A Valuation Study of McDonald's —— Based on Price-Earnings Ratio and Price-Sales Ratio

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Abstract. The thesis studies the company McDonald's, starting from a basic aspect of the analysis, containing its founding time, capital structure, major shareholders and a financial summary. It then focuses on its financial analysis, profit analysis and relative valuation. The financial analysis includes the business model of the company, business strategy and an analysis of its business segments. The revenue analysis of McDonald's adopts the strategy of sub-market research, specifically analyzing its revenue growth points and bottlenecks. As for the relative valuation of the company, this paper adopts the price-earnings ratio (P/E) method, as well as price-sales ratio approach (P/S). In addition, during analysis and calculation, several fast-food companies in the market are selected for comparison. In view of the leading position of McDonald's through the fast-food industry and the fluctuation of the current market environment, it is very necessary to do valuation analysis of McDonald's as the valuation of the company has practical application value.

Keywords: Profit Analysis, Business Analysis, Relative Valuation.

1 Introduction

1.1 Importance of valuation

Value plays a significant role in measuring the performance because of the consideration of the long-term interests of all stakeholders in an enterprise instead of the interests of shareholders. There has been an increasing number of research showing that companies which maximize value for their shareholders in a long term also create more job opportunities, offer a better treatment to their current and former employees, give their customers more satisfaction, and shoulder a greater burden of corporate responsibility compare to those shortsighted rivals. Competition among value-focused companies also helps to ensure that capital, human capital, and natural resources are used efficiently throughout the economy, enhancing everyone's standard of living [1].

McDonald's is an American multinational fast-food chain founded nearly seven decades ago. Through the past five years, McDonald's stock has experienced a process from a huge shock to a strong rebound, showing an overall growth trend. Particularly in the Q1 2020, stock price fell more than 30% to only about $148.And in the resent

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2024, the stock price witnessed a small decline due to unstable global economic conditions and industry challenges, so whether the stock price truly reflects the value of McDonald's Corporation, the paper will conduct a valuation analysis based on historical financial data and reference method (P/E and P/S) in order to judge whether it is the true value or a price that has received the influence of short-term economic factors and has shifted the company's value from its true value. And the paper will include the financial analysis, profit analysis and relative valuation in order to help investors evaluate the market value of McDonald’s and future growth potential as well as offering valuable insights into consumer demand, market competition and the economic environment.

1.2 Business description: McDonald's Corporation

The company is the world’s leading global food service retailer with nearly 40,000 locations in over 100 countries as of 2024 Q3, which originated in Southern California in 1995 and the founder of the company is Raymond Kroc. The enterprise mainly sells fast food and it headquarter is in Chicago currently.

McDonald's is the world's biggest fast-food chain. Net sales break down by type of restaurants: The company owned 38,169 franchised restaurants, including 8,220 affiliates, which together represented 60.9% of its portfolio at the end of 2022.Company-operated restaurants accounted for 37.7% with 2,106 locations, while other operations were only about 1.4%. In addition, 58.6% of net sales are abroad. The amount of employees was 150,000 at the end of 2023 [2].

1.3 Major shareholder of McDonald’s

Table 1. Shareholder information of McDonald’s

Shareholder name	Type of shareholder	Percentage of shares
Public Companies and Individual Investors		46.53%
other Institutional Investors		33.01%
The Vanguard Group	other Institutional Investor	9.644%
BlackRock	other Institutional Investor	5.533%
Mutual Funds		20.26%
Vanguard Index Funds	Institution	6.87%
Fidelity Concord Street Trust	Institution	1.62%
Insiders		0.20%

The ownership structure of McDonald's stock is a mix of institutional, public companies, individual investors, mutual funds and insiders. Approximately 57.95% of the company's stock is owned by public companies and Individual Investors, 22.16% is owned by other institutional investors while insiders only make up about 0.20% [2].

1.4 McDonald’s position in industry

McDonald’s corporation is a global leader in the fast-food industry, with a significant market share and considerable influence. It has over 40,000 stores in more than 100 countries and regions worldwide.

Table 2. Revenue of different fast-food companies

	MCD	**KFC**	**Domino’s Pizza**	**Shake Shack**	**Average**
2021	23.22	27.80	4.357	0.740	14.03
2022	23.18	25.96	4.537	0.900	13.64
2023	25.49	22.63	4.479	1.088	13.42
TTM	25.76	25.07	4.612	1.169	14.15

The annual revenue of the enterprise has remained at about 24billion from 2021 to the end of 2023, ranking in the forefront of the fast-food market. The table counts the annual incomes of four prominent global fast food companies including McDonald's, which is at the top of the list, on par with KFC. According to the latest data, McDonald's hit an average of nearly 2.6 billion, which could be the greatest through these four companies [2].

1.5 McDonald’s financial performance

America experienced the largest market of McDonald’s and the branch is 95% as of December 31, 2023.

International operating markets include countries and regions where the firm operates and franchises restaurants, such as Australia, Canada, France, Germany, Italy, Poland, Spain and the United Kingdom. As of December 31, 2023, the segment's franchise ratio was 89%.

The majority of International Developmental Licensed Markets & Corporate includes the development license market and affiliated market within the McDonald's system. And the corporate activities are also included in such segment. As of December 31, 2023, the franchise rate for this segment was 98% [3].

2 Business Analysis

2.1 Business Analysis

Business Mode. McDonald’s global brand is widely recognized with marketing, promotional and public relations activities designed to put the customer in mind. Based on the philosophy of QSCV (Quality, Service, Cleanliness and Value), and its global strategy and its target is “to dominate the global food service industry” [4]. The company relies on the a ‘three-legged stool’ business philosophy that establish a strong relationship through the close corporation of suppliers, employees and franchisees. The company also make Happy Customers means Happy Employees as a rule and figured out very early in their business; the possible way to achieve happiness among customers is through happy, motivated and committed employees. They pursued the customer first strategy to start both employees and customer’s well-being [5]. Such system which based on trust and shared values has offered McDonald’s a competitive advantage to provide high-quality products at reasonable price compare to the companies, like KFC, Burger King.

Business strategy.

Operating McDonald's restaurant directly. The Company franchises McDonald's restaurants to serve a local menu of quality food and beverages in communities in over 100 countries and territories worldwide. At the end of 2023, there were approximately 95% of the 41,822 McDonald's restaurants franchised.

Globalization strategy and localization. Firstly, it is the combination of two management styles, including franchising and self-management. Through the worldwide standards and training operations, McDonald's is a global brand, but the company is also local, offering franchises to local entrepreneurs, sourcing food locally and targeting specific local consumer market demands [6]. Franchising allows for rapid market expansion while direct operation could make ensure that the control of the company over key markets. Such enterprise uses both modes of operation rationally in order to maximize its profit.

Secondly, it is the combination of globalization and localization of McDonald's. The company maintains a consistent brand image globally, while setting up localized menus more in line with local eating habits and cultures at the same time, like beefless burgers launched in the Indian market and the rice set meal in the Asian market. In India, in particular, the company has pioneered the offering of non-beef and non-pork products in this nation, following its philosophy of being sensitive to local food and cultural preferences. Over 70% of the menu in such country has been developed locally with complete separation of vegetarian and non-vegetarian products, from the food processing plants to serving customers [7].

Efficient supply chain management. Through the long-term cooperation between the enterprise and its trading partners, the company has owned a relatively strong chain management which represents that the raw materials of such company could in a high quality with lower price.

Innovative menus and products. The company regularly co-branded with major brands and movies animations, such as the cooperation with the minions "Despicable Me 4" in July 24, which not only released the related toys, but also produced a new product: Banana Split McFlurry, this cooperation also generated a certain growth of sales globally.

McDonald's also places significant emphasis on packaging design, especially for the design of its paper bags. Compared to the plastic bags used by KFC, the paper bags have lots of merits.

Firstly, aesthetic appeal. The company adopts a kind of minimalist style. The design primarily focuses on the brand logo and color scheme, using simple graphics and text. The most commonly utilized background colors are brown or beige. Such brown paper bag has been in use at McDonald's since 1990, emphasizing environmentally friendly.

Secondly, visual and tactile, with a high degree of recognition. On the one hand, the tactile impression of the paper bag offers customers a better sensory experience which improve the appetite of customers and increase goodwill to the brand. On the other hand, using its iconic golden ‘M’, as well as red and yellow color scheme have a strong visual impact and will reinforce the brand awareness.

The final point concerns about environmental protection. In recent years, McDonald's paper bags have emphasized their recyclable or degradable materials, often come with some environmental labels or explanatory text to demonstrate the company’s sense of social responsibility [8].

Digital Services. Not only the online ordering services offered by its app and the mini program, but also the automatic ordering machines in its offline stores, which make such company more technological. McDonald’s corporation has designed an entire vary of systems like intranets, wireless applications or innovative booth systems, all supported Day’s Communication [9].

Competition and challenge. The unpromising international situation and unfavorable economic conditions, including inflationary pressures, have impacted the McDonald’s financial results negatively. With decreasing disposal income, consumers spend less money than before and may prefer to cook by themselves rather than order takeout or eat outside, resulting in lower sales for McDonald’s under continued adverse economic conditions.

The response McDonald’s taken can be divided into three parts: menu diversification, marketing campaigns and offering healthier options. By creating new menu items and expanding choices, such as "Create Your Taste" program, McDonald's aims to increase the market share and appeal to customers seeking different and healthier options.

The company is also famous for its marketing campaigns, like 'Refresh' which is one of the main campaigns started in 2015, focused on enriching customer experience through modern decor, digital menu boards and the introduction of the 'create your taste' concept, contributing 26% increase in share value since 2015.

McDonald’s has also introduced healthier menu options, such as "A la Carte" menu, which provides the customers with a complete meal with a healthy choice of side dishes and a milk drink instead of the usual soft drink instead of usual soft drinks.

2.2 Financial analysis

Balance sheet.
The table illustrates the financial data of McDonald’s from 2021 to H2024.Total assets is in a fluctuating trend, peaking at $56.15 billion in 2023. Total liabilities and debt of the company also fluctuated, with both decreasing slightly by H1 2024. In comparison, total equity remained negative over the whole period, around -5 billion, whereas the debt-to-asset ratio consistently exceeded 90%, with the highest ratio of 96.65% in H2024 [2].

The company has maintained the poor state that the liabilities were over assets from 2021 to H20224. However, it also means that McDonald's has a relatively high industry position and market confidence.

The total equity of McDonald’s reflects that the company is actively responding to the challenges brought by the epidemic, which has chosen to optimize its capital structure by increasing financial leverage, and may result in a negative book value for its total equity. However, it does not necessarily indicate a deterioration in McDonald's financial position. The company may use this structure to boost ROE even if total equity is negative. Additionally, a higher debt ratio represents a larger interest tax shield, and the enterprise takes advantage of such provision, thereby reducing tax pressure and financial burden. And the investors may view it as manageable and provide a long-term and stable financing support due to the optimistic market about its future. Additionally, it could be strategic expansion. As McDonald's is aggressively expanding its market areas and making a great job in investment of new product, which strengthen its market position.

High debt-to asset ratio represents that debt the firm owned is in a high level and the enterprise might have serious financial pressure. And the ability on repaying could be weak. However, in another case, it could be a way for the company to expand the business through borrowing. McDonald's experienced a high debt-to asset ratio through the four years, which could be caused by the outbreak of COVID-19 at the end of 2019.

Table 3. Financial data of McDonald's

	2021	**2022**	**2023**	**Q2 2024**
Total Assets (Bill)	53.85	50.44	56.15	53.80
Total Liabilities (Bill)	58.46	56.44	60.85	58.63
Total Debt (Bill)	49.35	48.70	53.09	52.00
Total Equity (Bill)	-4.60	-6.00	-4.71	-4.82
Debt-to-Asset Ratio (%)	91.64%	96.55%	94.55%	96.65%

Cash flows.

Net cash flow from operating activities was in a fluctuating trend from $9.14 billion to $9.60 billion between 2021A to 2024H1.The company witnessed an increase of the Cash provided by operations while 2023 experienced the highest point ($9.61 billion) because of improved operating performance.

The cash used for investment activities were negative through these four years and increased from $2.17 billion in 2021 to $5.11 billion in 2024. It could be resulted in the increasing capital expenditures as the continued investment is usually for future growth and better competitive.

Cash used for financing activities over the same period was also a fluctuation, which floated between $4.37 billion in 2023 and $6.58 billion in 2022.And the overall trend is an incline from $5.60 billion to $5.52 billion because of the decreasing trend of bond issuances in the resent years.

McDonald's cash and equivalents balance was also a fluctuating trend, which rolled between $0.792 billion in 2024H and $4.71 billion during 2021among the four-year period.

Table 4. Cash flows of McDonald's

items	2021A	2022A	2023A	2024H1
Financial Data (Bill)				
Net cash flow from operating activities	9.14	7.39	9.61	9.60
Net cash flow from investment activities	-2.17	-2.68	-3.18	-5.11
Net cash flows from financing activities	-5.60	-6.58	-4.37	-5.52
Net increase in cash and cash equivalents	4.71	2.58	4.58	0.792

2.3 Revenue analysis

The global comparable sales increased 9.0% in 2023, which was mainly due to the continued implementation of the Accelerating the Arches strategy, which led to strong sales results across all segments.

U.S. witnessed an increase of comparable sales which was 8.7% in the same year, which benefited from strong average cheque growth driven primarily by the rise of strategic menu pricing, successful menu and marketing campaigns and continued growth in digital and delivery services.

Comparable sales for international operations experienced an increase of 9.2%, reflecting division-wide comparable sales growth, driven primarily by the United Kingdom, Germany and Canada.

Comparable sales in the International Developmental Licensed segment shot up 9.4% which means strong comparable sales through all areas [3].

Table 5. Revenue of McDonald's

Items	2021A	2022A	2023A	2024H1
Financial Data (Bill)				
Gross income	23.22	23.18	25.49	25.76
Gross margin	12.58	13.21	14.56	14.67
Net profit	7.55	6.18	8.47	8.31

In these five years, the revenue of McDonald's is a fluctuating state, but basically stable at about 20 billion dollars. The annual revenue of McDonald's in 2020 was the lowest point in these five years. Through the information and the annual report, it could be led by the global outbreak of the New Crown Epidemic. The outbreak has caused many countries to limit restaurant hours to varying degrees, the number of people who can dine in, and even in some cases, restaurants have had to suspend operations. These measures have directly impacted the dining choices of consumers, reducing the frequency of eating out, which in turn has resulted in a decline in the revenue.

Table 6. Future revenue

	2024E	2025E	2026E
Revenue	27797.80	30690.07	33883.27

By using such formula

$$2023\ revenue*(1+growth\ rate) \tag{1}$$

The revenue for the next three years can be estimated, which could be predicted to an increasing trend, going from roughly $27 billion to over $30 billion between 2024E to 2026E. Although the total debt of McDonald's is still negative currently, as well as the debt-to-asset ratio remain relatively high through these years, but if the company might use these to expand their capital, then it is likely that the revenue of McDonald's will continue to rise and get better in the future.

Table 7. Revenue among three different markets

	2021A		2022A		2023A	
	operating revenue	proportion	operating revenue	proportion	operating revenue	proportion
U.S.	8,711	38%	9,421	41%	10,384	41%
International Operated segment	12,094	53%	11,164	49%	12,251	49%
International Developmental Licensed segment	2,068	9%	2,269	10%	2,543	10%
Total	**22,873**		**22,854**		**25,178**	

For the revenue in three exact areas, the proportion of total revenue in International Operated segment was the majority, followed by the US and International Developmental Licensed segment.

Table 8. Ratios of McDonald's

Items	2021A	2022A	2023A	2024H1
Return on equity (%)	-129.42%	-99.11%	-166.57%	-172.91%
Gross profit margin (%)	54.17%	56.97%	57.12%	56.97%
Net interest rate on total assets (%)	14.40%	12.41%	16.08%	15.42%
Asset-liability ratio (%)	-7.74%	-5.98%	-7.89%	-7.99%
Current ratio	1.78%	1.43%	1.16%	1.08%
Quick ratio	1.76%	1.41%	1.16%	1.06%

2.4 Valuation

Table 9. PE/PS ratios of top firms in fast-food chain

	PE	PS

MCD	25.13	8.06
Yum! Brands, Inc	24.85	5.37
Restaurant Brands International Inc.	17.21	2.91
Domino's Pizza	25.10	3.14
Darden Restaurants, Inc.	18.45	1.65
Chipotle Mexican Grill	55.07	7.18
Median	**24.98**	**4.26**
Average	**27.64**	**4.72**

For the median PE/PS:

$$Market\ value = Net\ profit * PE \tag{2}$$

Valuation= net profit * PE = 8.31 (Bill) *24.98 =207.58

$$Market\ value = Sales\ revenue * PS \tag{3}$$

Valuation = revenue * PS = 25.76(Bill) *3.89 =109.73
For the average PE/PS:

$$Market\ value = Net\ profit * PE \tag{4}$$

Valuation= net profit * PE = 8.31 (Bill) *27.64 =229.69

$$Market\ value = Sales\ revenue * PS \tag{5}$$

Valuation = revenue * PS = 25.76(Bill) *4.72 =121.59

Through the PE and PS data as of August 2022 from six enterprises that includes McDonald's, the median and average of those figures has been solved out.
For the median PE/PS, the valuations are counted for 207.58 million and 109.73 million respectively.

Company with a higher P/E ratio than a rival in the same area of business usually represents bad value for investors. The forward P/E ratios contain the average expectations of the future growth prospects. A high P/E ratio usually indicates a significantly growth of future earnings through the market expects [10]. P/E ratio is more suitable for companies with stable earnings and could be helpful to compare companies within the same industry. In comparison, P/S is more suitable for early-stage or high-growth companies that have yet to show profitability, or for unprofitable companies, where the method can better reflect the future potential of these firms. As a result, since McDonald's is a company which owns a stable revenue, P/E ratio might be better.

For the difference between the calculation by average or median P/E ratio, P/S ratio, the average reflects a central tendency of the overall data which is easier to understand and calculate. But the mean can be changed by the extreme values or outliers which can make it unrepresentative. The median is not affected by extreme values, so the results are more accurately when reflecting the valuation levels of most companies. In particular, if the data is asymmetric or outliers exist, median is a more robust indicator. However, the method does not care about all variations in the data which may ignore some valuable information. To sum up, the valuation calculated by the median PE/PS can be a truer result as the PE of Chipotle Mexican Gril is much higher than the average level, and the valuation of McDonald's is around 200 million.

3 Conclusion

Over the past five years, McDonald's earnings have generally increase steadily, despite multiple challenges and market volatility. The global revenue of the company ripped significantly in 2020 due to epidemic, but rebounded strongly in 2021 and 2022, returning to near pre-pandemic levels. In terms of global market performance, the proportion of the US market among the international market experienced a gradually rise, reaching nearly half in the latest two years. With a market value exceeding $200 billion, the competitive position in the global fast-food industry is evident, play a significant role in profitability, management, and market share for investors and analysts.

There are still some limitations, which can be divided into three categories. Firstly, only one method has been used instead of multiple methods, when calculating the forecast of future revenue, which may not make accurate predictions due to relatively large errors. Secondly, there are insufficient sample data of the companies through P/E and P/S methods in order to calculate the mean and median, which might lead to inaccurate values that far away from the real value of the market. In addition, through the calculation of McDonald's relevant valuation, only two methods are involved instead of a variety of methods for prediction and verification. For example, SOTP method was not included in this paper, which might not be evaluated accurately.

And for the further research, more methods will be included to calculate the future revenue and relevant valuations to make the results more rigor as well as timeliness to enhance credibility.

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