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Quantifying the financial impact of COVID-19 on the largest global companies in the hotel industry

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Abstract: COVID-19 has affected every business worldwide, with the hotel industry being among the hardest hit. The aim of this paper is to examine the impact of the pandemic on the liquidity and profitability of the world's five largest hotel companies. The research is conducted through financial ratio analysis and comparative analysis based on available financial data from 2017 to 2022, covering the period before, during and "after" (the recovery period) the crisis. Research results imply that hotels have prioritized liquidity over profitability during the pandemic, with some indicators pointing to its devastating effects that generated a long and difficult recovery. The paper's conclusions can be useful for the examined hotel companies to control their costs and produce positive financial outcomes in the future. They can also be helpful to policymakers as a respectable delivery system which will guarantee that the support eventually gets to the businesses that need it most.

Keywords: COVID-19, hotel industry, liquidity, profitability
JEL classification: G01, I15, Z33

Kvantifikacija finansijskog uticaja COVID-19 na najveće svetske kompanije u hotelskoj industriji

Sažetak: COVID-19 je uticao na svako poslovanje širom sveta, a hotelska industrija je među najteže pogođenima. Cilj ovog rada je da ispita uticaj pandemije na likvidnost i profitabilnost pet najvećih svetskih hotelskih kompanija. Istraživanje je sprovedeno kroz analizu finansijskih koeficijenata i uporednu analizu dostupnih finansijskih podataka od 2017. do 2022. godine, čime je pokriven period pre, tokom i „posle" (period oporavka) krize. Rezultati istraživanja ukazuju na to da su hoteli tokom pandemije davali prioritet likvidnosti u odnosu na profitabilnost, dok neki pokazatelji ukazuju na njene razorne efekte koji su generisali dug i težak oporavak. Zaključci rada mogu biti korisni obuhvaćenim hotelskim kompanijama u kontroli troškova i postizanju pozitivnih finansijskih rezultata u budućnosti. Oni takođe mogu biti od pomoći kreatorima politike kao respektabilan sistem za procenu ugroženosti privrednih subjekata koji će garantovati da podrška na kraju stigne do kompanija kojima je najpotrebnija.

Ključne reči: COVID-19, hotelijerstvo, likvidnost, profitabilnost
JEL klasifikacija: G01, I15, Z33

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1. Introduction

The COVID-19 pandemic has triggered the largest health and socio-economic crisis in recent history. According to Statista (2020), the world's biggest virus outbreaks in the last 50 years by confirmed cases and deaths include: H1N1 in 2009 (762,630,000 infections and 284,500 deaths); Ebola in 1976 (33,577 infections and 13,562 deaths); and COVID-19 in January 2020 (11,871 infections and 259 deaths). This implies that already in January 2020, COVID-19 has become the third most prevalent virus outbreak in terms of the number of infections in the last five decades. At the time of submission of this paper (mid-April 2023), there have been reported to be more than 762 million confirmed cases of the virus and more than 6.89 million COVID-19 deaths worldwide (World Health Organization, 2023). Such figures support the United Nations's (2020) claim that the COVID-19 pandemic is deeply etched in humanity's dark history, bringing about major disease and death, and upsetting normal daily life.

In addition to the undoubted human tragedy in terms of the health crisis, COVID-19 has had a significant impact on the global economy, international trade and human mobility. The breadth and depth of the impact differed from country to country, but all economies of the world were greatly affected by this crisis. According to Statista (2023), global GDP fell by 3.4% during 2020; global goods trade volume fell by 11.6% in April 2020; while on March 16 of the same year, the *Dow Jones* stock market posted its biggest single-day loss ever, losing nearly 3,000 points, breaking its previous record of 2,300 points established just four days earlier.

Despite the fact that COVID-19 had a negative influence on overall economic trends, the impact was far from uniform across all sectors and industries. Some sectors and industries suffered much more damage than others. As governments around the world implemented measures to contain the spread of the virus, such as travel restrictions and lockdowns, the travel and tourism industry was heavily affected. A number of recent studies examining the COVID-19 disaster confirm that the travel and tourism industry is suffering more than other businesses primarily due to the challenge of adhering to social distancing standards (Im et al., 2021; Pagano et al., 2020). As a result, the hospitality sector has experienced significant disruption, job losses and billions of dollars in lost revenue.

According to the World Tourism Organization (2020b), there was a 44% drop in international tourist arrivals (overnight visitors) in the first four months of 2020 compared to the same time in 2019. It resulted in a loss of 180 million international arrivals, which equates to $195 billion in lost foreign tourism revenue. This confirms that the pandemic has had a huge destructive impact on tourism worldwide, but there are still some differences if we look at regions separately. Asia and the Pacific, the first region to be affected by COVID-19, experienced a 51% drop in arrivals in the first four months of 2020; Europe come second with a 44% decrease in arrivals; followed by the Middle East (-40%); the Americas (-36%); and Africa (-35%) (World Tourism Organization, 2020b).

Because of the presented devastating effects on travel and tourism, COVID-19 has become a very challenging topic for researchers looking at its impact on various aspects of the hospitality industry. Bresciani et al. (2021) and Dolnicar and Zare (2020) shed light on the vulnerability of different types of accommodation – primarily hotels and full flats – during the pandemic. Đorđević et al. (2022) and Matteucci et al. (2021) assess how changes in the hospitality industry during COVID-19 have affected regional ecosystems and the quality of life of their resident populations. Aigbedo (2021) and Milovanović et al. (2021) investigated the impact of COVID-19 on hotel supply chain management. Hao et al. (2020) and Permatasari and Mahyuni (2022) discussed the hotel's post-crisis response and the necessity to improve future crisis management.

A large number of studies examined the financial impact of COVID-19 on the hospitality industry (Clark et al., 2021; Crespí-Cladera et al., 2021; Wieczorek-Kosmala, 2021). All of their findings imply that the COVID-19 accident will have a particularly negative impact on the hospitality industry, and emphasize that "financial strength of firms will be crucial for hospitality firms to survive the Covid-19 disaster" (Crespí-Cladera et al., 2021. p. 12). In addition to drastically reducing revenue, mandatory health and safety protocols implemented by hotels have generated significant costs, such as increased cleaning and sanitation measures, as well as the need to provide personal protective equipment for staff and guests.

The general intention of this research is to contribute to the literature on the crisis in the hospitality industry. The purpose of the paper is to explore the effects of COVID-19 on the financial performance of the hotel industry. Specifically, the authors analyze the impact of the COVID-19 pandemic on key financial indicators such as liquidity and profitability of the world's top five hotel companies prior to and following the pandemic. By doing so, this paper aims to provide valuable insights into the economic consequences of the COVID-19 pandemic on the hotel industry and to identify potential strategies for recovery and resilience in the face of future crises.

The rest of the paper is organized as shown below. The next section discusses the theoretical background and literature review of the impact of COVID-19's effects on the tourism and hospitality industry. The materials, methods and research questions of the paper are covered in the third part of the manuscript. In the following section, the authors present the research results and discuss them. Finally, the concluding remarks are presented in the last section.

2. Background

The COVID-19 outbreak had an overwhelming impact on tourism and affiliated sectors, which have been among the first and the most adversely hit since most of the governments have imposed travel and social distance restrictions (Higgins-Desbiolles, 2020; McLaughlin, 2020). The tourism and hospitality sector has born the most dramatic repercussions from the pandemic since it has experienced an immense shrink in the demand, being particularly sensitive to safety and health risks, thus recording a significant drop in activities and job losses which brought many small businesses to bankruptcy (Blake et al., 2003; Cartwright, 2000; Kozak et al., 2007; Maniga, 2020).

According to similar data from the World Tourism Organization (2020a) shown in the introduction of the paper (but viewed from a slightly different perspective), the tourism industry has witnessed 20 million decline in the number of tourists worldwide in the first quarter of 2020. The worst hit among the markets was Asia (-64%), followed by Europe (-60%), America (-46%), Africa (-44%) and the Middle East (-41%), which caused a sharp decline in travel spending (-42%), revenues (-$300-450 billion), and financial loss estimated at $1.9 trillion in the top 10 tourism markets. Consequently, hotel closures and layoffs have implied an 8.3 million staff reduction and thereby the decrease in customer service and satisfaction level that have broadened the ongoing scenario in which both, businesses and employees faced a significant loss in their income (World Tourism Organization, 2020a). In line with these facts, one may anticipate that the recent pandemic has raised many challenges for related companies' financial managers, struggling to identify opportunities and develop strategies that would improve the severely harmed outlook of their business finances towards revenue increase, liquidity enhancement and optimum asset utilization under the new circumstances.

The devastating effects of the recent pandemic on the tourism sector have been empirically confirmed by a number of studies. Foo et al. (2021), who have examined the impact of the pandemic in Malaysia, have identified a devastating effect in the observed market which suffered from a dramatic decrease in customer visits due to postponing travel decisions since the outbreak of COVID-19. In this view, Bouarar et al. (2020) pointed out that tourism industry revenues have been the most severely affected in the countries whose growth is strongly dependent on this sector. Accordingly, the authors identified a weak impact on the tourism sector in Algeria as this country records no significant revenues from this sector, while the damaging effect was the strongest for some Pacific Ocean and Asia countries such as China.

Since, as seen by Chen (2011), the stock prices have been a reflection of not only the firm's current and future anticipated cash flow, but also of their observed riskiness, there has been a number of studies aimed at assessing the impact of COVID-19 on the tourism business stock returns. Accordingly, as suggested by Jorda et al. (2020), COVID-19 has impacted negatively the asset returns in the tourism industry during and in the aftermath of the pandemic, which has been a common scenario associated with such events. Having an assessment of the impact of COVID-19 on stock returns by employing the OLS method, Liu et al. (2020) have revealed that significant decrease in returns has been recorded with the outburst of the COVID-19 pandemic, where the most severe impact has been observed in Asia stock market. Similarly, Al-Awadhi et al. (2020) have confirmed the strong negative impact of the COVID-19 pandemic on the returns of all the businesses in China.

With an intention to evaluate the strategies being imposed by the businesses in tourism sector after the COVID-19 outbreak and the introduction of restrictive measures, Ozatay and Sak (2020) have suggested that the businesses will not go for the decrease in the number of employees in their attempt to ensure the survival. Differently, the businesses shall consider other strategies to maintain the operations. To cope with such devastating effects of the pandemic, Liew (2022) suggests that the firms severely affected by the COVID-19 pandemic in the tourism sector shall be given the opportunity to reinforce their operations supported by government policies on tax reduction, employees' retention, postponing the loan payment and an easy access to additional finance stimuli.

Accordingly, aiming to reinforce the revenue side of the profitability function, the businesses shall place the emphasis on a better understanding of different customer segments, their incentives for traveling, travel behavior, perceived value and better quality communication with customers, rather than on discount strategy which turned not to be effective (Singh, 2020). In line with that, identifying the new and more effective business models and strategies that involve the adoption of technological innovations, reduction of risks and enhancing the customer perception of safety has become an imperative in the tourism sector (Shin & Kang, 2020). Following this view, while some hotels have created the plans towards boosting local and regional weekend travel, some others have adapted a part of their facilities into traveling workers' home offices providing long-term rental discounts, or into COVID-19 patient centers in peculiar cases. For many, enhancing flexibility in terms of free cancelation and flexible check-in and check-out policy was one of the paths towards reviving their operations and revenues. In response to social distancing measures and increased hygiene requirements, some hotels adopted innovations into various operational activities including contactless transactions and customer self-services and apps usage for food ordering and laundry services. Nevertheless, with the exception of well-known hotel chains, which despite significant decreases in their income could manage to sustain their operations throughout the pandemic period, many, being more vulnerable to the novel requirements, were imposed to close their facilities (Singh, 2020).

Summing all up, one may conclude that the COVID-19 pandemic has severely impacted the tourism and hospitality sector worldwide, putting on it strong challenges in identifying strategies to revive its operations and finances. Still, the crisis has opened new opportunities for business models innovations and restructuring, mostly focused on refining customer experience and new technologies implementation. Nevertheless, even though many steps have been taken so far by different stakeholders to support the recuperation of this sector, its revival will depend on many factors, among which are the attractiveness of the destination, dependency on air travel, health standards and sustainability awareness.

3. Materials and methods

The research aims to assess the impact of the COVID-19 pandemic on the hotel industry as one of the most affected and sensitive industries at that period of time. The economic and financial performance of the hotel industry has been analyzed based on the profitability and liquidity of the five world's biggest hotel companies. The time frame of the six-year period (2017-2022) covers the pre-COVID years, 2020 as a peak of the pandemics and the following "recovery" years. According to the World Bank (2023), the top five hotel companies, that have been chosen based on the value of turnover in 2022, are: Marriott International Inc. (20.8 billion), Hilton Worldwide Holdings Inc. (8.8 billion), Hyatt Hotels Corporation (5.9 billion), Host Hotels&Resorts Inc. (4.9 billion), and InterContinental Hotels Group (3.9 billion).

Facing a reduction in the number of holidays due to the outbreak of COVID-19, followed by an economic slowdown, requested isolation, many health recommendations, accompanied by transport and other challenges of the population, profitability and liquidity analysis of the selected hotel companies strive to elaborate their ability to maintain expenses in this challenging period, perform positive financial results, and meet their short term obligations (Weaver, 2021).

The economic and financial analysis of the hotel companies relies on financial statements (income statement and balance sheet) as the information base, available on their official websites. Comprehensive profitability and liquidity analysis are the methods applied in the research, as well as a comparative analysis.

Following the general direction of the research, the paper strives to answer the next research questions:

1. Has COVID-19 affected the hotel companies' capacity to respond to their current obligations and keep the necessary liquidity?
2. Have the hotel companies managed to maintain positive financial results independent of the crises caused by COVID-19?
3. Given the trade-off between liquidity and profitability, which one the companies give priority to in the time of crisis?

4. Results and discussion

The research results have been divided into two sections: liquidity and profitability.

Liquidity is one of the crucial segments to be considered in a company's finances and represents an indispensable part of financial statement analysis. Liquidity measures the company's capability to transfer its current assets into cash, with the aim to meet short term debts without using external sources (Cornett et al., 2012). The more liquid assets a company holds, the less likely is to experience financial risk. Liquidity ratios, the most commonly used and applied in this research, are the following:

– Current ratio; – Quick ratio (acid-test ratio); – Cash ratio; – Working capital.

Table 1 shows liquidity ratios for the selected hotel companies in the period from 2017 to 2022. According to the data presented, all the companies maintained very low liquidity in the observed period considering that current liabilities exceed current assets. These companies managed to increase the number of euros of current assets available to pay each euro of current liabilities (Madushanka & Jathurika, 2018) in 2020 as the pandemic year compared to the previous three years, as a sign of slightly higher liquidity.

The biggest rise in the *current ratio*, as the broadest liquidity measure, has been noticed for Hilton Worldwide Holdings, showing 2.4 times higher value in 2020 than in 2019. According to this ratio, the lowest liquidity in 2020 performs Marriott International, as well as in other years (except in 2018). Excluding inventories as generally the least liquid of a company's current assets since their book values are the least reliable measures of market value, *quick ratio (acid-test ratio)* measures a company's capability to pay off current obligations relying on more liquid assets (Cornett et al., 2012). However, these changes in liquidity measure do not affect the liquidity of the selected hotel companies to a large degree. Relying only on available cash and marketable securities to pay short-term obligations (Cornett et al., 2012), the *cash ratio* reports significantly lower liquidity of the hotel companies. For instance, Marriott hotel has available only 0.07 euro of cash and marketable securities in 2022 to pay each euro of current liabilities, compared to 0.45 euro of current assets available for the same purpose. Liquidity measured in this way decreases for around two-three times relative to current and quick ratios. Liquidity risk can be also measured by *working capital* which simply compares current assets and current liabilities. Marriott and Hilton, in all the analyzed years (2017-2022), struggled with a lack of current assets to meet short-term obligations. Hyatt and InterContinental have both positive and negative working capital in this period, while Hilton only in 2020 recorded a positive working capital and Host Hotels&Resorts only in 2022 recorded negative working capital. However, negative working capital also means that the companies tried to have more free cash flows than to tie up cash in operations.

Table 1: Liquidity ratios for the selected hotel companies, 2017-2022

Hotel companies	**Liquidity ratios**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**
Marriott	Current ratio	0.45	0.57	0.49	0.47	0.42	0.47
Hilton		0.85	0.95	1.73	0.73	0.76	0.82
Hyatt		0.68	0.92	2.60	1.57	1.27	1.34
Host		0.96	1.66	1.55	1.45	0.00	3.51
InterContinental		1.09	1.27	1.20	0.67	0.97	0.67
Marriott	Quick ratio	0.45	0.53	0.46	0.39	0.38	0.41
Hilton		0.85	0.88	1.69	0.70	0.69	0.75
Hyatt		0.68	0.92	2.60	1.56	1.25	1.32
Host		0.96	1.66	1.55	1.45	0.00	3.51
InterContinental		1.08	1.27	1.20	0.67	0.97	0.67
Marriott	Cash ratio	0.07	0.22	0.15	0.03	0.05	0.07
Hilton		0.36	0.47	1.32	0.19	0.15	0.27
Hyatt		0.35	0.53	1.91	0.88	0.65	0.74
Host		0.47	1.00	1.45	1.26	0.00	1.83
InterContinental		0.63	0.84	0.87	0.14	0.50	0.14
Marriott	Working capital (in mil)	-4,026	-2,781	-2,927	-3,550	-3,731	-3,067
Hilton		-502	-148	1,771	-778	-632	-455
Hyatt		-1,037	-170	1,579	620	284	335
Host		-59	531	887	560	1,813	1,253
InterContinental		134	442	376	-452	-31	-313

Source: Authors' calculations

Liquidity ratio analysis of the selected top five world hotel companies shows their low level of liquidity in the period from 2017 to 2022. Given the research goal to determine the impact of the pandemic in 2020 on their liquidity, all the companies tried to keep a little more liquid assets in 2020 compared to previous years, but then again slightly lower liquid assets in the following years. The current and quick ratio above 1, indicating a company's ability to meet its current obligations, has not been recorded for Marriott at all, for Hilton only in 2020, and for the other three companies in three or four of the analyzed years. Likewise, working capital leads to the same conclusion. Namely, Marriott has a negative working capital in the whole period, Hilton has a positive working capital only in 2020, Host Hotels&Resorts recorded lower current assets than current liabilities only in 2022, while Hyatt and InterContinental have both positive and negative working capital in the observed period. However, a low level of liquidity may actually show good or decisive company management considering the trade-off between the advantages of being liquid versus the disadvantages of reduced profit.

Profitability shows a company's ability to generate income from its operations (Andekina & Rakhmetova, 2013) relative to sales, equity, assets, operational costs, etc. Profitability ratios evaluate the company's capacity to utilize its assets with the aim to make profit and increase shareholder value (Mitrović et al., 2021). The most often used ratios for measuring the company's profitability, being applied in this research, are the following:

- Gross profit margin;
- Operating profit margin;
- Net profit margin;
- Basic earnings power ratio;
- Return on assets;
- Return on equity;
- Return on debt;
- Debt to equity ratio.

Profitability ratios, as the most commonly used financial metrics, in the research of the five hotel companies have been divided into margin and return ratios (see Table 2). *Gross* and *operating profit margins*, which provide an inside into the company's earning power and ability to manage its costs of production, achieve their lowest values in 2020 as the pandemic year. *Net profit margin*, as well known as the profit margin ratio, shows the percentage of revenue left after all the company's costs are paid (Cornett et al., 2012). Based on the *net profit margin* results from Table 2, all five hotel companies had negative results in 2020 after previous years' positive results, pointing out a lack of sales to cover all expenses. Marriott, Hilton and InterContinental recovered in the next 2021 with positive values, while Hyatt and Host Hotels&Resorts needed two years to recover from the crises caused by COVID-19 and related challenges. Operating profit generated per euro of a company's assets, measured through the *basic earning power ratio*, was positive in all analyzed years only for Marriott and InterContinental hotels, while Hyatt and Host Hotels&Resorts have negative value in 2020 and 2021, and Hilton in 2020. All five hotel companies recorded the lowest *basic earning power ratio* in 2020, as an obvious impact of COVID-19. Similar results can be noticed in the return ratios (*return on assets*, *return on equity* and *return on debt*) given the lowest values in 2020, except for Hilton and InterContinetal regarding the lowest *return on equity* value in 2019 and 2017. The last profitability ratio, *debt to equity ratio*, shows Marriott's extreme reliance on debt relative to its own resources. This ratio increased from 5.63 (times debt higher than equity) in 2017 to 56.44 (times debt higher than equity) in 2020. While Hyatt has its debt twice higher than equity, Host Hotels&Resorts keep reliance through the years on its resources rather than on debt. On the other hand, Hilton and

InterContinental, with their negative debt to equity ratio, face a financial risk since their liabilities exceed their assets.

Table 2: Profitability ratios for the selected hotel companies, 2017-2022

Hotel companies	**Profitability ratios**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**
Marriott	Gross profit margin	21.94	20.21	13.80	15.34	17.70	17.52
Hilton		30.75	28.59	13.54	25.76	25.28	24.14
Hyatt		21.86	14.04	-0.05	18.78	21.98	22.08
Host		59.65	55.02	32.47	56.88	51.00	51.00
InterContinental		28.01	30.72	22.39	26.89	22.69	25.70
Marriott	Operating profit margin	16.72	12.69	3.32	9.24	12.14	12.09
Hilton		23.87	17.57	-2.76	16.67	16.08	15.45
Hyatt		6.76	-8.29	-30.59	3.92	7.45	7.51
Host		15.45	-8.93	-58.83	14.52	9.47	12.27
InterContinental		17.65	17.41	7.31	16.51	13.61	15.42
Marriott	Net profit margin	11.35	7.93	-2.53	6.07	9.19	7.13
Hilton		14.31	7.08	-16.60	9.32	8.58	13.33
Hyatt		7.72	-7.33	-34.03	15.26	17.27	8.72
Host		12.90	-0.38	-45.19	16.82	19.68	10.47
InterContinental		9.64	9.15	-10.86	8.32	8.05	13.24
Marriott	Basic earnings power ratio	14.00	6.88	1.42	7.74	10.64	10.37
Hilton		23.87	17.57	-2.76	16.67	16.08	15.45
Hyatt		3.23	-1.99	-6.92	2.34	4.34	4.42
Host		6.18	-2.09	-7.39	6.45	4.33	5.65
InterContinental		16.30	10.73	3.47	19.22	13.78	21.92
Marriott	Return on assets	9.50	4.30	-1.08	5.08	8.05	6.12
Hilton		8.09	2.66	-4.27	5.89	5.46	7.62
Hyatt		3.70	-1.76	-7.70	9.10	10.06	5.14
Host		5.16	-0.09	-5.68	7.48	8.99	4.82
InterContinental		8.89	5.64	-5.16	9.68	8.15	18.83
Marriott	Return on equity	415.14	77.72	-62.09	181.08	85.71	40.73
Hilton		-114.30	-50.06	48.12	-186.65	136.92	64.10
Hyatt		12.29	-6.23	-21.87	19.31	20.91	10.14
Host		9.20	-0.17	-11.38	12.32	14.50	8.09
InterContinental		-23.32	-18.05	14.06	-26.28	-29.31	-43.33
Marriott	Return on debt	9.72	4.55	-1.10	5.23	8.88	7.24
Hilton		7.56	2.52	-3.92	5.71	5.69	8.65
Hyatt		5.28	-2.46	-11.89	17.21	19.39	10.46
Host		11.74	-0.19	-11.34	19.02	28.33	14.24
InterContinental		6.44	4.30	-3.77	7.08	6.39	13.15
Marriott	Debt to equity ratio	42.69	17.07	56.44	34.63	9.65	5.63
Hilton		-15.13	-19.85	-12.28	-32.69	24.08	7.41
Hyatt		2.33	2.53	1.84	1.12	1.08	0.97
Host		0.78	0.88	1.00	0.65	0.51	0.57
InterContinental		-3.62	-4.20	-3.73	-3.71	-4.59	-3.30

Source: Authors' calculations

The conducted six-year profitability and liquidity analysis, with its focus on 2020 as the pandemic year, have provided an insight into the ability of the analyzed top world five hotel companies to meet their short-term obligations and be profitable. Given the trade-off between the companies' intention to keep liquid assets and make profit at the same time, the research confirmed that all five hotel companies in 2020 slightly increased their liquidity while they could not manage to keep positive financial results. The main reason for low profitability in this year is reflected in double lower revenue for all evaluated hotel companies so they failed to cover expenses. Although the hotel companies have recovered from COVID-19 in financial terms, their revenue in 2022 still did not reach the value of revenue from the pre-COVID year (2019).

5. Conclusion

With the COVID-19 pandemic, market survival has become a need for businesses in practically all industries and sectors of the global economy. A company cannot remain in operation without the ability to sustain liquidity and profitability, which is why the paper has put these indicators at the forefront of its consideration. These significant performance metrics assess the sustainability and growth potential of each company.

Our analysis highlights the importance of hospitality firms' financial stability in surviving the COVID-19 crisis. The results of this study and other publications discussed in the paper show that the COVID-19 pandemic has had a profound financial impact on the hospitality industry, with hotels being particularly hard hit. With travel restrictions, lockdowns and social distancing measures in place, hotels have seen a sharp decline in demand for their services, and thus a significant decline in revenue.

The research results of this paper showed a relatively low level of liquidity of all considered hotel companies in the period from 2017 to 2022. This means that current liabilities exceed the hotel's current assets in most of the six observed years. It is also indicative that hotels in 2020 (the year with the highest peak of the pandemic's impact) managed to increase their liquid assets compared to previous years. For example, when it comes to the *current ratio* and the *quick ratio*, as the most widely accepted indicators of liquidity, all hotels increased value in 2020 compared to 2019, with some of them doubling (Hilton) or nearly doubling (Hyatt and InterContinental) their score. The results of the research also indicate that after 2020, the liquidity of the majority of observed hotels declined again. The low level of liquidity can be attributed to the good and decisive management of the companies, considering the trade-off between the advantages of liquidity in relation to the disadvantages of reduced profits.

The analysis applied in this paper showed a significantly different situation when it comes to profitability during the COVID-19 crisis. All observed hotels recorded very low levels of almost all profitability measures throughout the pandemic, with most of them being negative. The indicators of *gross profit margin*, *operating profit margin*, *net profit margin*, *basic earnings power ratio* and *return on assets* showed convincingly the lowest values in 2020 compared to other observed years for all analyzed hotel companies. A devastating financial metric is particularly visible in the *net profit margin*, which indicates the percentage of revenue that remains after all expenditures have been covered by the business. According to this indicator, all five hotels recorded negative results in 2020 after positive achievements in previous years, pointing out a lack of sales to cover all expenses. While Hyatt and Host Hotels&Resorts needed two years to recover from the COVID-19 crisis, Marriott, Hilton and InterContinental rebounded in the following year of 2021 with positive values.

Summarizing the results of the study, it can be concluded that the observed hotel companies prioritize liquid assets (liquidity) over profit margins (profitability) during the COVID-19 pandemic. It seems that the hotels were forced to make this decision, as their revenues dropped significantly during the crisis and they were struggling to survive with limited occupancy and reduced income. As the main reason for the low profitability, we have identified a double lower income for all rated hotels in 2020 compared to the previous year. When we consider that they were also exposed to the additional costs of implementing health and safety protocols, such as increased cleaning and sanitation measures and the purchase of personal protective equipment for staff and guests, it is clear that there was little chance of an impact on profitability. The extent of the COVID-19 influence on the profitability of the observed hotels is also shown by the fact that even in 2022 they did not manage to reach the income they achieved in the period before the pandemic.

The study is limited to a group of five leading global hotel companies, while there are no representatives of small and medium-sized hotels in the sample. Although it is logical and justified to expect that the COVID-19 pandemic had a stronger impact on smaller participants in the hotel industry, in a paper of this scope and structure it was impossible to process a heterogeneous set of hotels in a consistent and comprehensible way. Studies that would fill this gap in terms of the inclusion of smaller representatives in the hotel business are desirable and strongly suggested by the authors of this paper.

Conflict of interest

The authors declare no conflict of interest.

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