



Assessment of the Financial Effect of COVID-19 in Hospitality Industry and Companies' Response

Jiahao Liu^{1,*}

¹The University of Western Ontario, Faculty of Science, Department of Statistical and Actuarial Science, Canada, N6A 3K7

*Corresponding author. Email: jeffrey.liujiahao.7@gmail.com

ABSTRACT

COVID-19 is one of the most severe crises in modern society. It hurts almost every country and every industry in the world. The hospitality industry makes money by selling unique in-person experiences, and absolutely got restrictions. The objective of this paper is about how COVID-19 influences the hospitality industry financially and what companies should do to overcome this crisis. This paper uses two global leading companies under different sub-segments of the industry as the examples. The examples explain the effect of COVID-19 on the companies' income, financial positions, and cash flow. From the financial statements the companies provided, they also indicate how world-leading companies react to funding shortage. After all, this paper also points out some financial suggestions for the hospitality industry for their future recovery. Since the industry highly depends on the situation of COVID-19, the better control, the better recovery companies will perform.

Keywords: *hospitality industry, COVID-19, financial crisis, financial suggestions*

1. INTRODUCTION

Due to the COVID-19 pandemic, 2020 and 2021 are very different years. COVID-19 becomes one of the biggest crises of modern society. The crisis is global, and almost every country in the world has been influenced critically. From a macro-perspective, many countries locked down their cities, shutting down public places such as schools, shopping malls, restaurants, etc. The governments restricted flights, and some of them even closed the broader route to prevent the spread of coronavirus. An at least 14 days self-quarantine is a mandatory policy for every person who enters the country. From a micro-perspective, people's lives have been impacted a lot. The basic requirement is that everyone must wear a mask and keep social distance when they are indoors. In addition, people's lifestyles have changed. For example, one person's daily routine might be working from home, doing online grocery shopping, making take-out orders from restaurants. From both macro and micro perspectives, these impacts brought from COVID-19 made a big difference to the economy. Many industries are influenced no matter positively and negatively. Even though at first, almost every economic sector had a sharp decline, the service industry was influenced badly. Since they bring in-person experience

as their "product" to their customers, the lock down policy made them have no chance to provide their sell product."

The objective of this paper is about how the COVID-19 affects the hospitality industry financially, and what companies can do to respond to this crisis. This paper mainly analyzes the hotel industry and civil aviation industry, which are severely affected by COVID-19, and summarizes the impact of COVID-19 on the industry through the analysis of financial statements and financial indicators of the examples and puts forward suggestions for the service industry to cope with COVID-19.

2. FINANCIAL EFFECT OF COVID-19 IN HOTEL AND AIRPORT INDUSTRY

Talking about the hospitality industry, hotel companies take a large portion of it. There are over 91,000 hotels and motels in the U.S., generating more than 194 billion dollars revenue annually. However, this such a large industry also has experienced a serious shock [1]. More than 47% of hotels state that they must close the hotel if they do not have the support from the government; more than 77% of hotels indicate they are forced to lay off employees in order to maintain the financial condition [2]. Using Marriott International Inc.

as an example, which is one of the largest hotel chains in the world. It is an international hotel company which has

over 5,700 properties and 30 brands spread across 110 countries.

MARRIOTT INTERNATIONAL, INC. CONSOLIDATED STATEMENTS OF (LOSS) INCOME Fiscal Years 2020, 2019, and 2018 (\$ in millions, except per share amounts)			
	December 31, 2020	December 31, 2019	December 31, 2018
REVENUES			
Base management fees	\$ 443	\$ 1,180	\$ 1,140
Franchise fees	1,153	2,006	1,849
Incentive management fees	87	637	649
Gross fee revenues	1,683	3,823	3,638
Contract investment amortization	(132.00)	(62.00)	(58.00)
Net fee revenues	1,551	3,761	3,580
Owned, leased, and other revenue	568	1,612	1,635
Cost reimbursement revenue	8,452	15,599	15,543
	10,571	20,972	20,758

Figure 1. The income statement of Marriott International Inc.

From its income statement in Figure 1, it can be directly seen that the 2020 revenue drops half of the previous years. The operating income decreased 95%.

Even though Marriot cuts its expenses by 45.30%, the net income of 2020 is still negative. In addition, the harm that COVID-19 brought is continuing.

MARRIOTT INTERNATIONAL, INC. CONSOLIDATED STATEMENTS OF (LOSS) INCOME Fiscal Years 2020, 2019, and 2018 (\$ in millions, except per share amounts)			
	December 31, 2020	December 31, 2019	December 31, 2018
OPERATING INCOME	84	1,800	2,366
Gains and other income, net	9	154	194
Interest expense	\$ (445.00)	\$ (394.00)	\$ (340.00)
Interest income	27	26	22
Equity in (losses) earnings ⁽¹⁾	\$ (141.00)	13	103
(LOSS) INCOME BEFORE INCOME TAXES	\$ (466.00)	1,599	2,345
Benefit (provision) for income taxes	199	\$ (326.00)	\$ (438.00)
NET (LOSS) INCOME	\$ (267.00)	1,273	1,907

Figure 2. The annual report of Marriott International Inc.

From the annual report in Figure 2, we can realize that compared to March 31st, 2020, the net income of Marriott is still a negative number. After one year of the

crisis, the company still has not recovered as well as before. On the other hand, Marriot was still making the right decision.

MARRIOTT INTERNATIONAL, INC. CONSOLIDATED BALANCE SHEETS Fiscal Years-Ended 2020 and 2019 (\$ in millions)		
	December 31, 2020	December 31, 2019
ASSETS		
Current assets		
Cash and equivalents	\$ 877	\$ 225
Accounts and notes receivable, net	1,768	2,395
Prepaid expenses and other	172	252
Assets held for sale	8	255
	2,825	3,127
Property and equipment, net	1,514	1,904
Intangible assets		
Brands	6,059	5,954
Contract acquisition costs and other	2,930	2,687
Goodwill	9,175	9,048
	18,164	17,689
Equity method investments	422	577
Notes receivable, net	159	117
Deferred tax assets	249	154
Operating lease assets	752	888
Other noncurrent assets	616	595
	24,701	25,051
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Current portion of long-term debt	\$ 1,173	\$ 977
Accounts payable	527	720
Accrued payroll and benefits	831	1,339
Liability for guest loyalty program	1,769	2,258
Accrued expenses and other	1,452	1,383
	5,752	6,677
Long-term debt	9,203	9,963
Liability for guest loyalty program	4,502	3,460
Deferred tax liabilities	83	290
Deferred revenue	1,542	840
Operating lease liabilities	823	882
Other noncurrent liabilities	2,366	2,236
Stockholders' equity		
Class A Common Stock	5	5
Additional paid-in-capital	5,851	5,800
Retained earnings	9,206	9,644
Treasury stock, at cost	\$ (14,497.00)	\$ (14,385.00)
Accumulated other comprehensive loss	\$ (135.00)	\$ (361.00)
	430	703
	24,701	25,051

Figure 3. The balance sheet of Marriott International Inc.

Looking at its balance sheet in Figure 3, we can find out that its total liability is not increasing compared to 2019. It means Marriot was not making loans or debt to support itself. Additionally, the cash flow shows a good tendency. To compare some categories in the cash flow to the previous period, such as liability, loyalty program and deferred revenue, we can notice that Marriot used several adjustments to maintain a relatively healthy cash flow when there is over 1,400 dollars decrease. First, the liability of the loyalty program provides more than 2 times the funds than before. The current portion of the loyalty program decreased but long-term increased. According to the Marriott's website [3], the company extends the expiry day of memberships' points redeem day. Also, memberships have longer time to redeem other rewards. The company uses this way to attract and comfort customers and also limit the cash outflow. Second, Marriot deferred its revenue to gain more cash

on hand. In other words, the company sells their "product" first and receives the money from customers, however, they might not provide the service. By doing so, Marriott has more cash generated from operating activities. Third, the cash flow indicated that Marriot decreased this purchase of treasury stock. According to Marriott International Inc.'s annual report to their stockholders [4], it pointed out that Marriot delayed its action to repurchase its own stock. Buyback stock can be for different reasons. The most common two reasons are companies want to reduce the common shares on the open market in order to increase the ownership of stakeholders, or the company wants to invest itself to make the financial ratio looks more attractive. However, repurchasing the shares will have a bad impact on Marriott's cash flow from financing activities, so they decide to delay this decision. To conclude, COVID-19 pandemic hit Marriot's financial condition which appears on its net income, however,

Marriot still did a good job on maintaining its asset and liability. Also, it successfully held cash flow in a positive position. From Marriot's nine months ended quarter report, 2021. The net income is 631 million dollars, which is over 700 million dollars more than the same time last year. Marriott International Inc. started to recover after almost two years from pandemic outbreak.

Another industry the paper is going to discuss is the airport industry. As the COVID-19 spread at an extremely fast speed, many countries introduced policies to stop the breakout such as flight restrictions, broader

closure, mandatory travel self-quarantine, etc. From the data of 2020, the COVID-19 crisis decreased more than 1 billion passengers. Compared to 2019, such a large decline is 63.3% of global passenger traffic; the total revenue generated from the industry dropped from 188 billion dollars to 125 billion dollars in the U.S. This paper utilizes American Airlines Inc. as an example to discuss how airport companies did financially during the pandemic. American Airlines Inc. is the largest airlines company in the world by the measurements of fleet size, scheduled passengers, and revenue passenger miles.

AMERICAN AIRLINES GROUP INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In millions, except share and per share amounts)

	Year Ended December 31,		
	2020	2019	2018
Operating revenues:			
Passenger	\$ 14,518	\$ 42,010	\$ 40,676
Cargo	769	863	1,013
Other	2,050	2,895	2,852
Total operating revenues	17,337	45,768	44,541
Operating expenses:			
Aircraft fuel and related taxes	\$ 2,581	\$ 7,526	\$ 8,053
Salaries, wages and benefits	10,960	12,609	12,251
Regional expenses	4,892	7,501	7,133
Maintenance, materials and repairs	1,583	2,380	2,050
Other rent and landing fees	1,536	2,055	1,900
Aircraft rent	1,341	1,326	1,264
Selling expenses	513	1,602	1,520
Depreciation and amortization	2,040	1,982	1,839
Special items, net	\$ (657.00)	635	787
Other	2,969	5,087	5,088
Total operating expenses	27,758	42,703	41,885
Operating income (loss)	\$ (10,421.00)	3,065	2,656

Figure 4. The consolidated income statement 2020 of American Airlines, Inc.

From its consolidated income statement 2020 in Figure 4, the revenue decreased by around 30,000 million dollars. The revenue component is made of "passengers", "cargo" and "others". Passenger category takes the largest portion among them. Due to the travel restriction, it harmed the most, so that the 30,000 million dollars decrease is mainly caused by the loss of passengers. American airlines Inc. generated a negative net income, which is 10,000 million dollars less than previous year.

American airlines tried to lower the expense to enable them to have larger net income. It decreased its total expense 35.5% in 2019. However, it still cannot cover the loss of total revenue. The total assets were 2,675 million dollars less than 2019, but liability increased by 8,000 million dollars. The major reason that drove this increase is long-term debt and finance lease. It could be a bad sign since the American airline tried to borrow more to cover having more cash on hand.

AMERICAN AIRLINES GROUP INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions)

	Year Ended December 31,		
	2020	2019	2018
Cash flows from operating activities:			
Net income (loss)	\$ (8,885.00)	1,686	1,412
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Depreciation and amortization	2,370	2,318	2,159
Net gains from sale of property and equipment and sale-leaseback transactions	\$ (95.00)	\$ (112.00)	\$ (59.00)
Special items, net non-cash	1,599	376	458
Pension and postretirement	\$ (319.00)	\$ (178.00)	\$ (300.00)
Deferred income tax provision (benefit)	\$ (2,568.00)	560	440
Share-based compensation	91	94	86
Other, net	47	\$ (62.00)	\$ (97.00)
Changes in operating assets and liabilities:			
Decrease in accounts receivable	538	73	222
Increase in other assets	\$ (38.00)	\$ (373.00)	\$ (390.00)
Increase (decrease) in accounts payable and accrued liabilities	\$ (626.00)	327	\$ (147.00)
Increase (decrease) in air traffic liability	\$ (51.00)	469	297
Increase (decrease) in loyalty program liability	580	76	\$ (283.00)
Contributions to pension plans	\$ (9.00)	\$ (1,230.00)	\$ (475.00)
Increase (decrease) in other liabilities	823	\$ (209.00)	210
Net cash provided by (used in) operating activities	\$ (6,543.00)	3,815	3,533
Cash flows from investing activities:			
Capital expenditures and aircraft purchase deposits	\$ (1,958.00)	\$ (4,268.00)	\$ (3,745.00)
Proceeds from sale-leaseback transactions	665	850	1,096
Proceeds from sale of property and equipment	351	54	111
Purchases of short-term investments	\$ (5,873.00)	\$ (3,184.00)	\$ (3,412.00)
Sales of short-term investments	2,803	4,144	3,705
Proceeds from vendor	90	250	—
Decrease (increase) in restricted short-term investments	\$ (308.00)	\$ (3.00)	72
Proceeds from sale of investments	41	—	207
Other investing activities	\$ (153.00)	\$ (86.00)	\$ (7.00)
Net cash used in investing activities	\$ (4,342.00)	\$ (2,243.00)	\$ (1,973.00)

Figure 5. The cash flows of American Airlines, Inc.

Except the financing activities component in cash flow, both operating and investing activities of American Airlines were using cash. In addition, the company used a lot more than in 2019. First, the company has a large net income loss on cash flow, and it also has a 2,000 million dollars payout for deferred income tax. Second, American airlines sell less short-term investment and purchase short-term investment than before. Last, in order to maintain a positive net cash flow, the company issued an 80,000 million dollars long-term debt. It can

cause many bad sides for the company. The company needs to restrict its cash flow for next few years since its need to pay back the debt and interest. Liabilities is the component of solvency ratio. Larger liability brings a higher solvency ratio, which stakeholders will look at. When an American airline wants to attract more investors in the future, a large debt will bring bad evaluation to the company. The COVID-19 also hurt American Airlines Inc. continuously.

AMERICAN AIRLINES GROUP INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In millions, except share and per share amounts)(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Operating revenues:				
Passenger	\$ 7,957	\$ 2,540	\$ 17,682	\$ 11,328
Cargo	332	207	973	484
Other	680	426	1,800	1,497
Total operating revenues	8,969	3,173	20,455	13,309
Operating expenses:				
Aircraft fuel and related taxes	\$ 1,952	\$ 611	\$ 4,596	\$ 2,703
Salaries, wages and benefits	3,018	2,763	8,611	8,592
Regional expenses	887	529	2,148	2,161
Maintenance, materials and repairs	548	337	1,383	1,253
Other rent and landing fees	694	472	1,950	1,495
Aircraft rent	358	336	1,064	1,004
Selling expenses	318	97	745	540
Depreciation and amortization	480	498	1,439	1,557
Special items, net	\$ (990.00)	\$ (295.00)	\$ (3,986.00)	\$ (657.00)
Other	1,109	696	2,784	2,567
Total operating expenses	8,374	6,044	20,734	21,215
Operating income (loss)	595	\$ (2,871.00)	\$ (279.00)	\$ (7,906.00)
Nonoperating income (expense):				
Interest income	5	5	13	36
Interest expense, net	\$ (476.00)	\$ (340.00)	\$ (1,332.00)	\$ (851.00)
Other income, net	82	111	241	77
Total nonoperating expense, net	\$ (389.00)	\$ (224.00)	\$ (1,078.00)	\$ (738.00)
Income (loss) before income taxes	206	\$ (3,095.00)	\$ (1,357.00)	\$ (8,644.00)
Income tax provision (benefit)	37	\$ (696.00)	\$ (296.00)	\$ (1,937.00)
Net income (loss)	169	\$ (2,399.00)	\$ (1,061.00)	\$ (6,707.00)

Figure 6. The income statement of the nine months ended quarter report 2021 of American Airlines, Inc.

The good situation is the income statement of the nine months ended quarter report 2021 shows a net income gain, and the operating activities were generating money. However, the cash was mostly provided by financing activities, and total liabilities increased, especially long-term debt. In conclusion, for an airport company, the main revenue comes from passengers. The pandemic has not been stopped yet. The airport industry cannot operate as well as before. Many governments still restrict the travel policy. There are still much less passengers no matter for business or travel purposes than before COVID-19 outbreaks. The airport industry needs time to recover, and it strongly depends on the situation of coronavirus.

3. SUGGESTED SOLUTIONS FOR HOSPITALITY COMPANIES

Then, to decrease the harm from COVID-19 and stay feasible, there are several things hospitality companies can do. First, companies can delay their renovation, technology improvement or other upgrade plans. Since COVID-19, less people use hospitality service. The

upgrades of facilities do not actually attract customers. Customers want to stay safe and decrease their chances of entering public places. Even if they have a plan to do so, the governments have different restrictions to prevent the public gathering. For instance, Marriot deferred its renovation plans for its franchises. Second, hospitality companies can negotiate with their suppliers about the payment date and even strive for discounts. Trying to hold more money on hand is always a right decision, because the company needs to meet the financial commitment they made to customers, employees, and landlords in order to operate. Third, delay any cash outflow activities and look for fundings. The goal of all hospitality companies is to survive during the pandemic. Predicting the future financial status and funding requirement, if it is necessary, assess the equity or available debt. There are many lenders that can provide short term funding. The companies need to look at their interest rates and evaluate themselves ability of paying back both funds and interests. If the companies cannot pay back the interest, and have a negative cash flow, they need to consider the borrowing options. Additionally, paying attention to government subsidy and financial

relief measurements. Last, the company needs to have an advanced management to make the right decision. They also need advanced technology, such as a management pricing model, so that they can adjust their price according to the market conditions immediately. The recovery of the companies during COVID-19 period can be long. Different countries have different situations. China's economy improved first at a slower pace, on the other hand, Europe, middle east, and Africa recovered relatively slowly. Companies need to adjust their operating strategies according to different countries [5]. However, for some cities which recover slowly, the companies can use this downtime as an opportunity to reevaluate themselves internally and do better preparation of recovery for the future. The companies can invest more time on the details within the company, such as focusing on employees' training, management system upgrading, even looking for new opportunities for innovating new services. For instance, a hotel company may market itself to local people instead of tourists. Hotel staycation is a popular trend nowadays, and hotel companies can see it as a chance to attract locals and decrease the vacant room percentage [6].

4. CONCLUSION

In conclusion, COVID-19 is an unprecedented global crisis in modern society. Almost every country, every industry in the world got hurt at different levels. Hospitality industry undoubtedly is experiencing a hard period. The paper used two subsegments of the hospitality industry to discuss how the crisis affected hotel and airport companies financially. Most of the companies in the industry have a net loss of income during 2020. The revenue decreased over 50%. Some of them need to issue long-term debt to finance themselves and stay positively on cash flow. However, the two examples talked about above are global leading companies in the industry. Their situations can be different from local businesses. Some small local companies are also affected badly, and still suffering. Some of the advice mentioned before might not be suggestive to them, especially the global operating strategies. More researches should be done to solve their problems according to specific local situations. Different from other industries, hospitality's products are providing in-person experience to their customers. The operation and finance performance are strongly dependent on the breadth and duration of COVID-19. Currently, the vaccination distribution is increasing in the world, the more control of the coronavirus, the better the hospitality industry can perform.

AUTHORS' CONTRIBUTIONS

This paper is independently completed by Jiahao Liu.

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