696	108 812	143 329	188 997
+Other Inv.	154 837	290 597	337 790	392 877	457 212
Cash flow from investing activities	(217 754)	(373 293)	(446 602)	(536 206)	(646 209)
Financing Activities					
-Interest paid	(44 352)	(33 342)	(31 369)	(46 837)	(14 848)
-Dividends	0	(10 548)	(36 660)	(61 175)	(116 811)
-DDebt	(248 036)	(44 454)	348 466	(720 647)	(17 488)
Other financing activities	188 287	353 375	410 763	477 751	555 984
Cash flow from financing activities	(104 101)	265 031	691 201	(350 908)	406 838
Change in Cash	(244 832)	67 787	463 799	(606 467)	112 107
Beginning	320 851	76 019	143 806	607 605	1 138
End	76 019	143 806	607 605	1 138	113 245

Appendix 6: Key Financial Ratios

	2016	2017	2018	2019	2020	2021F	2022F	2023F	2024F	2025F
Efficiency Ratios										
Asset Turnover (x)	0,55	0,63	0,63	0,39	0,12	0,18	0,21	0,24	0,32	0,37
Fixed Assets Turnover (x)	0,74	0,84	0,87	0,90	0,29	0,41	0,55	0,72	0,93	1,17
Accounts Receivables Turnover (x)	9,90	11,66	15,13	16,04	17,91	17,38	15,31	15,32	15,32	15,33
Collection Period (days)	36,85	31,30	24,12	22,76	20,38	21,00	23,84	23,83	23,82	23,81
Inventory Turnover (x)	146,7	157,6	154,6	153,6	67,4	153,1	153,1	153,1	153,1	153,1
Days in Inventory (days)	2,49	2,32	2,36	2,38	5,42	2,38	2,38	2,38	2,38	2,38
Payables Turnover (x)	-	-	-	6,7	2,4	4,9	7,4	7,4	7,5	7,5
Payables Period (days)	-	-	-	54,51	151,81	74,83	49,03	49,01	48,98	48,96
Cash Cycle (days)	39,34	33,62	26,48	-29,38	-126,01	-51,44	-22,80	-22,79	-22,78	-22,77
Solvency Ratios										
Long and short-term Debt Ratio (%)	56,00%	53,39%	41,32%	70,96%	81,56%	81,45%	82,73%	84,94%	83,73%	84,30%
Long-term Debt Ratio (%)	41,86%	29,46%	26,99%	57,01%	69,55%	70,22%	71,05%	66,61%	69,40%	69,23%
Debt to Equity Ratio (x)	1,27	1,15	0,70	2,44	4,42	4,39	4,79	5,64	5,15	5,37
Equity Multiplier (x)	2,27	2,15	1,70	3,44	5,42	5,39	5,79	6,64	6,15	6,37
Debt Ratio	0,56	0,53	0,41	0,71	0,82	0,81	0,83	0,85	0,84	0,84
Interest Coverage Ratio (x)	-	3,51	7,73	13,79	-13,50	0,75	2,51	4,65	4,81	22,03
Liquidity Ratio										
Current Ratio (x)	1,10	0,65	1,33	0,85	0,84	0,37	0,50	0,77	0,25	0,40
Quick Ratio (x)	1,07	0,64	1,31	0,83	0,82	0,36	0,49	0,76	0,24	0,38
Cash Ratio (x)	0,37	0,14	0,72	0,47	0,62	0,16	0,27	0,62	0,00	0,13
Profitability Ratio										
EBITDA Margin (%)	15,24%	18,01%	21,99%	33,48%	-14,13%	-14,31%	-5,85%	0,03%	4,14%	7,00%
EBIT Margin (%)	7,36%	10,05%	14,78%	16,09%	-70,55%	4,57%	8,68%	11,53%	13,50%	14,87%
Net Profit Margin (%)	2,52%	2,55%	7,75%	5,44%	-82,14%	-3,45%	1,85%	4,88%	6,19%	8,96%
ROA (%)	1,39%	1,60%	2,00%	2,12%	-10,17%	-0,61%	0,39%	1,16%	1,98%	3,33%
ROIC (%)										
NOPT	87	84	141	194	298	26	65	115	177	258
Invested Capital	451	053	782	173	810	440	988	314	929	460
ROCE (%)	4,72%	8,26%	10,86%	7,27%	-9,93%	0,90%	2,09%	3,34%	5,05%	6,52%
ROE (%) - DuPont Approach	3,15%	3,43%	8,32%	7,28%	-55,15%	-3,27%	2,28%	7,67%	12,17%	21,23%
NI / S (%)	2,52%	2,55%	7,75%	5,44%	-82,14%	-3,45%	1,85%	4,88%	6,19%	8,96%
S / A (%)	55,11%	62,55%	62,95%	38,89%	12,38%	17,57%	21,29%	23,67%	32,01%	37,21%
A / E (%)	227,3%	214,6%	170,4%	344,3%	542,2%	539,0%	579,0%	664,1%	614,8%	637,1%

Appendix 7: Forecasting Assumption Statement of Financial Position

	Unit	2021F	2022F	2023F	2024F	2025F	Assumption
Goodwill	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value.
Intangibles	Value	112 350	101 210	94 542	92 404	95 114	See CAPEX appendix
Investment Property	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value.
PP&E	Value	1 577 467	1 559 114	1 565 396	1 602 437	1 678 482	See CAPEX appendix
Right-of-use assets	Change YoY	9,14%	15,72%	15,79%	15,86%	15,93%	Grow w/ revenues
Investments accounted for using the equity method	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value
Non-current financial investments	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value
Deferred tax assets	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value.
Inventories	Value	4 782	6 285	8 270	10 893	14 364	Historical average of Revenues/Inventories
Trade Receivables	%	4,76%	4,19%	4,20%	4,20%	4,20%	Revenues*(Avg Trade Receivables days/365)
Tax Receivables	Value	11 817	15 532	20 437	26 920	35 498	Historical average of Tax receivables/revenues
Other non-trade debtors	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value.
Accounts receivable from related entities	Change YoY	-1,69%	31,44%	31,58%	31,72%	31,86%	Average accounts receivables/Revenues * 365
Other current assets	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value.
Share capital	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value.
Reserves & Retained Earnings	Change YoY	-19,75%	7,05%	22,90%	31,09%	45,29%	R&Ret = R&Ret-1 + NI t - Divt
Conversion differences	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Assumed to be equal to FY20
Non-controlling interests	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value.
Debt instruments and other marketable securities	Value	352 533	353 947	355 535	-	-	See Debt appendix
Bank borrowings	Value	369 610	342 126	332 678	320 992	308 512	See Debt appendix
Leasing liabilities	Change YoY	9,14%	15,72%	15,79%	15,86%	15,93%	Grow w/ revenues
Other financial liabilities	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value
Other non-current liabilities	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value
Provisions for contingencies and charges	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value
Deferred tax liabilities	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value
Debt instruments and other marketable securities	Value	1 894	1 720	355 535	-	-	See Debt appendix
Bank borrowings	Value	26 070	7 860	10 371	12 480	7 472	See Debt appendix
Leasing liabilities	Change YoY	9,14%	15,72%	15,79%	15,86%	15,93%	Grow w/ revenues
Other financial liabilities	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value
Trade and other payables	%	1,34%	2,04%	2,04%	2,04%	2,04%	Average trade payables/revenues *365
Accounts payable from related entities	Change YoY	-41,6%	5,0%	31,4%	31,6%	31,7%	Average Accounts payables/revenues * 365
Tax payables	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value
Provisions for contingencies and charges	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value
Other current liabilities	Change YoY	0,00%	0,00%	0,00%	0,00%	0,00%	Equal to FY20 nominal value

Appendix 8: Forecasting Assumption Income Statement

	Unit	2021F	2022F	2023F	2024F	2025F	Assumption
Revenues	Value	732 195	962 387	1 266 310	1 668 002	2 199 467	See Revenues appendix
Other operating income	Value	8 131,40	8 420,73	8 720,37	9 030,66	9 352,00	See Revenues appendix
Net gains on disposal of non-current assets	Value	0	0	0	0	0	Hard to predict
Procurements	% Total Revenues	4,68%	4,68%	4,68%	4,68%	4,68%	Historical average as % of Revenues
Staff Costs	% Total Revenues	27,2%	27,2%	27,2%	27,2%	27,2%	Historical average as % of Revenues
Depreciation and Amortisation charges	Value	117 160	112 189	109 199	108 426	110 242	See CAPEX and D&A appendix
Net Profit/(Losses) from asset impairment	Value	0	0	0	0	0	Hard to predict
Other operating expenses	% Total Revenues	48,66%	48,66%	48,66%	48,66%	48,66%	Historical average as % of Revenues
Gains on financial assets and liabilities and other	Value	(222)	(222)	(222)	(222)	(222)	Equal to FY20 nominal value
Profit (loss) from companies accounted for using the equity method	% Total Revenues	-0,01%	-0,01%	-0,01%	-0,01%	-0,01%	Historical average 2016YE-2019YE.
Financial Income	% Total Revenues	0,273%	0,273%	0,273%	0,273%	0,273%	Historical average as % of Revenues
Change in fair value of financial instruments	Value	0	0	0	0	0	Hard to predict
Financial expenses	% Total Revenues	3,12%	3,12%	3,12%	3,12%	3,12%	Historical average as % of Revenues
Results from exposure to hyperinflation	Value	0	0	0	0	0	Inflation was considered to remain stable
Net exchange differences (Income/(Expense))	Value	0	0	0	0	0	Exchange differences were considered to remain stable
Impairment of financial investments	Value	0	0	0	0	0	Hard to predict

Appendix 9: Forecasting Assumption Revenues

Number of Hotel Rooms	2021F	2022F	2023F	2024F	2025F
Benelux	11 527	12 062	12 622	13 208	13 822
Germany	10 443	10 461	10 479	10 497	10 515
Italy	8 630	8 768	8 908	9 050	9 194
Latin Americas	10 280	10 280	10 280	10 280	10 280
Spain	15 250	15 250	15 250	15 250	15 250
Rest of Europe and others	3 085	3 119	3 153	3 188	3 222
Total	59 215	59 940	60 692	61 472	62 283

RevPar	2021F	2022F	2023F	2024F	2025F
Benelux	28,19 €	36,96 €	48,46 €	63,53 €	83,30 €
Germany	27,44 €	34,38 €	43,07 €	53,96 €	67,60 €
Italy	28,26 €	37,48 €	49,72 €	65,96 €	87,50 €
Latin America	13,79 €	18,46 €	24,72 €	33,09 €	44,30 €
Spain	28,54 €	36,68 €	47,15 €	60,60 €	77,90 €
Rest of Europe and others	26,49 €	34,22 €	44,21 €	57,12 €	73,80 €

Revenues by Hotel Occupancy	2021F	2022F	2023F	2024F	2025F
Benelux	118 596 932	162 716 309	223 248 584	306 299 537	420 246 369
Germany	104 582 349	131 251 340	164 721 047	206 725 688	259 441 709
Italy	89 008 159	119 956 501	161 665 652	217 877 171	293 633 563
Latin America	51 741 201	69 270 736	92 739 149	124 158 485	166 222 460
Spain	158 837 330	204 168 847	262 437 790	337 336 449	433 610 875
Rest of Europe and others	29 826 905	38 956 966	50 881 753	66 456 736	86 799 244
Total Revenues by Hotel Occupancy	552 592 877	726 320 699	955 693 975	1 258 854 066	1 659 954 220

Other segments of revenues	2021F	2022F	2023F	2024F	2025F
Catering	121 262	159 385	209 719	276 245	364 263
Meeting rooms and others	36 144	47 507	62 510	82 339	108 574
Rentals and other services	22 196	29 174	38 387	50 564	66 675
Total revenues by other segments	179 601 774	236 066 174	310 616 261	409 148 277	539 512 425

Revenues (thousand euros)	2021F	2022F	2023F	2024F	2025F
Total	732 195	962 387	1 266 310	1 668 002	2 199 467
Δ		31,44%	31,58%	31,72%	31,86%

Appendix 10: Forecasting Assumption CAPEX and D&A

Thousands €	2021F	2022F	2023F	2024F	2025F
Revenues	732 195	962 387	1 266 310	1 668 002	2 199 467
CAPEX	62 916	82 696	108 812	143 329	188 997
Average historical CAPEX/Revenues	8,59%				
D&A	117 160	112 189	109 199	108 426	110 242
CAPEX PP&E	56 742	74 581	98 134	129 264	170 450
CAPEX Intangibles	6 174	8 115	10 678	14 065	18 547
PP&E	1 577 467	1 559 114	1 565 396	1 602 437	1 678 482
Depreciations	95 200	92 934	91 853	92 223	94 405
Avg Historical Depreciation/PP&E	5,89%				
Intangibles	112 350	101 210	94 542	92 404	95 114
Amortizations	21 961	19 255	17 346	16 203	15 837
Avg Historical Amortization/Intangible	17,14%				

Appendix 11: Debt schedule

	2021		2022		2023		2024		2025	
	Long-Term	Short-Term	Long-Term	Short-Term	Long-Term	Short-Term	Long-Term	Short-Term	Long-Term	Short-Term
Guaranteed senior bonds maturing in 2023	356 850,00	-	356 850,00	-	356 850,00	-	-	-	-	-
Borrowing Costs	-	3 308,00	-	3 308,00	-	356 850,00	-	-	-	-
Arrangement Expenses	-	-	-	-	-	-	-	-	-	-
Effect of renegotiation of debt IFRS 9	- 4 317,00	- 1 414,00	- 2 903,00	- 1 588,00	- 1 315,00	- 1 315,00	-	-	-	-
Debt Instruments and other marketable securities	352 533,00	1 894,00	353 947,00	1 720,00	355 535,00	355 535,00	-	-	-	-
Guaranteed syndicated credit line	-	-	-	-	-	-	-	-	-	-
Unsecured loans	329 919,00	9 177,00	320 742,00	11 572,00	309 170,00	11 572,00	297 598,00	11 572,00	286 026,00	4 194,00
Subordinated loans	-	-	-	-	-	-	-	-	-	-
Mortgages	26 252,00	2 398,00	23 854,00	2 002,00	21 852,00	2 072,00	19 780,00	1 008,00	18 772,00	1 308,00
Credit lines	17 000,00	12 000,00	5 000,00	-	5 000,00	1 000,00	4 000,00	-	4 000,00	2 000,00
Arrangement expenses	- 10 917,00	- 3 447,00	- 7 470,00	- 4 126,00	- 3 344,00	- 2 958,00	386,00	100,00	286,00	30,00
Borrowing costs	7 356,00	7 356,00	-	-	-	-	-	-	-	-
Bank Borrowings	369 610,00	26 070,00	342 126,00	7 860,00	332 678,00	10 371,00	320 992,00	12 480,00	308 512,00	7 472,00

Source: NHH annual report 2020

Debt	2021F	2022F	2023F	2024F	2025F
Long Term Borrowings	723 047	696 977	689 117	321 896	309 416
Debt instruments and other marketable securities	352 533	353 947	355 535	0	0
Bank borrowings	369 610	342 126	332 678	320 992	308 512
Other financial liabilities	904	904	904	904	904
Short Term Borrowings	28 069	9 685	366 011	12 585	7 577
Debt instruments and other marketable securities	1 894	1 720	355 535	0	0
Bank borrowings	26 070	7 860	10 371	12 480	7 472
Other financial liabilities	105	105	105	105	105
Total Debt	751 116	706 662	1 055 128	334 481	316 993
Δ Debt	(248 036)	(44 454)	348 466	(720 647)	(17 488)

Appendix 12: Market – Based Valuation

	P/B	EV/EBITDA	EV/SALES
PPHE HOTEL GROUP LTD	2,20	15,10	4,17
HILTON GRAND VACATIONS INC	6,47	14,90	3,55
MELIA HOTELS INTERNATIONAL	5,22	8,47	2,82
SCANDIC HOTELS GROUP AB	2,69	9,36	2,69
WHITBREAD	1,18	18,88	1,48
MARRIOTT VACATIONS WORLD	2,25	9,41	1,88
Average	3,34	12,69	2,77
Median	2,69	9,41	2,82

EV / EBITDA	
NHH EBITDA	195 718
Peers Average	12,69
EV	2 482 896,03
Net Debt	(562 856,3)
Equity Value	1 920 040
# Shares Outst.	392 180
Share Price	4,90 €
Current Price	3,80 €
Upside Potential	28,84%

EV/ SALES	
NHH Sales	962 387
Peers average	2,77
EV	2 661 000
Net Debt	(562 856,3)
Equity Value	2 098 143
# Shares Outst.	392 180
Share Price	5,35 €
Current Price	3,80 €
Upside Potential	40,79%

P/B	
NH BV/sh	2,23
Peers Average	3,34
Share Price	7,44 €
Current Price	3,80 €
Upside Potential	96%

Appendix 13: WACC and Terminal growth rate

	MRP	CRP
Spain	6,40%	1,70%
Germany	5,80%	0,00%
Italy	6,00%	2,13%
Benelux	5,83%	0,197%
Belgium	5,90%	0,59%
Netherlands	5,80%	0,00%
Luxembourg	5,80%	0,00%
Rest of Europe & others	6,52%	1,38%
Austria	5,90%	0,38%
Czech Republic	5,80%	0,59%
Denmark	5,80%	0,00%
France	5,80%	0,48%
Hungary	7,10%	2,13%
Ireland	5,90%	0,82%
Poland	5,50%	0,82%
Portugal	6,80%	2,13%
Romania	7,00%	2,13%
Slovakia	5,90%	0,82%
Switzerland	5,20%	0,00%
United Kingdom	5,60%	0,59%
USA	5,50%	0,00%
Qatar	6,00%	0,59%
Tunisia	9,40%	5,33%
Egytp	11,10%	5,33%
Latin America	9,19%	5,09%
Argentina	17,40%	11,62%
Brazil	7,70%	2,91%
Chile	6,30%	0,68%
Colombia	6,90%	3,84%
Ecuador	12,50%	9,68%
Mexico	6,40%	1,55%
Uruguay	7,10%	1,68%
Total	6,25%	1,23%

Beta Estimation	From Bloomberg
Raw Beta (Regression vs. IBEX Index)	1,499
Blume Adjusted Beta	1,3346

Risk Free Rate Estimation		
Government Bond Yields	2021F	Source
Germany Bund 10 Year Yield	-0,36%	Bloomberg, September 2021
Germany Bund 30 Year Yield	0,14%	Bloomberg, September 2021
Government Bond Yields - 10y Avg		
German Bund 10 Year Yield	0,73%	Bloomberg Monthly Avg

- **MRP** and **CRP** were calculated for each geographic segment of NHH as an average of a sample of countries. The values for each country were retrieved from *Fernandez, Martínez & Acín, 2021*. In addition, another average was performed using the values of each segment, taking into consideration the weights of each segment on total revenues.

	2021	2022	2023	2024	2025	
Net Income	- 25 270	17 789	61 827	103 171	196 999	
Dividends	-	10 548	36 660	61 175	116 811	
Revenue	732 195	962 387	1 266 310	1 668 002	2 199 467	
Total Assets	4 168 146	4 519 630	5 350 663	5 211 402	5 911 639	
Equity	1 163 064	1 173 954	1 211 805	1 274 966	1 395 570	
NI-D/NI	1,00	0,4071	0,4071	0,4071	0,4071	
ROE	-2,17%	1,52%	5,10%	8,09%	14,12%	
NI/S	-3,45%	1,85%	4,88%	6,19%	8,96%	
S/A	17,57%	21,29%	23,67%	32,01%	37,21%	
A/E	358,38%	384,99%	441,55%	408,75%	423,60%	
g	-2,17%	0,62%	2,08%	3,29%	5,75%	1,91%

	2021F	2022F	2023F	2024F	2025F	TV
P/B	1,50	1,50	1,50	1,50	1,50	1,50
Equity BV	773 314	780 555	805 721	847 717	927 905	945 648
Equity MV	1 163 064	1 173 954	1 211 805	1 274 966	1 395 570	1 422 255
Debt	751 116	706 662	1 055 128	334 481	316 993	323 054
E/V	60,76%	62,42%	53,46%	79,22%	81,49%	81,49%
D/V	39,24%	37,58%	46,54%	20,78%	18,51%	18,51%
D/E	64,58%	60,20%	87,07%	26,23%	22,71%	22,71%
Beta u	0,90	0,90	0,90	0,90	0,90	0,90
Beta L	1,3346	1,3051	1,4863	1,0761	1,0523	1,0523
ke	10,30%	10,12%	11,25%	8,69%	8,54%	8,54%
kd	5,47%	5,47%	5,47%	5,47%	5,47%	5,47%
Interest Coverage ratio	0,75	2,51	4,65	4,81	22,03	
Spread	13,09%	4,05%	1,33%	1,33%	0,82%	
kd @ spread	15,05%	6,01%	3,29%	3,29%	2,78%	2,83%
Kd: Interest expense/debt	5,90%	4,72%	2,97%	14,00%	4,68%	4,68%
Tax Rate	25,00%	25,00%	25,00%	25,00%	25,00%	25,00%
WACC	10,69%	8,01%	7,16%	7,39%	7,34%	7,35%

Appendix 14: Absolute Valuation Methods

Free Cash Flow to the Firm

	2021F	2022F	2023F	2024F	2025F	TV
EBIT	12 364	55 859	109 630	177 433	264 213	269 265
Corporate tax rate	25%	25%	25%	25%	25%	25%
(+) EBIT*(1-t)	9 273	41 894	82 223	133 075	198 160	201 949
(+) D&A	117 160	112 189	109 199	108 426	110 242	112350
(-) CAPEX	62 916	82 696	108 812	143 329	188 997	192 611
(-) var NWC	59 220	(12 730)	(16 807)	(22 213)	(29 390)	(29 951,7)
Free Cash Flow to the Firm	4 297	84 117	99 416	120 385	148 795	151 640
PV FCFF @ WACC	4 297,38	77 897,35	86 610,93	97 265,99	112 181,86	2 805 920,64

NPV @ WACC	378 253,50
Terminal Value	2 805 920,64
PV	2 115 489,71
Enterprise Value	2 493 743,21
(+) Cash	143 805,68
(-) Debt	706 662,00
Equity Value	1 930 886,89
Shares Outstanding	392 180
Equity Value /sh	4,88 €
Current Price	3,80 €
Upside Potential	28%
Annualized potential	21%

Free Cash Flow to Equity

	2021F	2022F	2023F	2024F	2025F	TV
Free Cash Flow to the Firm	4 297	84 117	99 416	120 385	148 795	151 640
interest expenses*(1-t)	33 264	25 006	23 526	35 128	11 136	11 349
var Debt	(248 036)	(44 454)	348 466	(720 647)	(17 488)	(17 822)
FCFE	(277 003)	14 656	424 356	(635 390)	120 171	122 469
PV FCFE @ ke	-277 003	13 309	342 852	-494 883	86 588	1 848 084

Equity Method	
NPV @ ke	- 329 136,67
Terminal Value	1 848 083,97
PV	1 331 618,04
Equity Value	1 002 481,38
Shares Outstanding	392 180
Equity Value /sh	2,56 €
Upside Potential	-33%

Adjusted Present Value

	2021F	2022F	2023F	2024F	2025F	TV
Free Cash Flow to the Firm	4 297,38	84 116,65	99 415,97	120 385,20	148 794,58	151 639,72
PV of FCFE @ ku	4 297,38	77 473,57	85 954,66	96 729,00	111 531,09	2 727 098,13
Pre-tax WACC (ku)	12,17%	8,57%	7,55%	7,57%	7,47%	7,47%
kd	15,05%	6,01%	3,29%	3,29%	2,78%	2,78%
Tax Rate	25%	25%	25%	25%	25%	25%
Interest Expenses	(44 352)	(33 342)	(31 369)	(46 837)	(14 848)	(15 131)
Interest Tax shield	11 088,05	8 335,48	7 842,16	11 709,25	3 711,89	3 782,87
PV of Tax Shield	11 088,05	7 863,06	7 350,80	10 626,19	3 326,54	68 031,32

APV Method	
NPV @ ku	375 985,69
Terminal Value	2 727 098,13
PV of terminal value	2 044 135,23
Unlevered Intrinsic EV	2 420 120,92
PV of Tax shield	40 254,65
PV of TV Tax shield	60 968,58
Intrinsic EV	2 521 344,15
(+) Cash	143 805,68
(-) Debt	706 662,00
Equity Value	1 958 487,83
Shares Outstanding	392 180
Equity Value /sh	4,99 €
Upside potential	31%

Dividend Discount Model

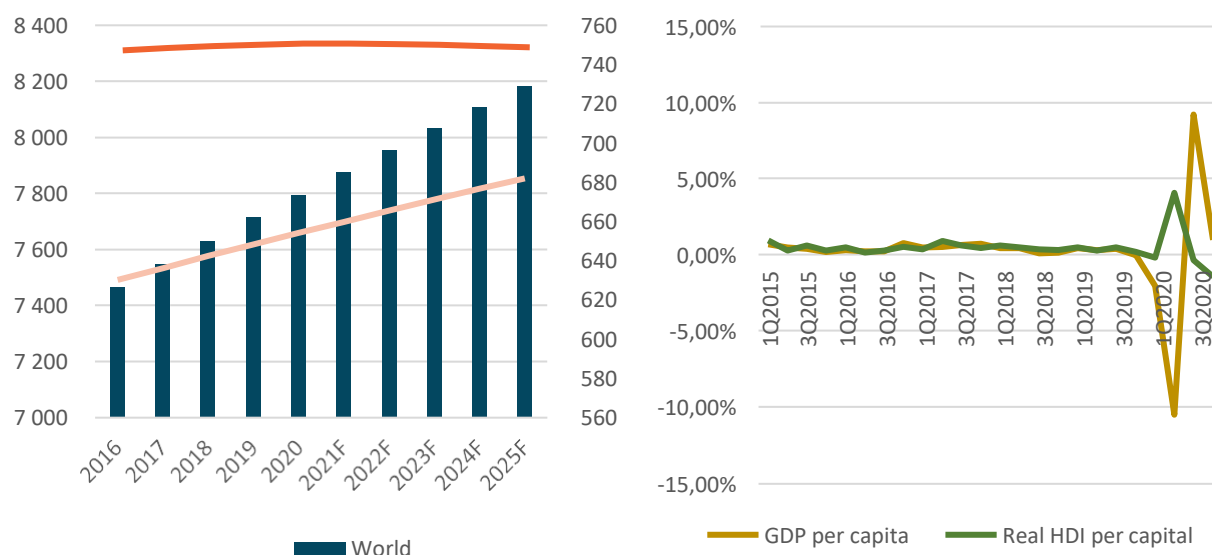
	2020	2021	2022	2023	2024	2025	TV
Dividend per share	- €	- €	0,03 €	0,09 €	0,16 €	0,30 €	
Shares Outstanding	392 180	392 180	392 180	392 180	392 180	392 180	
Dividends	- €	- €	10 547,84 €	36 660,12 €	61 175,23 €	116 810,56 €	
Payout Ratio			59,30%	59,30%	59,30%	59,30%	
EPS							
Shareholders Cashflow	- €	- €	10 547,84 €	36 660,12 €	61 175,23 €	116 810,56 €	
Ke	10,92%	10,30%	10,12%	11,25%	8,69%	8,54%	8,54%
PV DPS			0,02 €	0,08 €	0,13 €	0,22 €	

DDM	
gL	1,91%
gs	3,60%
H	2,50
TV	4,77 €
PV DPS	0,46 €
PV TV	4,44 €
Price Target	4,90 €
Price 11 Aug, 2021	3,80 €
Upside Potential	28,96%

Appendix 15: Remuneration Mix

Source: NHH annual report 2020

Appendix 16: World Population growth & GDP per capita and HDI per capita



Source: IMF 2021

Appendix 17: NHH's Peer Group

Company	SARD	Ticker	Rank	Mkt Cap (EUR)	Rank	ROE	Rank	D/E	Rank	EBIT Margin	Peer
NH Hotel Group SA	0	NHH SM	16	1 472 636 812	27	-44	7	408	26	-66	
PPHE Hotel Group LTD	20	PPH LN	24	715 631 170	17	-18	8	327	27	-74	✓
Hilton Grand Vacations	25	HGV US	9	4 485 114 586	25	-43	6	533	11	-4	✓
Melia Hotels International	25	MEL SM	17	1 333 860 800	7	-6	5	569	28	-82	✓
Scandic hotels Group AB	27	SHOT SS	25	633 946 488	22	-24	1	4 581	19	-28	✓
Whitbread PLC	32	WTB LN	4	7 588 283 591	19	-20	15	118	30	-106	✓
Marriott Vacations World	33	VAC US	8	5 411 712 587	25	-43	12	166	8	1	✓

References

- 2021 Top Hospitality Industry Trends. [online] Available at <<https://hospitalityinsights.ehl.edu/hospitality-industry-trends>>
- 4Q20 Investor Update | Hilton [online] Available at May 15, 2021 <[https://s27.q4cdn.com/757306400/files/doc_presentations/FINAL-HGV-Q420-Slides-\(3\).pdf](https://s27.q4cdn.com/757306400/files/doc_presentations/FINAL-HGV-Q420-Slides-(3).pdf)>
- Accor Annual Reports. Available at: <https://group.accor.com/en/investors> Accessed on 20 February 2021
- Accor development strategy. (n.d.). Retrieved October 31, 2020, from <https://group.accor.com/en/hotel-development/accor-choice/our-development-strategy>
- Airoldi, D. (2020, May 21). CBRE: U.S. Hotel Occupancy Won't Fully Recover Until Late 2022. Retrieved October 30, 2020, from <https://www.businesstravelnews.com/Procurement/CBRE-US-Hotel-Occupancy-Wont-Fully-Recover-Until-Late-2022>
- A Look at Total Room Inventory Vs. Standard Occupancy. [online] Available at <<https://www.costar.com/article/1170257190>>
- Annual Report. (n.d.). Retrieved August 02, 2021, from <https://www.ihgplc.com/en/investors/annual-report>
- Argentina Inflation Slows for Third Month to Below Forecast | Bloomberg. [online] Available at <<https://www.bloomberg.com/news/articles/2021-07-15/argentine-inflation-slows-for-third-month-to-below-forecast>>
- Bader, E. E. (2005). Sustainable hotel business practices. *Journal of Retail & Leisure Property*, 5(1), 70-77.
- Betas by Sector (US) [online] Available at < https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/Betas.html>
- Consolidated Management report and annual accounts 2019. (n.d.). Retrieved October 29, 2020, from https://www.meliahotelsinternational.com/en/shareholdersAndInvestors/IntegratedRepDocs/mhi_ccaa_conso_19_en.pdf
- Cheng, D. (2013). Analyze the Hotel Industry in Porter Five Competitive Forces. *The Journal of Global Business Management*, 9(October), 3rd ser., 52-57.
- Choice Hotels Announces Commitment to Clean Initiative. (2020, May 04). Retrieved October 31,
- Choice Hotels Announces Corporate Travel Focus Following Years Of Strategic Investments. (n.d.). Retrieved November 01, 2020, from <http://media.choicehotels.com/2019-06-06-Choice-Hotels-Announces-Corporate-Travel-Focus-Following-Years-Of-Strategic-Investments>
- Choice Hotels Announces Strategic Relationship With AMResorts, One of The Fastest-Growing
- Luxury Resort Companies. (n.d.). Retrieved October 30, 2020, from
- <http://media.choicehotels.com/2019-05-16-Choice-Hotels-Announces-Strategic-Relationship-With-AMResorts-One-of-The-Fastest-Growing-Luxury-Resort-Companies>
- Choice Hotels International - SEC Filings. (n.d.). Retrieved November 02, 2020, from <http://investor.choicehotels.com/sec-filings>
- Challenges turned into Opportunities. 2020 Annual Report. [online] Available at <https://cms.posadas.com/documents/3110971/3167666/Annual_Report_Posadas_2020.pdf?_ga=2.6855602.1271761015.1633000421-1040653099.1633000421>
- Corporate information | NH Hotel Group. [online] Available at < <https://www.nh-hotels.com/corporate/> >
- Competitive analysis of the hotel industry in Konya by Using Porter's Five Forces Model. (n.d.). Retrieved September 14, 2021, from https://journals.euser.org/files/articles/ejes_sep_dec_15/Ramazan.pdf
- Corporate profits after tax (without iva and CCADJ). (2021, September 30). Retrieved february 14, 2021, from <https://fred.stlouisfed.org/series/CP>

COVID-19: Hotel Industry Impact and Recovery. [online] Available at <<https://str.com/pt-br/data-insights-blog/coronavirus-hotel-industry-data-news>>

COVID-19 Webinar Summary: 5 Key Points on Asia Pacific Hotel Performance, 29 January – STR. [online] Available at <<https://www.hotelnewsresource.com/article114303.html>>[online]

Deloitte. (n.d.). 2019 Travel and Hospitality Outlook. Retrieved October 22, 2020, from 2019 Travel and Hospitality Outlook

E. (n.d.). 2020 Top Hospitality Industry Trends. Retrieved October 22, 2020, from <https://hospitalityinsights.ehl.edu/2020-top-hospitality-trends>

E. (n.d.). Hotel chains want to be more like Airbnb. Retrieved October 22, 2020, from <https://hospitalityinsights.ehl.edu/hotel-chains-airbnb>

Ergocun, G. (2020, July 28). EU: Household consumption drops sharply in Q1. Retrieved May 01, 2021, from <https://www.aa.com.tr/en/economy/eu-household-consumption-drops-sharply-in-q1/1925028>

European Central Bank [Online Data] Available at: <https://www.ecb.europa.eu/stats/html/index.en.html> Accessed on 19 June 2021

European tourism - ETC corporate. [online] Available at < https://etc-corporate.org/uploads/2021/05/ETC-Quarterly-Report-Q1-2021_Public-1.pdf.>

European Tourism – Trends & Prospects, Quarterly Report 2021 | Oxford Economics. [online] Available at <<https://www.oxfordeconomics.com/recent-releases/European-Tourism-2021-Trends-Prospects-Q1-2021>>

Eurostat [Online Data] Available at: https://ec.europa.eu/eurostat/statisticsexplained/index.php/Tourism_statistics Accessed on 15 April 2021

Extended Stay America - Annual Reports. (n.d.). Retrieved November 02, 2020, from <https://www.aboutstay.com/stock-information/annual-reports>

Federal Reserve Economic Data [Online Data] Available at: <https://fred.stlouisfed.org> Accessed on 18 March 2021

Fernandez, P., Bañuls, S., & Fernandez Acin, P. (2021, June 16). *Survey: Market risk premium and risk-free rate used for 88 countries in 2021*. SSRN.

Financial targets: Scandic Hotels Group AB. [online] Available at <<https://www.ihgplc.com/-/media/FBBD6EBDD4D14EAD88A08E62F7911E74.ashx>>

Forecast Global Arrivals [Online Data] Available at: <https://www.statista.com/statistics/247264/total-revenue-of-the-global-hotel-industry/> Accessed on 2 September 2021

FTSE Russell. (n.d.). Retrieved November 02, 2020, from <https://www.ftserussell.com/search?text=intercontinental>

Gaggioli, A. (2018, October 09). How the Sharing Economy Influences Hospitality. Retrieved October 21, 2020, from <https://www.cloudbeds.com/articles/how-the-sharing-economy-influences-hospitality/>

Growth of tourism - Tourism - KS3 Geography Revision - BBC Bitesize. (n.d.). Retrieved October 28, 2020, from <https://www.bbc.co.uk/bitesize/guides/zqk7hyc/revision/1>

Hannon, P. (2018, July 31). Eurozone Economy Slows Further as Exports Sputter. Retrieved November 02, 2020, from <https://www.wsj.com/articles/eurozone-economy-slows-further-as-exports-sputter-1533028770>

Hilton Group Annual Reports and Form 20-F Available at: <https://ir.hilton.com/>

Hospitality Industry: All Your Questions Answered. (n.d.). Retrieved November 02, 2020, from <https://hospitalityinsights.ehl.edu/hospitality-and-tourism-industry>

Hospitality Industry: The No. 1 Hospitality Information Guide! (2020, June 20). Retrieved October 27, 2020, from <https://www.revfine.com/hospitality-industry/>

Hospitality Industry Trends Available at: <https://hospitalityinsights.ehl.edu/sustainable-tourism-trends>

Hospitality On. (2019, March 08). European Hotel Ranking 2019: Which groups are now in the top 10? Retrieved October 20, 2020, from <https://hospitality-on.com/en/statistiques-tendances/european-hotel-ranking-2019-which-groups-are-now-top-10>

Hotel industry: Revenue per available room in Europe 2019. (2020, April 01). Retrieved October 19, 2020, from <https://www.statista.com/statistics/587900/revenue-per-available-room-revpar-of-hotels-europe/>

Hotel Insights: A quarterly digest of key trends in the hospitality sector. [online] Available at < https://www.reitas.sg/wp-content/uploads/2021/03/Colliers-APAC-Hotel-Insights-Q1-2021_updated-0225.pdf>

Hotels - worldwide. (n.d.). Retrieved February 27, 2021, from <https://www.statista.com/outlook/267/100/hotels/worldwide>

Hotels - South America | Statista Market Forecast. [online] Available at < <https://www.statista.com/outlook/mmo/travel-tourism/hotels/south-america>>

IHG Announces Strategic Partnership With Asset World Corporation (AWC). (2020, January 15). Retrieved October 24, 2020, from <https://www.hospitalitynet.org/news/4096533.html>

IHG Annual Reports and Form 20-F Available at: <https://www.ihgplc.com/en/investors> Accessed on 18 July 2021

International tourism trends in EU-28 member states - Current situation and forecast for 2020-2025-2030 | European Commission . [online] Available at https://ec.europa.eu/growth/content/international-tourism-trends-eu-28-member-states-current-situation-and-forecast-2020-2025-0_en

Impact of Covid-19 crisis on non-financial corporation and household accounts. (n.d.). Retrieved November 02, 2020, from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Impact_of_Covid-19_crisis_on_non-financial_corporation_and_household_accounts

International Monetary Fund. (n.d.). Retrieved November 02, 2020, from https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/WEO_WORLD/EURO/USA

Jelski, C. (2020, August 21). Hotels will be hurting into 2021, forecasts show. Retrieved October 27, 2020, from <https://www.travelweekly.com/Travel-News/Hotel-News/Hotels-will-be-hurting-into-2021-forecasts-show>

Karantzavelou, V. (2020, August 19). Annual hotel occupancy forecast to decline 29% over the next 12 months with \$75 billion in projected revenue losses. Retrieved October 23, 2020, from <https://www.traveldailynews.com/post/annual-hotel-occupancy-forecast-to-decline-29-over-the-next-12-months-with-75-billion-in-projected-revenue-losses>

Lock, S. (2020, October 05). RevPAR of the U.S. hotel industry 2019. Retrieved October 31, 2020, from <https://www.statista.com/statistics/200168/us-lodgings-average-revenue-per-available-room-outlook/>

Macro trends – Euro Dollar Exchange Rate [Online Data] Available at: <https://www.macrotrends.net/2548/euro-dollar-exchange-rate-historical-chart>

Magalhães, L. (2019, May 16). Melia Hotels no Top 10 das marcas hoteleiras. Retrieved October 21, 2020, from <https://opcaoturismo.pt/wp/melia-hotels-no-top-10-das-marcas-hoteleiras/>

Marriott Annual Reports and Form 20-F Available at: <https://marriott.gcs-web.com/>

Melián-Alzola, L., Fernández-Monroy, M., & Hidalgo-Peñate, M. (2020). Hotels in contexts of uncertainty: Measuring organisational resilience. *Tourism Management Perspectives*, 36, 100747

Meliá Hotels International. (n.d.). Retrieved November 02, 2020, from <https://www.flytap.com/pt-hk/miles-and-go/parceiros/melia>

Meliá Hotels International Annual Reports Available at: <https://www.meli-hotels-international.com/en/shareholders-investors/financial-information>

NH Hotel Group S.A. (NHH.MC) Stock Historical Prices & Data. | Finance Yahoo [online] Available at <https://finance.yahoo.com/quote/NHH.MC/history?p=NHH.MC>

Number of Hotels Worldwide | Statista. [online] Available at <https://www.statista.com/statistics/1092502/number-of-hotels-worldwide/>

Our response to Covid-19. (n.d.). Retrieved October 26, 2020, from <https://www.ihgplc.com/en/about-us/our-response-to-covid-19>

Our strategy. (n.d.). Retrieved October 29, 2020, from <https://www.ihgplc.com/en/about-us/our-strategy>

Pablo Fernandez,, Bañuls, S., & Acín, P. (2021). Survey: Market Risk Premium and Risk-Free Rate used for 88 countries in 2021.

PESTLE Analysis of the Hotel Industry. [online] Available at <https://www.marketingtutor.net/pestle-analysis-of-the-hotel-industry/>

Phil, Davis. Choose your peers with care . CFA Institute. (2017). [online] Available at <https://www.cfainstitute.org/en/research/financial-analysts-journal/2017/choose-your-peers-with-care>.

Real GDP Growth. (n.d.). Retrieved April/May, 2021, from https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/AFQ

Reguant, M. (n.d.). Do you know the bleisure hotels? Learn about this new trend. Retrieved October 22, 2020, from <https://www.amara-marketing.com/travel-blog/trends-bleisure-hotels>

Seasonality in tourism demand. (2019, May). Retrieved November 02, 2020, from https://ec.europa.eu/eurostat/statistics-explained/index.php/Seasonality_in_tourism_demand

Skills mismatches: EU businesses are losing millions, and will be losing even more! (2018, July 25). Retrieved November 02, 2020, from <https://www.eesc.europa.eu/en/news-media/press-releases/skills-mismatches-eu-businesses-are-losing-millions-and-will-be-losing-even-more>

Smit, S., Hirt, M., Buehler, K., Lund, S., Greenberg, E., & Govindarajan, A. (2020, March 23). Safeguarding our lives and our livelihoods: The imperative of our time. Retrieved November 02, 2020, from <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/safeguarding-our-lives-and-our-livelihoods-the-imperative-of-our-time>

Strategic progress in 2020 | Strategic Report. [online] Available at https://www.pphe.com/~media/Files/P/PPHE-Corp/documents/investors/PPHE_AR20_Strategy_AtAGlance.pdf

STR downgrades its 2021 forecast as Covid rages on. [online] Available at <[travelweekly.com/Travel-News/Hotel-News/STR-downgrades-its-2021-forecast-Covid](https://www.travelweekly.com/Travel-News/Hotel-News/STR-downgrades-its-2021-forecast-Covid)>

STR revisits January's forecast during Hotel Data Conference. [online] Available at <<https://www.hotelmanagement.net/operate/hotel-data-conference-str-revisits-january-s-forecast>>

The Recovery of Hotel Industry. [online] Available at <https://businessjournalism.org/2021/08/the-recovery-of-the-hotel-industry/>

The Impact of COVID-19 on the European Hotel Sector. [online] Available at <<https://www.hvs.com/article/8876-the-impact-of-covid-19-on-the-european-hotel-sector>>

The World Bank [Online Data] Available at: <https://data.worldbank.org/indicator/IS.AIR.PSGR?end=2018&start=2005>

Trading Economics [Online Data] Available at: <https://tradingeconomics.com/united-states/forecast>

Trivago Hotel Price Index. [online] Available at <<https://businessblog.trivago.com/trivago-hotel-price-index/>>

Outlook for the Hotel Industry | HVS. [online] Available at <https://www.hvs.com/StaticContent//Image/21WebinarLodging/HVS_Outlook-A_View_From_The_Top-January_2021.pdf>

United Nations – Department of Economic and Social Affairs [Online Data] Available at: <https://population.un.org/wpp/>

Wire, F. (2020, May 12). European Hotel Occupancy Rates Will Not Recover Until 2023. Retrieved November 01, 2020, from <https://www.fitchratings.com/research/corporate-finance/european-hotel-occupancy-rates-will-not-recover-until-2023-12-05-2020>

World population prospects - population division. (n.d.). Retrieved April 14, 2021, from <https://population.un.org/wpp/Download/Standard/Population/>

World Tourism Organization. (n.d.). Retrieved July 02, 2021, from <https://www.unwto.org/unwto-tourism-dashboard>

Yan, L. (2018, June 21). IHG to Open Over 300 Hotels in China to Meet Growing Demand for Business, Leisure Travel. Retrieved October 26, 2020, from <https://www.yicaiglobal.com/news/ihg-to-open-over-300-hotels-in-china-to-meet-growing-demand-for-business-leisure-travel>

Zhang, F., Xiao, Q., Law, R., & Lee, S. (2019). Mergers and acquisitions in the hotel industry: A comprehensive review. *International Journal of Hospitality Management*, 102418.

World Tourism Organization. [online] Available at <<https://www.unwto.org/taxonomy/term/347>>

Disclosures and Disclaimer

This report is published for educational purposes by Master students and does not constitute an offer or a solicitation of an offer to buy or sell any security, nor is it an investment recommendation as defined by Article 12° A of the *Código do Mercado de Valores Mobiliários (Portuguese Securities Market Code)*. The students are not registered with *Comissão de Mercado de Valores Mobiliários (CMVM)* as financial analysts, financial intermediaries or entities/persons offering any service of financial intermediation, to which Regulamento (Regulation) 3°/2010 of CMVM would be applicable. This report was prepared by a Master's student in Finance at ISEG – Lisbon School of Economics and Management, exclusively for the Master's Final Work. The opinions expressed and estimates contained herein reflect the personal views of the author about the subject company, for which he/she is sole responsible. Neither ISEG, nor its faculty accepts responsibility whatsoever for the content of this report or any consequences of its use. The report was supervised by Prof. Tiago Diogo, who revised the valuation methodologies and the financial model.

The information set forth herein has been obtained or derived from sources generally available to the public and believed by the author to be reliable, but the author does not make any representation or warranty, express or implied, as to its accuracy or completeness. The information is not intended to be used as the basis of any investment decisions by any person or entity.

Recommendation System

Level of Risk	SELL	REDUCE	HOLD/NEUTRAL	BUY	STRONG BUY
High Risk	0%≤	>0% & ≤10%	>10% & ≤20%	>20% & ≤45%	>45%
Medium Risk	-5%≤	>-5% & ≤5%	>5% & ≤15%	>15% & ≤30%	>30%
Low Risk	-10%≤	>-10% & ≤0%	>0% & ≤10%	>10% & ≤20%	>20%