

# Financial Analysis on United Airlines Holdings, Inc.

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**Abstract.** This report provides a comprehensive financial analysis of United Airlines Holdings, Inc. (UAL) for the fiscal year 2022. In 2022, UAL demonstrated a robust financial performance, through notable improvements in liquidity, profitability, and solvency indicators. The analysis reveals that UAL sustained strong liquidity, benefiting from increased cash flow and enhanced current ratios. The company's profitability metrics exhibited substantial growth, driven by effective cost management and revenue optimization. Additionally, this study shows that UAL prudently managed its debt load, reinforcing solvency ratios, however, they should keep improving their debt management in the following years. In the recent dynamic aviation industry landscape, UAL exhibited adaptability and strategic acumen, with a focus on sustainable growth. This report also emphasizes UAL's competitive positioning and resilience in a challenging market environment in comparison with its four peers. This financial analysis offers valuable insights for investors and stakeholder, underscoring UAL's solid financial foundation, strategic adaptability, and a promising and positive financial prospect in the airline industry.

**Keywords:** Financial Performance, Accounting Recognition, Aviation Industry.

## 1. Introduction

United Airlines Holdings, Inc., commonly referred to as UAL, is a holding corporation with United Airlines, Inc. as its wholly-owned subsidiary. UAL embraces the mission of "Connecting People. Uniting the World." Notably, United boasts the most extensive route network among North American carriers, underpinned by prominent mainland hubs across the United States, including but not limited to Chicago, Denver, Houston, Los Angeles, New York/Newark, San Francisco, and Washington, D.C [1].

The financial dynamics of UAL are intricately tied to the performance of its subsidiary, United. Indeed, United's operational revenues and expenses account for a significant portion, approximately 100%, of UAL's overall revenues and operating costs. This symbiotic relationship underscores the integral role of United in shaping UAL's financial landscape and underscores the company's central position within the North American aviation industry [1].

Since the beginning of 2022, aviation stocks have demonstrated signs of recovery within the industry from the COVID-19 pandemic. Earnings reports indicate that airlines are rebounding to pre-pandemic levels, with strong requirements for air travel becoming evident [2]. In the early months of 2023, air travel has witnessed a resurgence, with the number of passengers reaching levels comparable to those seen before the pandemic, as confirmed by data from the Transportation Security Administration. This rebound in air travel is significantly impacting the performance of airline stocks, as they take flight alongside the returning travelers. Norton also pointed out that, while United Airlines, like many other airlines, faced a series of setbacks during the COVID-19 pandemic, the company exceeded analyst expectations in the fourth quarter of 2022. Earnings per share stood at \$2.46, surpassing the analyst target of \$2.10. Revenue amounted to \$12.4 billion, exceeding the anticipated \$12.23 billion. Although by revenue, UAL ranks among the world's top three airline companies [3]. They take quick steps to meet the increasing travel demand after the pandemic-related lull: United Airlines is strategically committing to the acquisition of approximately 200 new aircraft as part of its competitive expansion initiative, with a particularly aggressive fleet expansion at the close of 2022. This expansion involved placing orders for as many as 200 Boeing 787 Dreamliners.

CEO Scott Kirby communicated to the company's employees that this bold move positions United as a prospective leader in the near future, aiming to surpass its competitors [4].

In addition to the proactive measures taken by United Airlines to address the global economic turbulence affecting the aviation industry, UAL also faced substantial challenges and crises in the year 2022. On March 18, 2022, Fitch Ratings revised the outlook for United Airlines Holdings, Inc. and its primary operating subsidiary, United Airlines, Inc., from stable to negative [5]. This change in outlook was driven by factors including rising aviation fuel prices, increased downside risks associated with inflation pressures and related economic impacts, substantial capital expenditures planned by United Airlines for the coming years, and uncertainties linked to the recovery of air travel post the pandemic. These factors elevated the risk profile of United Airlines. Furthermore, the overselling crisis at UAL has persisted since 2017 [6].

## 2. Accounting Analysis

This report is analyzed based on the 2022 annual report of UAL released on 02/16/2023. According to some important accounting policies pointed out in the 2022 annual report, this part will emphasize the following three parts: Revenue Recognition, Frequent Flyer Accounting, Property and Equipment (PPE) & intangibles. To make the analysis more powerful and specific, this report compares the accounting policies with four competitors of UAL: American Airlines Group Inc. (AAL), Southwest Airlines Co. (LUV), ALK Airlines (ALK), Spirit Airlines, Inc. (SAVE) [7-10].

### 2.1. Revenue Recognition

UAL reports a relatively high level of total operating revenue compared to its industry competitors. However, this can be attributed to its significant size and higher revenue base. UAL operates in a complex environment, offering a variety of services and products, including passenger ticketing, cargo transportation, and ancillary fees. It is imperative that the revenue recognition policies align with the company's operational intricacies to ensure that the financial statements accurately reflect its true financial position and profitability. Incorrect revenue recognition can lead to financial statements that do not accurately represent the economic reality, potentially misleading investors and stakeholders.

For UAL's Revenue Recognition, passenger revenue is recognized upon the provision of transportation services, while cargo revenue is recognized when the goods reach their destination, and other operating revenue is recognized as related performance obligations are fulfilled. The annual report also highlights specific accounting treatments, such as UAL employing different revenue recognition methods for various service types and products, including passenger ticketing, cargo transportation, and ancillary fees, each with its unique recognition method. The company temporarily records the revenue from advance ticket sales as "Advance ticket sales liability" and recognizes it when actual travel occurs. For multi-segment travel, each segment is considered an independent performance obligation, and revenue is recognized separately. When providing services in cooperation with other airlines, UAL is often considered an agent and recognizes corresponding commission income. UAL emphasizes that, in light of uncertainties such as the COVID-19 pandemic, it must adjust estimates based on historical experience and recent trends to ensure accurate revenue recognition.

In consideration of its competitors, AAL, LUV, ALK, and SAVE are all consistent with UAL in terms of passenger and loyalty revenue. They recognize revenue when services are delivered. LUV, ALK, and SAVE behave almost the same in the revenue recognition. However, UAL recognizes cargo revenue upon the arrival of goods at their destination, while AAL recognizes it when transportation services are provided. ALK's 2022 annual report particularly emphasizes a shift in their breakage method. They now recognize breakage based on the proportion of mileage points redeemed, a method similar to that used by UAL.

In the part of revenue recognition, the accounting policies of UAL perform reasonable and comparable with peers, but further estimation and adjustments are also needed for the complicated operations of UAL.

## 2.2. Frequent Flyer Accounting

Frequent Flyer Accounting carries value of 2693 million, contributing significantly to Total current liabilities (\$19,994 million). It plays an important role in UAL's annual report due to its direct association with the MileagePlus loyalty program. This loyalty program stands as a vital business initiative aimed at fostering customer loyalty through the provision of rewards, benefits, and services. Within this context, Frequent Flyer Accounting addresses critical accounting issues, including revenue recognition, mileage valuation, and the treatment of unredeemed mileage points. Furthermore, the MileagePlus program underscores the vital significance of accurate accounting practices in reflecting the company's profitability and financial health.

UAL employs the Deferred Revenue method to account for passenger mileage points earned through travel. The pricing of passenger mileage points is determined using the Equivalent Ticket Value (ETV) method. UAL's estimations also encompass unredeemed mileage points, calculated through statistical models based on historical redemption patterns. Notably, the company aggregates mileage points within frequent flyer accounts, irrespective of the period in which they were earned. According to UAL's estimates, the majority of these points are expected to be redeemed within a two-year timeframe. The company recognizes portions of partner-related marketing, advertising, non-travel mileage points redemption, and other mileage-related benefits within the "Other Operating Revenue" category. Partially redeemed mileage points are deferred and reflected as part of the Frequent Flyer Liability, with the current portion contingent on anticipated redemptions in the upcoming 12 months.

In comparison with four major competitors, AAL similarly employs the Deferred Revenue method for accounting passenger mileage points within its AAdvantage loyalty program. AAL also employs the ETV method to estimate the future selling price of mileage points, mirroring UAL's practices. The accounting methodologies of the other three competitors exhibit substantial alignment with those of UAL.

To sum up, given its strong connection with the MileagePlus loyalty program, Frequent Flyer Accounting is a critical component within UAL's 2022 annual report and the investors should take this financial plan into consideration.

## 2.3. PPE & Intangibles

PPE and intangibles offer crucial insights into UAL's core asset management, impairment risk, asset valuation, and long-term planning. UAL records the cost of self-owned operating property and equipment while valuing financed lease properties at their present value. Credits related to aircraft and engine purchases are deferred until delivery. Depreciation and amortization of owned depreciable assets follow the straight-line method based on estimated useful lives. Moreover, finite-lived intangible assets are amortized over their estimated useful lives, while goodwill and indefinite-lived intangibles are assessed annually or more frequently for impairment, primarily using market and income approaches.

AAL, LUV and SAVE all follow a similar approach to UAL in terms of depreciation and amortization methods for PPE. However, AAL uses a different method for assessing impairment, comparing estimated undiscounted cash flows to the asset's carrying value, recognizing impairment only when these cash flows fall short. Additionally, UAL's annual report does not mention intangible assets like domestic airport slots, as indicated in LUV's report.

### 3. Performance Evaluation

#### 3.1. Liquidity

From Table 1, UAL has a moderate level of liquidity performance. UAL, or United Airlines, demonstrates a current ratio of 1.00, indicating that its current assets are just sufficient to cover its current liabilities. While the ratio is at par or a little lower than industry peers, it suggests that UAL may need to consider optimizing its balance between current assets and liabilities to enhance its short-term financial flexibility. Compared with the best performer in current ratio, which is LUV of 1.43, UAL has about 7555 million Advanced ticket sales and 2693 million Frequent flyer deferred revenue of total current liabilities (\$19,994 million), which causes UAL to have much current liabilities. However, given UAL's larger current asset, its operations could be relatively more complex compared to LUV. In light of these factors, its performance is reasonable and quite commendable, since AAL are of the almost same total current assets and liabilities with UAL. On the other hand, UAL performed better than ALK in 0.68 current ratio, because it has large amount of short-term investment contributing to larger amount of total current assets. It suggests that UAL should persist in short-term investment.

The cash ratio for UAL is 0.37, indicating that it holds a moderate amount of cash and cash equivalents in relation to its current liabilities. This suggests that the company maintains a reasonable cash reserve, which can help it meet short-term financial obligations efficiently. However, a higher cash ratio would provide an even stronger safety net in case of unexpected financial demands. Compared to the best performance companies in cash ratio, SAVE and LUV, UAL spends a significant amount of cash flow on investment activities, resulting in a decrease in the remaining cash volume and cash ratio in 2022. However, these investment activities may bring greater income and cash flow to UAL in the long-run. Compared with AAL and ALK, who do a poor cash ratio of 0.03 and 0.08 respectively, UAL experienced an increase in cash flow from its operating activities. However, AAL saw a decrease in cash flow from operating activities compared to 2021, and they conducted significant debt repayments (\$2,991 million) in 2022, likely to reduce their debt burden. SAVE, due to its relatively smaller scale, exhibits fewer stable cash inflow from operating activities. In 2022, the company incurred a substantial loss and was further burdened by substantial capital interest payments, leading to significant cash outflows. These factors, in part, contribute to why UAL outperforms them in terms of cash flow.

**Table 1.** Comparison of UAL's Liquidity with its Competitors

	current ratio	cash ratio
UAL	1.00	0.37
AAL	1.02	0.03
LUV	1.43	0.91
ALK	0.68	0.08
SAVE	1.25	0.92

#### 3.2. Solvency

UAL performs mediocly in terms of total debt ratio and long-term debt ratio, as shown in Table 2. At the same time, its interest coverage ratio is not high, which may require attention as it requires more profits to cover interest expenses.

UAL has a substantial amount of long-term debt dedicated to capital expenditures and aircraft acquisitions to support its operations and expansion plans. This results in both its total debt ratio and long-term debt ratio being relatively high compared to its competitors. In contrast, other companies such as LUV, ALK, and SAVE maintain lower levels of long-term debt, and they tend to rely on equity financing or short-term debt for funding their operational and expansion initiatives. Furthermore, LUV adopts a more conservative tax strategy, resulting in lower deferred tax items on

its balance sheet. SAVE also holds a significant amount of cash and short-term investments, which contributes to its higher total assets and lower total debt ratio.

Compared to LUV and ALK, UAL has a relatively higher proportion of interest expense due to its debt levels and debt interest rates, resulting in a lower Times Interest Earned (TIE) ratio. On the other hand, when compared to AAL, its proportion of interest expense is even higher, leading to a slightly lower TIE than UAL. Meanwhile, Spirit Airlines has been in a continuous state of losses, with net losses in the range of hundreds of millions of dollars. This persistent loss-making situation means that the company's net income is insufficient to cover interest expenses, thus maintaining a low TIE.

In summation, although the total debt ratio and long-term debt ratio are relatively high, this does not necessarily mean that the company is at risk. After looking into the details in the balance sheet, these two high ratios actually reflect the company's expansion and capital expenditure plans, which are likely to meet the growing market demand due to the economic recovery after the COVID-19. What's more, the scale of the UAL is relatively large, therefore requiring more capital to support its operations and capital expenditures, resulting in higher total debt ratios and long-term debt ratios.

**Table 2.** Comparison of UAL's Solvency with its Competitors

	total debt ratio	long-term debt ratio	times-interest-earned
UAL	0.90	0.49	1.56
AAL	0.92	0.39	1.24
LUV	0.70	0.23	3.14
ALK	0.73	0.10	1.73
SAVE	0.83	0.35	-4.01

### 3.3. Profitability

In terms of profit margin in Table 3, UAL demonstrates a robust performance with a profit margin of 0.016, only slightly lower than LUV. This indicates that UAL retains a relatively high level of profit for every dollar of sales. Given its large scale and extensive operations, UAL excels in both net income and operating income. However, LUV, with its lower total revenue, shows better cost control measures to enhance profit margins.

Regarding operating margin in Table 3, UAL boasts a 0.052 operating margin, surpassing all other four competitors. This suggests that UAL achieves relatively high net profits after deducting operating costs, reflecting its efficiency in core business activities.

In terms of asset turnover in Table 3, UAL's asset turnover stands at 0.659, slightly lower than other competitors, including AAL and ALK. This may indicate that UAL is somewhat less efficient in utilizing its assets to support sales. AAL and ALK appear to utilize their assets more effectively to generate sales, especially in other transportation and cargo areas. This contributes to an improved asset turnover as it represents higher sales generated per unit of assets. On the other hand, SAVE, being a smaller-scale company, typically exhibits a lower asset turnover rate, which may be a significant factor contributing to its lower capital turnover.

**Table 3.** Comparison of UAL's Probability with its Competitors

	profit margin	operating margin	asset turnover
UAL	0.016	0.052	0.659
AAL	0.007	0.034	0.688
LUV	0.023	0.043	0.656
ALK	0.006	0.007	0.691
SAVE	-0.109	-0.118	0.593

### 3.4. Investment

As Table 4 shows, UAL performs well in all three of these indicators, especially in terms of ROE and the market-to-book ratio. This demonstrates UAL's high efficiency in using shareholders' equity

and its ability to effectively utilize its resources to generate profits. The highest market-to-book ratio suggests that the market has an optimistic outlook on UAL's future growth and profit prospects.

In terms of ROE, UAL consistently reports significantly higher net income than other companies, resulting in a higher ROE. For ROA, even though UAL's net income surpasses that of LUV, its total assets are greater, leading to a slightly lower ROA compared to LUV Airlines. Regarding the market-to-book ratio, UAL's market value is relatively high, although it does not exceed LUV's level. However, LUV's book value is larger. This indicates that UAL is in a positive and optimistic development trend.

**Table 4.** Comparison of UAL's Investment with its Competitors

	ROE	ROA	market-to-book ratio
UAL	0.107	0.011	1.989
AAL	0.060	0.005	1.491
LUV	0.050	0.015	1.509
ALK	0.015	0.004	1.169
SAVE	-0.353	-0.060	1.155

#### 4. Strategic Valuation

UAL begins its annual report by acknowledging the continued impact of the COVID-19 pandemic on its business in the first half of 2022. To evaluate its strategic valuation, it must consider the assumption that COVID-19 will continue to have an influence on United Airlines' business in 2022, but its impact will be relatively small compared to 2020 and 2021. Moreover, the global economy will gradually recover in 2022 and travel demand will gradually rebound.

UAL outlines its strategic plan as "United Next," aimed at transforming the customer experience and enhancing the company's earnings power. The key elements of this plan include fleet expansion, as UAL has placed significant orders for new Boeing and Airbus aircraft to modernize its fleet and enhance its capacity. Additionally, the company plans to reduce carbon emissions per seat by retrofitting its planes, replacing less efficient aircraft, and implementing other fuel efficiency measures. Operational excellence is another crucial aspect of the plan, with UAL aiming to improve on-time performance, particularly at congested airports, through the use of technology. Cost control is a key focus as well, with the company intending to manage its cost per available seat mile (CASM-ex) efficiently, focusing on driving margin improvement. Lastly, UAL emphasizes excellent customer service as a core component of its strategy, recognizing the importance of customer satisfaction and loyalty.

A comprehensive risk assessment is integral to strategic valuation. Despite the relatively diminished impact of the pandemic in 2022, the lingering uncertainty associated with COVID-19 could still influence United Airlines' operations, leading to challenges like variability in demand and continued travel restrictions. Furthermore, the airline industry's historical character of intense competition necessitates that United Airlines skillfully navigate competitive pressures related to pricing, routes, and service offerings. Fluctuations in fuel prices also pose a significant risk to United Airlines' cost structure, making effective fuel cost management imperative for sustaining profitability. Additionally, the company's substantial plans for aircraft acquisition and fleet modernization require significant capital investments, and inadequate capital availability could adversely affect its financial health. Global macroeconomic factors add to the complexities, as the instability of these conditions can impact the airline industry, influencing factors such as demand fluctuations and foreign exchange rate volatility. Lastly, the financial statements in UAL's 2022 annual report reveal that United Airlines carries a substantial fixed debt load, necessitating regular interest and principal payments. Ensuring the sustainability of the debt structure and compliance with debt covenants is essential for maintaining credit ratings and investor confidence.

In conclusion, UAL's strategic valuation is based on a comprehensive plan aimed at growth, customer satisfaction, and sustainability. While the COVID-19 pandemic and economic factors

present risks, the company's strategic initiatives, fleet expansion, and cost control measures position it for long-term success in the airline industry.

## 5. Conclusion

In conclusion, UAL delivered a solid performance in 2022, outpacing many of its industry peers in various aspects. However, its substantial debt load has posed challenges in certain areas. When considering its strategic objectives and plans for 2022, along with the company's operational reality and the market's valuation of the airline industry, this paper anticipates a positive and robust future for UAL. The obstacles faced by UAL, which include the impact of the pandemic on the aviation sector and the inherent challenges of expanding scale to be a major player in the airline industry, seem to be part of the inevitable journey towards long-term growth and sustainability. With a well-defined strategic direction, investments in fleet modernization, a focus on customer service, and efforts to control costs, UAL appears to be on the right path to capitalize on the anticipated recovery in air travel demand. While the company's substantial debt warrants careful management, its commitment to improving operational efficiency and delivering an enhanced customer experience bodes well for its future prospects. In light of these factors, UAL's trajectory appears promising, and it seems poised to navigate the headwinds and harness the opportunities in the ever-evolving airline industry.

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