Krause Fund Research

Fall 2020

McDonald's Corporation (NYSE: MCD)

Consumer Discretionary

Stock Rating: *SELL*

Date: *November 16th, 2020*

Analysts

Jackson Castellon
jackson-castellon@uiowa.edu

Zachary Graefen
Zachary-graefen@uiowa.edu

Cade Chadima
cade-chadima@uiowa.edu

Nate Wegener
nathan-wegener@uiowa.edu

Carter Gornick
carter-gornick@uiowa.edu

Investment Thesis

We recommend a **SELL** rating for McDonald's Corporation.

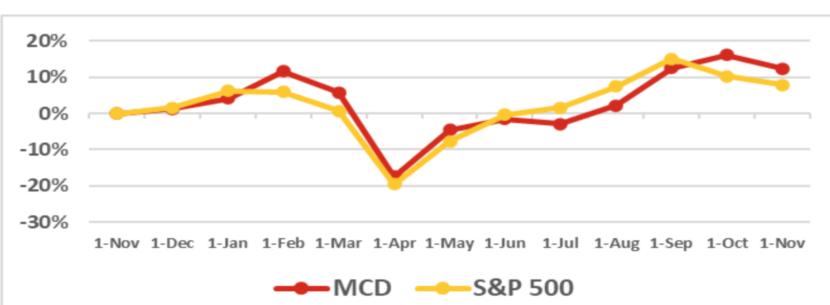
Drivers of Thesis:

- **Declining revenue** and low earnings growth signals that McDonald's is struggling to keep pace with a growing QSR industry. We have factored this into the model by assuming a 1% growth of revenues in steady state
- **Economic uncertainty** due to COVID-19 continues to reduce sales which accounts for our forecast of 11% dip in revenue for 2020
- **Increasing amount of debt** primarily used for repurchasing shares instead of reinvestment into the company does not generate organic growth

Risks to Thesis:

- **Revenue and earnings stability** due to the strategic transition to the franchising operating model
- **Increase of technological innovation** in the quick-service restaurant business could result in surprise upside
- **Faster than expected** COVID-19 recovery timeline may boost performance in the short-run

12 Month Performance



Target Price: $215 - $225

Valuation Methods

DCF/EP	$224.30
DDM	$212.48
Relative PE (EPS '20)	$218.73

Price Data

Current Price	$216.73
52 Week Range	$124.23 - $231.91
Consensus 1yr Target	$238.30

Key Statistics

Market Cap (B)	$158.66
Shares Outstanding (M)	758.10
Beta	0.84
Dividend Yield	2.38%
EPS (2021E)	$7.71

Performance Highlights

Profit Margin	43.03%
Operating Margin	28.59%
ROA (TTM)	9.72%

Company Description

McDonald's is an American quick service restaurant franchise famous for fast food meals that satisfy breakfast, lunch, and dinner. McDonald's operates out of approximately 40,000 restaurants, 94% of which are franchised, and the company has locations in 118 countries and territories worldwide. McDonald's serves around 1% of the world's population every day. The current President and CEO is Chris Kempczinski who took the position last year.

Executive Summary

The Consumer Discretionary team's sell recommendation on McDonald's Corporation is the result of our thorough analysis of the company's financial condition, its products and markets, possible catalysts for growth, the potential impacts of COVID-19, and the broader economic environment.

McDonald's is one of the most well-known brands in the world. The company offers a menu that attracts a very wide customer base from all over the globe. McDonald's generated $21 billion of revenue in 2019, which is down 24% from 2012. Despite this, the company continues to pay increasing dividends, repurchase shares, and issue long-term debt.

In recent years, McDonald's investment in modern technology such as their mobile application and ordering kiosks is at the forefront of the industry. Such investment has paid off during the COVID-19 pandemic and has bolstered McDonald's leading market share position in the quick service restaurant business.

The company is not immune to the effects of COVID-19 as comparable sales, earnings, and store visits are all down year-over-year. As of now, the world is seeing a resurgence of the coronavirus which is likely to have the largest impact on McDonald's international market, where dining-in is more common than drive-thru.

Our team's sell recommendation is based on the cumulation of these points which we will delve into throughout this report.

Economic Outlook

COVID-19 and the Economy

The COVID-19 pandemic continues to be both a public health and economic crisis. As of November 2020, 10.3 million people have been infected and 240,000 have died in the United States. COVID-19 continues to threaten all industries of the economy, specifically, quick service restaurants (QSR). Without a current vaccine for the virus, we expect increased economic instability as we enter 2021.

The Federal Reserve has fully exercised its powers of direct lending to households, employers, and financial markets along with near-zero interest rates and other policies to balance the market. As the Federal Reserve works to stabilize the economy, much of America faces financial distress as we end 2020 on the hopes of an added stimulus package.

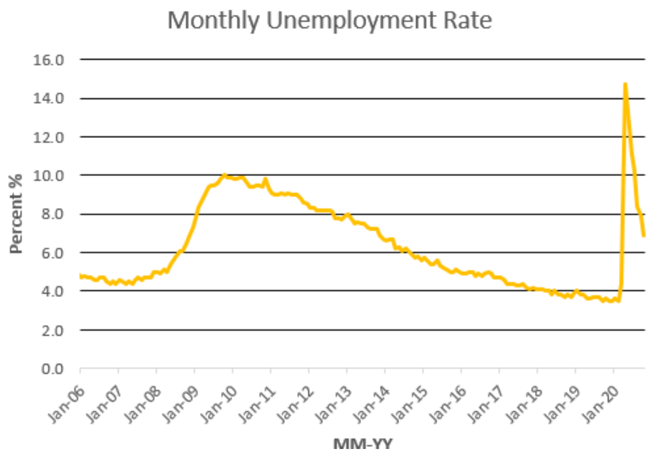
The impacts of these events directly affect McDonald's and the rest of QSR. While most companies struggle to navigate the crisis, McDonald's experiences effects to its business of what is expected to be about $1 billion loss in net income from 2019 as seen in the financial statements attached to this report. Although McDonald's is losing a portion of its customers due to a weak consumer effect, we expect that the company's competitive advantage in reputation and operations will help their recovery.

Analysis of Key Economic Indicators

Unemployment and Labor Force Participation Rate(s)

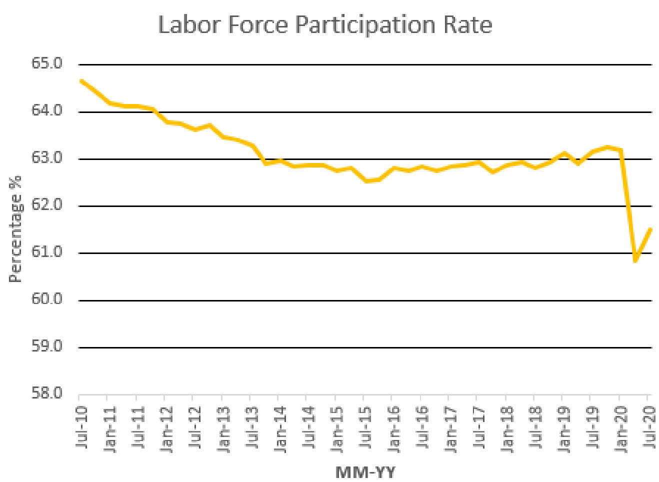
The unemployment rate is a key metric to gauge the health of the economy using the portion of the working population that is employed. Importantly, the unemployment rate helps value consumer income and spending. With the help of employment numbers, we achieve a greater understanding of discretionary spending, which is especially conservative in high unemployment conditions.

The economic shutdown prompted by COVID-19 drove the United States' unemployment rate to 14.7% in February from lows of 3.5% leading up to the pandemic. For comparison, the peak unemployment rate following the '08-'09 financial crisis was 9.9%.[1] As unemployment increases, the amount of consumer spending declines. The chart data found on FRED[1], shows a significant retreat in the unemployment rate.



Source: https://fred.stlouisfed.org/series/UNRATE[1]

Initially, this appears to be a positive indicator, however, the retreat is caused by a decrease in labor force participation rather than people finding jobs. The explanation for what appears to be job recovery is the loss of labor force participants as seen in the trend shown by the participation rate.[2]



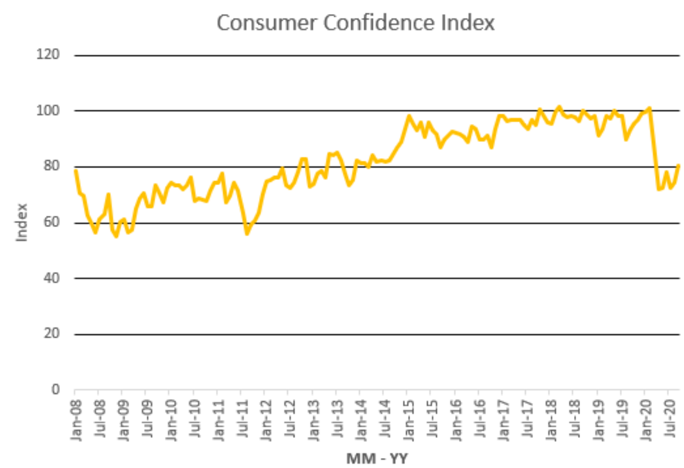
Source: https://fred.stlouisfed.org/series/CIVPART [2]

The impact of high unemployment on the consumer discretionary sector depends on the consumer's willingness to purchase non-essential goods and services. When households are without income, general spending at places like restaurants declines.

We expect unemployment to return to 7.1% in the short-term 2020 and through early 2021 because of increased lockdown measures. We predict the virus will be under control by the end of 2021, which will cause the unemployment rate to settle to 5.5%.

Consumer Confidence Index (CCI)

Consumer confidence is another key measurement of the consumer's perspective of the economy. We are able to gather an understanding for whether consumers are optimistic or pessimistic towards the market. And, like the unemployment rate, CCI can help quantify spending across industries. When consumer confidence is low, our expectation of spending is low. The consumer discretionary sector is enduring the effects of unconfident consumers.



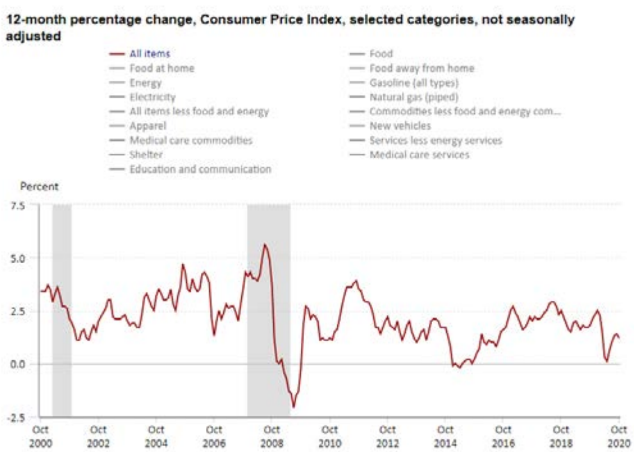
Source: https://data.sca.isr.umich.edu/data-archive/mine.php[3]

As the chart above displays, University of Michigan's CCI data[3] consumer confidence metrics were exceedingly high relative to historical data. Consumer confidence had been trending at 100 leaning towards upside momentum. However, the pandemic rattled the entire economy and panicked consumers. With hope on the horizon of a vaccine from Moderna or Pfizer[4], our team predicts confidence to remain depressed until a vaccine is readily available. We expect confidence to return to 2019 levels when a vaccine becomes widely distributed, mid-2021.

Our forecast anticipates consumer confidence to return to the 85-95 range and continue to the upside once a vaccine becomes available. We believe the financial performance of quick service restaurants, specifically, will continue to be affected negatively until consumer confidence recovers.

Consumer Price Index (CPI)

The Consumer Price Index (CPI) measures changes in the weighted price of an average basket of consumer goods and services. CPI is an important indicator used to gauge the health of the economy, primarily based on inflation. CPI tracks increases and decreases in basic consumer goods which is helpful to understand the fluctuation in prices. Analysts rely on this indicator to examine the impact of policymakers on the market(s) which are important to valuation and forecasting assumptions. The consumer discretionary sector relies heavily on the CPI as discretionary spending varies with the price-average basket of consumer goods.



Source: bls.gov [5]

The preceding graph shows the historical trend of CPI which is near 1.4%. The CPI represents our inflation. Currently, the 1.4% is less than the Federal Reserve's target inflation rate of 2%. As the inflation rate rises with the FED's benchmark, prices for company operations will rise and increase the price for common goods. Both increase in prices and increase consumer goods; this will hinder McDonald's performance.

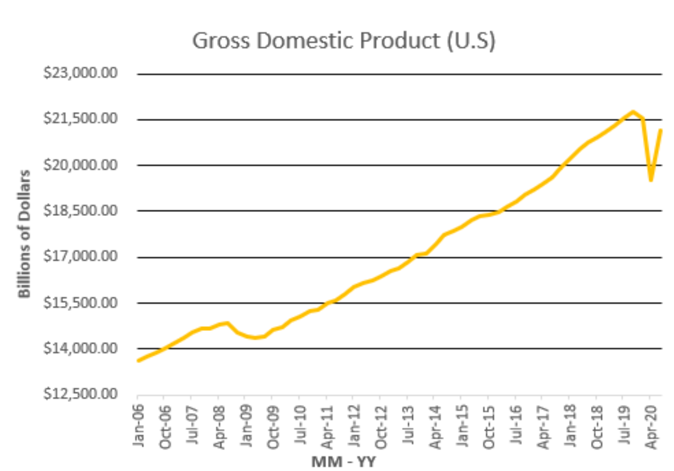
Interest Rates

The United State interest rates are essential in many aspects. The fundamental consideration that deserves attention is the low interest rate environment. At pandemic lows, the United States 10-year rate sunk below 100 basis points, and 30-year rate plummeted to 150 basis points.[6] The low interest rate economy has put pressure on lenders to trade debt for low returns and caused buyers to struggle to find safe, high yielding, returns in the market.

McDonald's restaurants are largely funded by debt as seen in their income statements. Increasing debt is a concerning item. We are interested in McDonald's decision to act on low borrowing opportunities to decrease their current debt holdings or lower borrowing rates. We have forecasted the company to grow their debt and have adjusted for lower interest rates.

U.S Real Gross Domestic Product (GDP)

United States Gross Domestic Product is a significant measurement of the economy's total goods and services production on an annualized basis. In times of economic expansion, we would expect GDP to grow steadily. As the economy grows, we expect the sectors of the economy to grow in tandem, which is a key determinant to measure the growth of any business. GDP has maintained impressive growth following the '08 financial crisis but declined 10.25% during the pandemic which has recovered to a loss of 2.70% since highs in 2019.



Source: https://fred.stlouisfed.org/series/GDP [7]

GDP is an important driver for our company growth valuation and represents the recovery we expect McDonalds operation and sales to recover. We anticipate GDP to decline into the second quarter of

2021E and recover in 2022E with a steady state growth of 0.95%.

Industry Analysis

Industry Description

Restaurants and food services are a $600 billion industry in the United States and are so widespread that nearly half of all adults have been employed at a restaurant or foodservice company at some point in their lives. McDonald's specifically operates in the restaurant industry. The restaurant industry is split into two main segments: quick service and casual dining. The quick service food industry can be further broken down into fast-food and fast-casual options. Fast-food restaurants operate with a drive-thru capability, while fast-casual restaurants typically follow an in-store ordering scheme similar to the operations of Chipotle. Casual dining restaurants are sit-down restaurants that offer more quality food than the typical quick service restaurant. McDonald's operates in the fast-food segment of the industry. According to IBISWorld, the revenue growth of the fast-food segment decreased from 4.39% in 2017 to 1.38% in 2019 before seeing a 13.05% decrease in revenue in 2020 due to the pandemic.[8]

These are cyclical industries strongly tied to the performance of the broader economy. When the economy contracts, people cut back their spending to save money which typically includes not eating out. Fortunately for McDonald's, fast-food restaurants have performed better during the pandemic than casual dining options as drive-thru, takeout, and delivery are the only options to eat outside of the home in many regions. That said, the uncertainty surrounding post-pandemic consumer trends and coronavirus vaccine timing present risks to the future of the industry.

COVID-19 Impact on the Industry

The COVID-19 pandemic has decreased many key external drivers in the industry such as consumer spending, consumer confidence, domestic trips by US population, urban population, and has also given consumers more flexibility to pursue healthy eating options. Since the onset of the pandemic, many consumers have feared contracting the virus and have opted to stay home. According to QSR Magazine, it is estimated that 67% of all meals were eaten outside of the home. As of May of 2020, that number had dropped to 45% of all meals due to pandemic lockdowns.[9] Although these numbers will more than likely realize a pullback when restrictions and consumer fears settle, we believe that the impacts of the pandemic will continue affecting the industry post-lockdown. According to Wall Street Journal, food company executives are expecting new consumer habits of health and cooking at home to stick after the pandemic.[10] As long as the coronavirus impacts loom on the industry, consumers will continue to reap the financial and health benefits of staying in.

Industry Development and Trends

Due to its saturation, the nature of the fast-food restaurant industry is trend driven, meaning that industry activities are constantly changing, and to remain competitive, companies must adapt to the environment. Current industry trends include increasing breakfast options, a more health-conscious consumer, and adoption of new technology.

Breakfast

Wall Street Journal reported that fast-food breakfast visits and sales were up 7.7% and 31%, respectively, in the five years leading up to October of 2019.[11] The pandemic has stunted this growth heavily as many consumers are in a time-crunch to get to work, causing McDonald's to get rid of all-day breakfast to stabilize their efficiency. That said, McDonald's and industry competitors such as Wendy's, Taco Bell, and Burger King have added menu items and have continued heavy breakfast advertising during the slowdown. We believe these competitors are trying to position themselves to compete well against peers in the breakfast space once coronavirus impacts settle.

Health

As the health and wellness trend continues to pick up steam with the millennial generation, fast-food restaurants have pushed to add fresh produce and plant-based meats into their menu. McDonald's recently introduced its plan for a plant-based burger with the tentative name of the "McPlant". Burger King was the first fast-food chain to introduce a plant-based burger with its Impossible Whopper, which received good traction from customers. Additionally, smaller quick service restaurants are beginning to invest in fresh produce to attract health-conscious consumers. For example, Sonic Drive-in cuts their onion rings from fresh and organic onions.[12] When the pandemic slows, we believe larger fast-food chains like McDonald's will begin to introduce similar options to compete.

Technology

Technological innovation has been a general trend in most industries in recent years, but it is becoming increasingly important in the fast-food industry as companies look to gain a better understanding of restaurant traffic and consumer demand.

Companies in the industry have made large investments in technology to gain insights into consumer behavior, such as McDonald's acquiring Apprente to create McDonald's Tech Labs.[13] The pandemic has caused a major shift in consumer demand and has caused many players in the industry to utilize apps and data more than ever for analytics and mobile ordering. We believe that this trend will continue even after the pandemic has subsided.

Additionally, with the onset of the Covid-19 pandemic, consumers are ordering delivery and takeout much more frequently. According to the National Restaurant Association, "three in five U.S. consumers order delivery or takeout at least once a week".[14] This has given fast-food restaurants another outlet to push back against the decreased traffic presented by the pandemic.

Competitive Analysis

Markets and Competition

The competitive landscape for McDonald's in the public market includes Yum! Brands, Inc., Yum! China Holdings, The Wendy's Company, Restaurant Brands International, Starbucks, Domino's, Dunkin' Brands. These companies all operate in the quick-service restaurant industry. COVID-19 has caused major changes in the operations of fast-food restaurants compared to companies that focus on dine-in, therefore we believe the most relevant comparisons are quick service restaurants. Additionally, we have included Starbucks and Dunkin who compete with McDonald's for breakfast sales, and Dominos who is a leader in pizza delivery and technological innovation.

Porter's Five Forces

Threats of new entrants (Moderate): The fast-food industry has limited barriers to entry and starting a restaurant is relatively cheap. However, industry leaders such as McDonald's and Yum! Brands hold a large market share and high brand recognition, which would take a new chain a long time to replicate. Forward-looking, companies in this industry are more concerned about current rivals than incoming competition.

Threats of substitutes (High): There are always plenty of cheap and quality substitutes for fast food, specifically at the grocery store. Due to COVID-19 forcing people to be at home more often, many consumers have been cooking and home and choosing grocery substitutes more frequently. We believe this trend will continue to impact the industry even after the pandemic, therefore fast-food companies will need to find ways to lure customers away from the grocery store to succeed.

Bargaining power of buyers (High): Due to the competitive nature of the fast-food industry, consumers have many options which causes companies to price at or near consumer demand. Competitors with high margins such as McDonald's and Yum Brands have more flexibility in lowering prices, which allows them to decrease prices if necessary. In turn, smaller companies with lower margins get squeezed trying to compete.

Bargaining power of suppliers (Moderate): There are many domestic suppliers in the fast-food industry making it hard for suppliers to negotiate heavily. Additionally, many of the large players in the industry have long-standing relationships with their local suppliers and some have contracted prices in place. In general, suppliers will continue to keep their prices competitive to stay in business in such a saturated market.

Degree of rivalry (High): Rivalry is high due to the high saturation and maturity in the industry. Companies in this industry are currently competing heavily through technological innovation, breakfast, and healthy options. Large companies with high brand recognition and focused marketing efforts have an advantage in the industry, but the size of the industry allows other companies to survive in the space as well. McDonald's is a leader in both tech and breakfast and has begun adding healthy options recently. For competitors to gain ground on McDonald's market share, they will have to invest in industry trends.

Catalysts for Growth/Change

Technology and Data

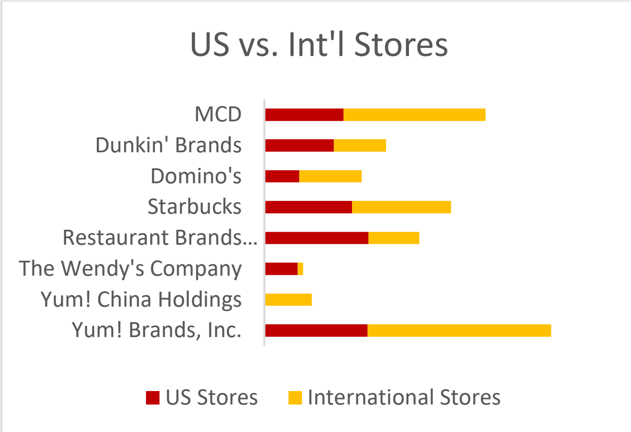
The saturation of the fast-food industry has caused many of the major players to invest in technology and extensive data analytics to increase market share. McDonald's and Dominos have been the leaders of this trend and have made multiple investments in recent years to bolster their position. For example, McDonald's acquired Apprente in September of 2019 to create McDonald's Tech Labs, an internal group of data scientists and engineers in the Silicon Valley.[9] This addition will allow McDonald's to have internal experts that are dedicated to analyzing consumer data for increased operational efficiency. Domino's has used cloud kitchens and automation to decrease rent and labor costs (source). This has created increased margins for Domino's allowing them greater flexibility moving forward. Other competitors have started to adapt to this trend and create apps and invest in new technology, but these companies will need to increase their focus on tech to stay competitive in the industry.

Global Presence

There is a vast amount of domestic competition in the fast-food industry, and if a company expands internationally, they can rapidly increase revenue and brand recognition. 64% of McDonald's restaurants are currently outside of the United States, and we expect this number to grow to 68% through 2024.[15] McDonald's has a larger international presence than its peers, which has allowed for a diverse revenue stream historically. That said, the pandemic has caused volatility in international sales as the virus has come in unexpected waves. The United States has been more lenient on restrictions and It's unclear how the future of the pandemic and potential vaccine rollout will be handled internationally, which presents a large risk to McDonald's relative to its peers.

US vs. International Store Count

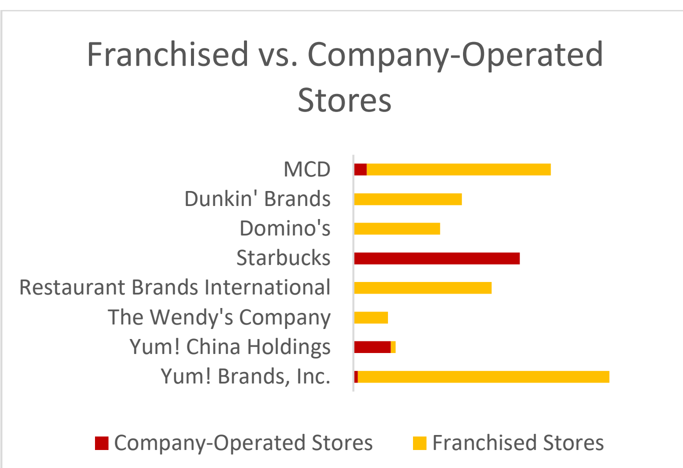
Due to the heavy saturation in the United States fast-food industry, one way that companies have tried to gain overall market share is by expanding globally. McDonald's has the second largest international presence of the competitive set behind Yum Brands and has plans to continue expanding internationally into the future. Over the past 5 years, McDonald's has added roughly 2.5 million international restaurants and we estimate that they will add an additional 3.2 million through 2024.[15] International revenues have been volatile throughout the pandemic, but by increasing global presence McDonald's will continue to diversify its revenue stream and eventually create more stability in its top-line revenue.



Source: FactSet

Corporate vs. Franchised Store Count

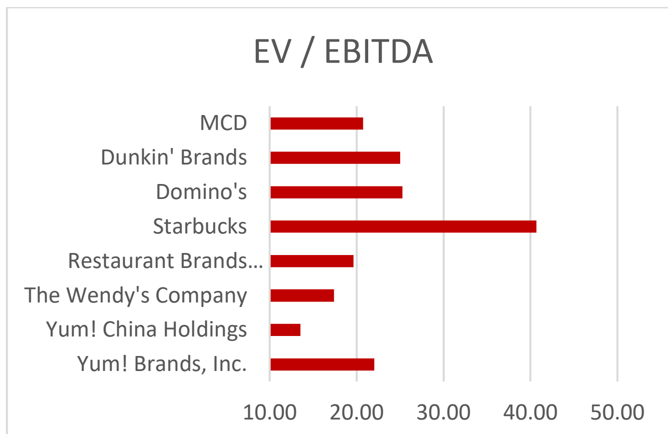
Over the past decade, many of the largest brands in fast food have begun switching their business model from owning their stores to franchising them. The shift comes as companies in the industry are looking to lower margins and stabilize revenue to compete. McDonald's has roughly 95% of their restaurants franchised currently, and we expect this number to rise to 98.32%.[15] Yum Brands is the only peer with a larger franchise presence than McDonald's, while the rest of the peers have significantly less franchised stores. This positions McDonald's well for the future, but franchises have struggled during the pandemic and some may be forced out of business depending on how long it takes to return to stable revenues.



Source: FactSet

EV/EBITDA Comparison

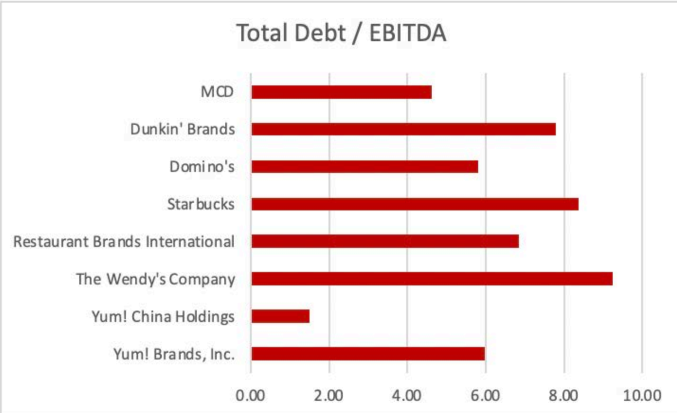
Enterprise value to EBITDA is an important metric when completing an industry peer comparison as it shows the company's value relative to its cash earnings. McDonald's ratio of 20.76 is slightly below 23.37, which is the average of the competitive set. Additionally, McDonald's ratio is even closer to the median of 21.4. This shows that McDonald's is valued very accurately at its current price, which is in line with our group's target price estimation. Starbucks is the largest outlier in the group for this ratio as it is less mature than its peers and has seen tremendous growth in recent years, causing its stock to be overvalued.[15] Outside of Starbucks, we believe the consistency in the EV/EBITDA ratio in the competitive set displays the maturity of the industry, which limits McDonald's upside moving forward.



Source: FactSet

Total Debt/EBITDA Comparison

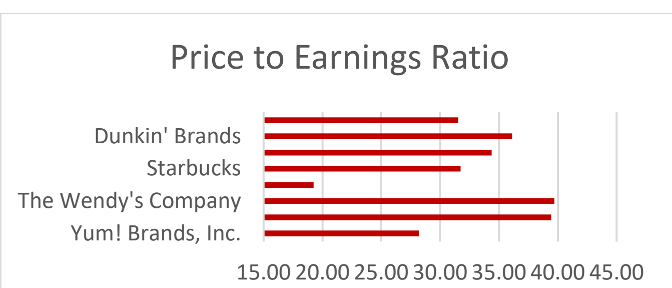
The total debt to EBITDA comparison shows how leveraged each company is relative to its earnings. The average total debt to EBITDA ratio for the competitive set is 6.50, which is substantially higher than McDonald's ratio of 4.61.[15] This is partially due to the fact that McDonald's EBITDA is over three times larger than the next closest competitor. That said, McDonald's also has twice the debt of any of the competitors, which we believe is a big concern moving forward. Management has reported plans to stop repurchasing treasury shares to pay down debt, but the uncertainty around coronavirus vaccine timing and long-term impacts on the industry pose risks to McDonald's future cashflows.



Source: FactSet

Earnings Analysis Comparison

The price to earnings ratio shows how much investors are willing to pay for a company relative to its earnings. McDonald's has the second largest stock price and EPS of its peers at $216.73 and $6.75, respectively, trailing Domino's in both metrics. Additionally, McDonald's price to earnings ratio of 31.6 is close to 32.7, the average of the competitive set.[15] We believe that this is due to McDonald's having more stability and company maturity than its peers. Although McDonald's stability could be attractive to some investors during the uncertainty of the pandemic, we believe that this metric shows limited upside for McDonald's in comparison to companies like Domino's, as investors aren't willing to pay as much for a share relative to earnings for those companies. Companies with P/E ratios that are materially higher than the competitive set's average, such as Wendy's and Yum China are less appealing upside options as they pose a large risk of being overvalued.



Source: FactSet

Same-Store Sales Growth

The same-store sales growth metric provides a look into the competitive set's change in sales per store from the prior year. Due to the pandemic, most companies in the fast-food industry have seen decreasing demand, leading to losses in same-store sales. The average growth of the competitive set is -3.67%, but Domino's is an outlier in the set as it is the only company who saw actual growth, with an increase of 10.9% over the year. Without Domino's in the set, the average growth drops to -6.10%, which is a better indicator of the fast-food industry. Domino's success has come due to their focus on delivery and takeout, along with their investments in technology and cloud kitchens, which has allowed them to decrease rent and operational expenses. McDonald's same store sales growth was the second lowest out of its peers at -6.8%, and Yum China Holdings had the lowest at -8.4%. These companies specifically have struggled due to having larger presences internationally than their peers.[15]

Company Analysis

Business Description

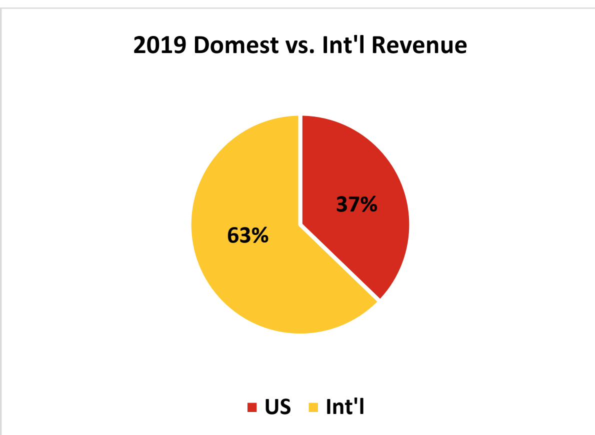
McDonald's is one of the most recognizable brands across the world. The company operates and franchises nearly 40,000 restaurants across 119 different countries and has about 50 million customers daily. Of the total restaurants, approximately 94% were franchised at year-end 2019.[16] The company's goal is to serve a locally relevant menu by operating primarily as a franchisor. With this structure, McDonald's franchisors maintain control of employee matters, marketing, and pricing, all while benefitting from the McDonald's brand.

The firm operates in the following segments: U.S., International Operated Markets, and International Developmental Licenses Markets, and Corporate. Within the International Operated Markets segment are McDonald's operating and franchising restaurants in countries like Australia, Canada, France, Germany, Italy, the Netherlands, Russia, Spain, and the U.K.[16]

Corporate Strategy and Life Cycle

The company's strategic focus is on the customer. Through extensive research and insights, McDonald's has developed the customer-centric strategy management calls "The Velocity Growth Plan". According to the company's 2019 annual report, the plan is designed to "drive sustainable comparable sales and guest count growth," and is built around three main pillars. These are: retaining existing customers, regaining customers who visit less often, and converting casual to committed customers.[16]

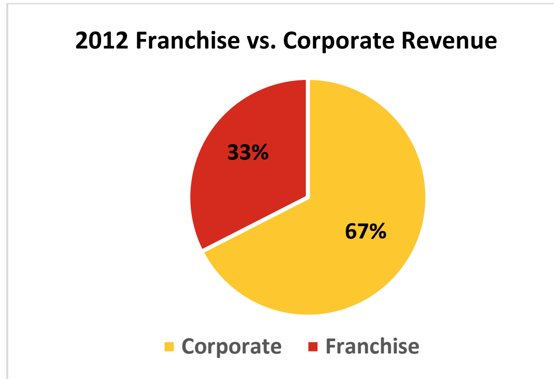
Despite the name of the company's strategic plan, our team believes that McDonald's is in the maturity phase of its life cycle. We believe this because the company has experience relatively stable, or slow growing, revenue, profits, and market share over the past 5 to 10 years.[17]

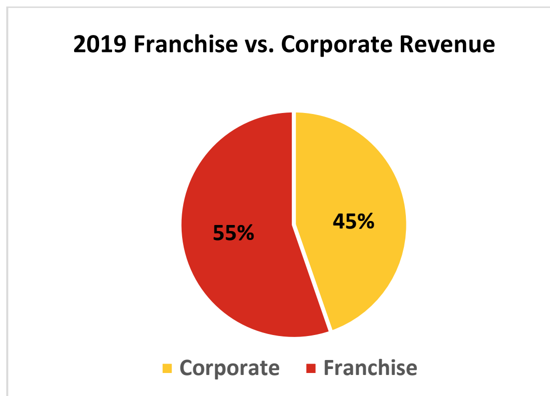


Franchises vs. Corporate-Owned Restaurants

McDonald's is leaning into their franchising model more than ever before. In 2012, the company franchised 81% of all restaurants and in 2019, this figure increased to 93%. We believe that this is a positive strategic move for the company because it allows for faster growth, a more stable income in the form of rent, and lower operating costs.

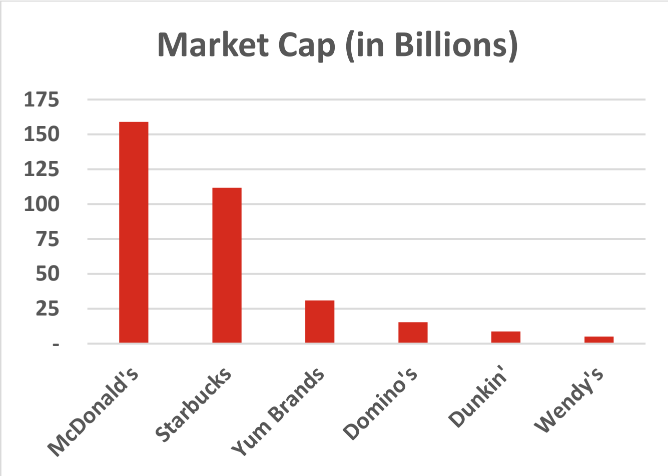
Many of the company's competitors utilize the franchising model such as Yum Brands, Wendy's, Dunkin', and Domino's. Starbucks is one of the few main competitors of McDonald's that does not franchise its stores. Starbucks believes that company-owned stores maintain a common culture that makes the company strong. An advantage of company-owned stores, that Starbuck's seems to prefer, is control over all operations and the ability to ensure that all business decisions are in alignment with the company's goals and vision.[18]





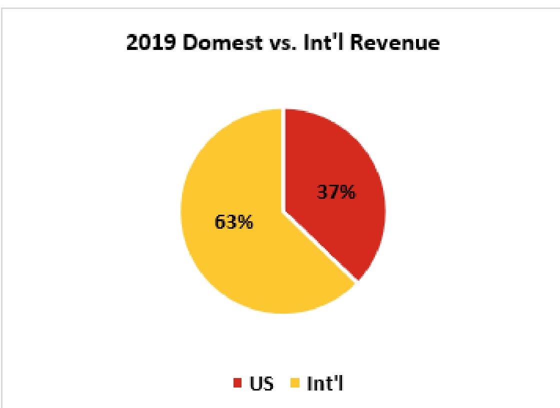
Financial Summary

McDonald's is the largest public fast-food restaurant in the world in terms of annual revenue and market cap. Since paying its first dividend in 1976, the company has raised its dividend for 43 consecutive years. This demonstrates financial strength especially in times of crisis, like today or in '08/'09. We believe that McDonald's will continue to deliver its promise of returning money to shareholders. However, to preface further discussion of the company's financials, our team believes that management's method of financing shareholder returns (dividends and share repurchases) is not sustainable. And we believe that soon McDonald's will have a problem maintaining, let alone growing, their current targeted payout.



Revenue and Earnings

In 2019, McDonald's generated a total of $21 billion of total revenue. Approximately $8 billion of this was from domestic operations and $13 billion from international operations.



As the impact of COVID-19 persists, our team believes that McDonald's with struggle with their international operations. In countries like France, Spain, and the U.K., the McDonald's drive-thru function is much less popular than in the U.S. So, if COVID-19 forces restaurants to close their dining rooms, McDonald's may be disproportionally impacted in these regions. In Q2 2020, international business saw negative comparable sales of -41% year-over-year, and in Q3 this improved to only -4.4%.

From 2012 to the end of 2019, McDonald's has experienced a decrease in topline revenue by approximately 3.75% per year. During the same period, NOPLAT has increased at a rate of nearly 3.25% per year. The decrease in topline revenue and simultaneous increase in NOPLAT is partially the result of the company's transition to franchising more of their restaurants. Regardless, the earnings growth is not sustainable when topline revenue is declining, thus our team believes that if McDonald's cannot grow revenues in the coming years, earnings will flatline or drop.

Our team's valuation model and our assumptions reflect these historical facts. We've projected McDonald's revenue to decline in 2020 by approximately 13% and earnings decline of 17%. Following 2020, our group believes that revenues will soon recover to 2019 levels and reach steady-state growth in 2024.

Cash Flow

In 2019, McDonald's generated $8.1 billion of cash flow from operations. The company spent approximately $2.5 billion on capital expenditures, $2 billion on debt repayments, $3.5 billion on dividend payments, and nearly $5 billion on share repurchases. After these major cash flows, McDonald's is left with approximately negative $5 billion for the year. So, to bridge the gap, the company borrowed more money.

Debt Levels

For the same period (2012-2019), the long-term debt on McDonald's balance sheet increased from $13.6 billion to $34.8 billion. For comparison, the Debt-to-NOPLAT ratio in 2012 was 2.5 and in 2019 was 5.0. Our team believes that the significant increase in debt for McDonald's is concerning. Given the interest rate environment, it is not uncommon to see large cash generating companies like McDonald's lever up. However, our team believes that management is making the wrong decision when borrowing money to repurchase stock at all-time highs. Instead, we believe management should invest the money back into the business. For the 2012-2019 period, CAPEX has decreased at a rate of 3.4% per year.

Products and Markets

Product Line and New Products

McDonald's product lines began in 1955 with hamburgers and fries. McDonald's originated as a fast-food diner serving lunch and dinner since opening and has slowly introduced new menu options through the course of its life cycle. The present McDonald's menu, 2020, consists of items that include savory burgers as well as healthier options like salads and wraps. Through the years, McDonald's has grown their menu to accommodate many meal preferences of their customers which supports the success of the company.

A major operating adjustment created multiple product lines. In 2005, McDonald's invested their effort to increase revenues of the company by serving customers 24 hours a day, "McDonald's went 24/7 in Garner in April, 2005, after a push by corporate headquarters to boost profits by extending store hours"[19]. 24/7 service presented an opportunity to acquire new customers with introduction of a breakfast menu. The products included breakfast sandwiches, hot-cakes, and sausage links, as well as choices of coffee or juice.

McDonald's has long received negative regard for its unhealthy food options. Since 2013, McDonald's has tried to supply heathier alternative for their menu through a partnership with Alliance healthcare, "In 2013 the fast-food chain partnered with the non-profit Alliance for a Healthier Generation. Together the two companies created five lifestyle goals for McDonald's to reach by 2020". McDonald's decision to address the consumer's concern also forced new products into the menu which include a variety of salads and fruit choices.

Two major adjustments in McDonald's business model and target market has branched the menu in wany directions. McDonalds is satisfying larger target markets including those who want a savory burger, a breakfast sandwich, or a healthier option of salad.

Marketing Strategy

With an increasingly health-conscious customer base, fast food restaurants have had to change their marketing strategy to save their reputations. In recent years, McDonald's has improved their marketing and deployed a consistent message to the public. Their transparent strategy addresses the publics' fear of nutrition and calorie counts. The company has taken steps such as launching a web page called "Our Food Your Questions" that addresses common misconceptions about McDonald's food and discusses how their food is made[20]. The company has also begun to introduce new menu items such as fruit options, salads, and even the plant based Beyond Burger to attract new customers.

McDonald's marketing strategy has been effective. According to the American Customer Satisfaction Index, McDonald's standing has been steadily rising. Our team believes that the transparency approach is key to attracting and retaining a more health-conscious consumer base. It proves that the company is making a strong effort to improve their brand and engage customers.

Production and Distribution

Manufacturing Process and Costs

McDonalds does not own a supply chain or manufacturing process. Rather, McDonalds outsources the steps to create ingredients to serve quickly, "The McDonald's supply chain is 100-percent outsourced: the company owns no factories and no distribution centres".[21] McDonalds does not own any of the food processing plants that supply its products but respects of important agreements between each other. McDonalds beef supply is satisfied by ranchers across the United States.

Data supported by: MacroTrends[22] shows internally,

- McDonald's operating expenses for the quarter ending June 30, 2020 were $2.800B, a 10.7% decline year-over-year.
- McDonald's operating expenses for the twelve months ending June 30, 2020 were $11.762B, a 3.44% decline year-over-year.

- McDonald's annual operating expenses for 2019 were $12.007B, a 1.61% decline from 2018.

Distribution

McDonald's distribution comes directly from restaurant activity. As clarified, McDonald's does not own any distribution or food packaging plants. Instead McDonald's developed relationships with ranchers across the United States handles beef and other menu items. McDonald's then distributes meals from its 38,000 stores.[23] To better understand, beef plants create the contents of meals and deliver frozen contents to McDonald's which cook in under a minute and served to customers. McDonald's outsourcing procedure saves time and money in the restaurants where the only cost responsibility is to serve meals.

Suppliers and Raw Materials

McDonald's contracts with suppliers to acquire its products and ingredients. McDonald's suppliers include Tyson Foods, Lopez Foods, 100 Circle Farms, and Hildebrandt Farms. These suppliers handle McDonald's supply of fish, meat, poultry, dairy products, and produce.[24] The company's supply chain consists of direct and indirect suppliers that are held to high standards for quality.

Competition

Competitive Environment

The main competition for McDonald's in the quick service restaurant industry is Starbucks, Chick fil-A, Taco Bell, Subway and Burger King. Public companies in the quick service restaurant industry include Chick fil-A, Chipotle Mexican Grill Inc., Dominos, Wendy's Company, Restaurant Brands International, who owns Burger King and Popeyes, and Yum Brands Inc., who owns KFC, Taco Bell, and Pizza Hut.[25]

Comparative Analysis of Competition

In recent years, many quick service restaurants have embraced the franchise agreement model. In the public markets, Companies like Chick-fil-A, Taco Bell, and Burger King now operate under franchising agreements at 100%, 98%, and 90% of their restaurants, respectively. McDonald's also decided to move to franchise agreement operations and now runs under that model at 98%. They believe this business model allows their restaurants to experiment and better fit their core market.

COVID-19 has caused issues for these restaurants by closures and no dine-in option, but the companies have been able to transition well into drive-thru, carryout, and curbside pickup options. The current macro trends in the consumer foods market is to eat more fresh and healthy ingredients, which benefits the largest private company in the industry, Subway. This trend does not fit in McDonald's favor, but many of McDonald's target customers are not following this trend.

One of the main ways McDonald's has stayed on top of competition is through breakfast sales, but many of the major competitors such as Wendy's, Subway and Taco Bell have added or improved their breakfast options and hours in recent years. During COVID, many people are working from home and making breakfast rather than spending extra money at a quick service restaurant. That said, McDonalds has a strong brand reputation and with all day breakfast hours they should be able to rebound in that segment of the market once the pandemic settles down.

McDonald's has continued to update their menu, renovate stores, and improve their technology in recent years. In 2019, McDonald's added mobile ordering to their platform via mobile device and in 2020 they have teamed up with celebrities Travis Scott and J. Belvin to create two unique meals for marketing purposes. They have also stayed involved at their stores with renovations and keeping the consumer experience high.[26]

Other Notable Topics

Research and development

McDonald's has a process for research and development that incorporates understanding external factors like customers, competitors, and the macro environment. Additionally, McDonalds is constantly engaging with their suppliers, customers, and franchisees to seek information and feedback to continue changing and improving their operations. Additionally, the feedback is used to decide what product offering McDonalds brings to the consumers, which is key in their business model.[27]

For example, in 2018 Kevin Ozan, the Executive Vice President and CFO, led a project to deploy $2.4 billion in capital to improve the design of the stores and make it the "Experience of the Future." 25 These stores implemented kiosk technology and table service as McDonald's research and development team continues to stay ahead of the curve in the next phase of quick service restaurant improvements.

Catalyst for Growth and Change

Technology

McDonald's attention has shifted towards long-term technology investing to increase value of their business and customer experience. Already, McDonald's has incorporated upgrades in their ordering technology within stores such as ordering kiosks. The kiosk reduces the demand for an employee at the register and allows more time to fill orders. A technological adjustment from the kiosk creates long-term results, "McDonald's shift to kiosks and mobile ordering could help the chain win back nearly $2.7 billion in lost sales". [28]

McDonald's continues to build for the future as it engages in a business investment in tech start-up Apprente who specializes in voice-based technology. McDonald's is confident Apprente's technology will create a better atmosphere for employees to serve customers.[29]

Outside of the restaurant, McDonalds relies heavily on its mobile application to attract customers. A partnership that will help increase sales growth through the mobile app is an investment in Plexure technology which helps build mobile customer relations. The investment grants McDonalds enhanced access to the capabilities of Plexure's services, "... which will extend McDonald's usage of Plexure's technology and set new specifications for service levels and pricing. As part of this agreement, Plexure will not provide similar services to a defined list of competitors in the QSR space, based on certain terms and conditions"[30]. McDonald's increased access to Plexure's software provides an advantage that many other businesses will not be able to access given the agreement not to share similar services with other competing quick service chains

Additionally, in 2018 McDonald's acquired digital customer experience company Dynamic Yield. The company paid $300 million in this acquisition with the intent to a more personalized experience for their customers.[30] Our team believes that with the amount of data being collected by McDonald's mobile application, this acquisition is a powerful strategic move in retaining and attracting customers.

McDonald's is creating stability in the long-term with technology at the forefront. McDonalds recognizes the growth potential that technology may bring and has invested in such potential in hopes of future return.

Valuation Analysis

Valuation Methods

Our valuation of McDonald's stock is a result of thorough analysis of the company's financial statements. The team used three valuation methods to arrive at our target price range of $215 to $220 per share. These methods are the dividend discount model, the discounted cash flow method (economic profit method), and relative price to earnings comparisons.

Dividend Discount Model

We arrived a share price of $212.48 with the dividend discount model by discounting forecasted dividends by our estimated cost of equity to find the intrinsic value. This misses slightly from our projections of

$215-$220. We expect dividends to grow by 4.25% paying around $5.30 per share. Despite healthy dividends, McDonald's maintains a growing loss in shareholder's equity. We expect fluctuation in our DDM as McDonald's reacts to the growing losses and inability to pay dividends and do not find this to be a reliable price estimation.

Discount Cash Flow and Economic Profit

Our team believes that the discounted cash flow and economic profit valuation models are the most accurate representation of McDonald's stock value. The two models analyze the free cash flow of operations against the economic profit of the company. The DCF and EP Models analyze various drivers within the operating profits of McDonald's to see which components drive the price. We found the present values operating assets using discount cash flows and adjusted for non-operating activities across a forecast of 4 years. Similarly, we've computed the present value of annual economic profit generated in the forecasted years. At the conclusion, we found an intrinsic value of $220.74 per share. As of November, McDonald's is trading near $215, which is not an impressive discount. Therefore, given current economic conditions, we do not find McDonald's advantageous to hold with limited upside.

Relative Ratios

We computed a stock price of $218.73 through the relative ratios model using the average P/E and EV/EBITDA ratios of seven companies similar to McDonald's. For our competitive set in the relative P/E model we used Yum! Brands, Inc., Yum! China Holdings, The Wendy's Company, Restaurant Brands International, Starbucks, Domino's and Dunkin' Brands. We looked to include companies who compete by providing quick-service options, as well as companies who have seen similar changes to McDonald's due to the coronavirus. Although Starbucks and Dunkin' do not compete directly with fast-food restaurants for all meals, they do compete for breakfast which is becoming increasingly important in the industry. We found Domino's as a relevant comparison to McDonald's as well due to their focus on takeout and delivery, and their technological innovation. We see the relative ratios model as the second most relevant model ahead of the DDM and behind the DCF and EP models. This is because the average P/E and EV/EBITDA numbers of the competitive set differ from McDonald's actual numbers which can skew the price.

Assumptions

Revenue Decomposition

Our group decomposed McDonald's revenue into both domestic vs. international stores, as well as company-operated stores vs. franchised stores. Additionally, we broke down the revenues in each segment before calculating company-operated revenue per store and franchise revenue per store. Over the past decade, McDonald's has pushed to increase franchised stores, therefore we project franchised revenue to increase moving forward and company-operated revenue to decrease. Due to struggles during the pandemic, we forecast franchised revenue to decrease in 2020, but rebound and surpass 2019 franchised revenues by 2021. We also expect company-operated stores to see an increase in revenue from 2020 to 2021, but then continue decreasing through 2024 due to the shift to franchises

Cost of Goods Sold as a Percentage of Sales

We have calculated our cost of goods sold using the three-year historical average of cost of goods sold as a percentage of sales, which equates to 57%. We use this percentage through our CV year of 2024 as this metric has been stable in McDonald's historical income statements.

Selling General and Administrative Expenses

We have calculated our SG&A expense using the three-year historical average of SG&A as a percentage of sales, which equates to 10%. SG&A has followed revenue consistently in McDonald's historical income statements, so we have used 10% as our forecast through 2024.

Capital Expenditures

McDonald's uses capital expenditures to spur organic growth within the company. The money is spent on opening new stores and increasing sales in existing locations. Our team forecasted total capex in 2020 to be 1.9 billion dollars per management's guidance. From years 2021 to 2024, we forecasted capex to steadily increase proportionally to depreciation.

Weighted Average Cost of Capital (WACC)

Our team calculated McDonald's WACC by using a 4.96% cost of equity and a 2.35% after-tax cost of debt. We used the market value of equity and total debt to weight the costs appropriately. Our estimated weighted average cost of capital is 4.39% which is used to discount cash flows in our valuation models.

Sensitivity Analysis

Beta vs. Equity Risk Premium (ERP)

Our team analyzed the sensitivity of these variables because of their importance in our discount rate (WACC). The final stock price is quite sensitive to both variables. For every 0.10 change in beta, McDonald's stock price changes ±20%. For every 0.25% change in the risk premium, the stock price changes ±10%.

Risk-free Rate vs. CV Growth of NOPLAT

These two variables are key factors in determining the value of McDonald's stock price. The continuing value is drastically impacted by a change in the risk-free rate as it is being discounted as a perpetuity. The impact is similar regarding our CV growth of NOPLAT assumption. For every 0.10% change in the risk-free rate, McDonald's stock price changes ±4%. For every 0.15% change in the NOPLAT growth rate, the stock price changes ±7%.

Marginal Tax Rate vs. Pre-Tax Cost of Debt

We analyzed these variables because of their impact on our most reliable model, the DCF and EP valuations. The marginal tax rate effects our forecasted net income cash flows and the pre-tax cost of debt effects our WACC calculation. A change in the pre-tax cost of debt has minimal impact on the stock price while for every 1% change in the tax rate, McDonald's stock price changes ±2%. So, if President-elect Biden increases the corporate tax rate such that McDonald's marginal rate increases to 28%, our sensitivity table projects that the MCD stock price will fall by ~7%.

WACC vs. CV ROIC

Our group sensitized the WACC and CV ROIC as they are important components in valuing McDonald's stock price- particularly the continuing value. For every 0.5% change in the CV ROIC, McDonald's stock price changes ±1%. For every .25% change in the WACC, the stock price changes 12-20%.

Revenue Growth vs. COGS (% of Sales)

We forecasted cost of goods sold as the 3-year average percent of sales which is 43%. Since our COGS forecast is a proportion of Sales, COGS in our sensitivity table is linear with respect to revenue growth. For every 0.25% change of revenue growth (forecasted at 3% in steady state), McDonald's stock price changes ±1%. For every 0.75% change in COGS as a percent of revenue, the stock price also changes ±1%.

Important Disclaimer

This report was created by students enrolled in the Applied Equity Valuation (FIN:4250) class at the University of Iowa. The report was originally created to offer an internal investment recommendation for the University of Iowa Krause Fund and its advisory board. The report also provides potential employers and other interested parties an example of the students' skills, knowledge, and abilities. Members of the Krause Fund are not registered investment advisors, brokers or officially licensed financial professionals. The investment advice contained in this report does not represent an offer or solicitation to buy or sell any of the securities mentioned. Unless otherwise noted, facts and figures included in this report are from publicly available sources. This report is not a complete compilation of data, and its accuracy is not guaranteed. From time to time, the University of Iowa, its faculty, staff, students, or the Krause Fund may hold a financial interest in the companies mentioned in this report.

References

[1] Unemployment Rate. (2020, November 06). Retrieved November 17, 2020, from https://fred.stlouisfed.org/series/UNRATE

[2] Labor Force Participation Rate. (2020, November 06). Retrieved November 17, 2020, from https://fred.stlouisfed.org/series/CIVPART

[3] Surveys of Consumers. (n.d.). Retrieved November 17, 2020, from https://data.sca.isr.umich.edu/data-archive/mine.php

[4] Thomas, K., Gelles, D., & Zimmer, C. (2020, November 09). Pfizer Stuns Experts With Early Data that Vaccine Is More Than 90% Effective. Retrieved November 17, 2020, from https://www.nytimes.com/2020/11/09/health/covid-vaccine-pfizer.html

[5] Charts related to the latest "Consumer Price Index" news release | More chart packages. (n.d.). Retrieved November 17, 2020, from https://www.bls.gov/charts/consumer-price-index/consumer-price-index-by-category-line-chart.htm

[6] United States Treasury Yield. (n.d.). Retrieved November 17, 2020, from https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldYear

[7] Gross Domestic Product. (2020, October 29). Retrieved November 17, 2020, from https://fred.stlouisfed.org/series/GDP

[8] Fast-Food Industry Data. (2020). Retrieved November 17, 2020, from ibisworld.com

[9] Restaurants' Greatest Competition Post COVID-19: Home-Cooked Meals. (n.d.). Retrieved November 17, 2020, from http://www.qsrmagazine.com/consumer-trends/restaurants-greatest-competition-post-covid-19-home-cooked-meals

[10] Wernau, J., & Gasparro, A. (2020, October 05). People Are Eating Healthier and Cooking More, Food Execs Say. Retrieved November 17, 2020, from http://www.wsj.com/articles/consumers-are-eating-healthier-and-cooking-more-food-execs-say-11601926763

[11] Haddon, H. (2019, October 21). Fast-Food Chains Heat Up Breakfast Fight. Retrieved November 17, 2020, from http://www.wsj.com/articles/fast-food-chains-heat-up-breakfast-fight-11571678889

[12] Bareuther, C. (2019, August 28). Five QSR Menu Trends: More Fresh Produce. Retrieved November 17, 2020, from http://www.producebusiness.com/five-qsr-menu-trends-more-fresh-produce/

[13] McD Tech Labs. (n.d.). Retrieved November 17, 2020, from http://www.bizjournals.com/chicago/news/2019/09/10/mcdonald-s-launches-tech-lab-in-silicon-valley.html

[14] Resendes, S. (2020, September 03). 2020 Restaurant Industry Trends: Shaping the Future of Food. Retrieved November 17, 2020, from https://upserve.com/restaurant-insider/restaurant-industry-trends/

[15] FactSet Industry Snapshot. (n.d.). Retrieved November 17, 2020, from https://my.apps.factset.com/navigator/industry/snapshot/FI3435US

[16] McDonald's Corporation. (2020). 2019 Annual Report. https://corporate.mcdonalds.com/content/dam/gwscorp/nfl/investor-relations-content/annual-reports/2019%20Annual%20Report.pdf

[17] McDonald's Revenue 2006-2020: MCD. (n.d.). Retrieved November 17, 2020, from https://www.macrotrends.net/stocks/charts/MCD/mcdonalds/revenue

[18] Schnotz, W. (2017, November 21). Difference Between a Chain and Franchised Restaurant. Retrieved November 17, 2020, from https://yourbusiness.azcentral.com/difference-between-chain-franchised-restaurant-3552.html

[19] Arndt, B. (2007, January 26). McDonald's goes 24/7. Retrieved November 17, 2020, from https://www.nbcnews.com/id/wbna16828944

[20] Lemon, M. (2020, October 05). McDonald's Marketing Strategy: Staying Transparent While Under Fire. Retrieved November 17, 2020, from https://postfunnel.com/mcdonalds-marketing-strategy-staying-transparent-while-under-fire/

[21] McDonald's wants to be assured of delivery. (2020, April 10). Retrieved November 17, 2020, from https://www.supplychainmovement.com/mcdonalds-wants-to-be-assured-of-delivery/

[22] McDonald's Operating Expenses 2006-2020: MCD. (n.d.). Retrieved November 17, 2020, from https://www.macrotrends.net/stocks/charts/MCD/mcdonalds/operating-expenses

[23] Lock, P., & 27, F. (2020, February 27). McDonald's: Number of restaurants worldwide. Retrieved November 17, 2020, from https://www.statista.com/statistics/219454/mcdonalds-restaurants-worldwide/

[24] Khandelwal, R. (2019, November 14). McDonald's Supply Chain: A Must-Know for Investors. Retrieved November 17, 2020, from https://marketrealist.com/2019/11/must-know-mcdonalds-supply-chain-2/

[25] Competitive Landscape. (2020). Retrieved November 17, 2020, from ibisworld.com.

[26] Debdutta, D. (2020, January 29). McDonald's To Spend More On Tech And R&D In 2020. Retrieved November 17, 2020, from https://www.dailymanagementreview.com/McDonald-s-To-Spend-More-On-Tech-And-R-D-In-2020_a6364.html

[27] Kiosk Savings - Johnson, H. (2018, July 26). McDonald's Kiosks. Retrieved November 17, 2020, from https://www.businessinsider.com/mcdonalds-kiosk-vs-cashiers-photos-2018-3

[28] Apprente Investment - Ha, A. (2019, September 10). McDonald's acquires Apprente to bring voice technology to drive-thrus. Retrieved

November 17, 2020, from
https://techcrunch.com/2019/09/10/mcdonalds-acquires-apprente/

[29] Maze, J. (2019, April 01). McDonald's invests in mobile software company Plexure. Retrieved November 17, 2020, from https://www.restaurantbusinessonline.com/financing/mcdonalds-invests-mobile-software-company-plexure

[30] Ha, A. (2019, March 25). McDonald's is acquiring Dynamic Yield to create a more customized drive-thru. Retrieved November 17, 2020, from https://techcrunch.com/2019/03/25/mcdonalds-acquires-dynamic-yield/

McDonald's Corporation

Revenue Decomposition

Fiscal Years Ending Dec. 31	2017	2018	2019	2020E	2021E	2022E	2023E	2024E
Total revenues	$ 22,820	$ 21,025	$ 21,077	$ 18,700	$ 20,570	$ 20,765	$ 20,963	$ 21,162
% growth	-7.3%	-7.9%	0.2%	-11.3%	10.0%	1.0%	1.0%	1.0%
Total restaurants	37,241	37,855	38,695	39,338	40,005	40,695	41,409	42,149
% growth	*0.93%*	*1.65%*	*2.22%*	*1.66%*	*1.69%*	*1.72%*	*1.76%*	*1.79%*
Domestic revenue	$ 8,006	$ 7,666	$ 7,843	$ 6,724	$ 7,133	$ 6,929	$ 6,715	$ 6,492
% growth	*-2.99%*	*-4.25%*	*2.31%*	*-14.27%*	*6.08%*	*-2.85%*	*-3.08%*	*-3.33%*
% of total revenue	35.08%	36.46%	37.21%	35.96%	34.67%	33.37%	32.04%	30.68%
Number of domestic restaurants	14,036	13,914	13,846	13,745	13,644	13,544	13,445	13,346
Net change in domestic restaurants (%)	*-0.84%*	*-0.87%*	*-0.49%*	*-0.73%*	*-0.73%*	*-0.73%*	*-0.73%*	*-0.73%*
International revenue	$ 14,814	$ 13,359	$ 13,234	$ 11,976	$ 13,437	$ 13,836	$ 14,247	$ 14,670
% growth	*-9.50%*	*-9.82%*	*-0.94%*	*-9.50%*	*12.20%*	*2.97%*	*2.97%*	*2.97%*
% of total revenue	64.92%	63.54%	62.79%	64.04%	65.33%	66.63%	67.96%	69.32%
Number of international restaurants	23,205	23,941	24,849	25,594	26,361	27,151	27,965	28,803
Net change in international restaurants (%)	*2.03%*	*3.17%*	*3.79%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*
Company-operated revenue	$ 12,719	$ 10,013	$ 9,421	$ 7,941	$ 8,298	$ 7,958	$ 7,632	$ 7,319
% growth	*-16.84%*	*-21.28%*	*-5.91%*	*-15.71%*	*4.50%*	*-4.10%*	*-4.10%*	*-4.10%*
% of total revenue	55.74%	47.62%	44.70%	42.46%	40.34%	38.32%	36.41%	34.59%
Number of Company-operated stores	3,133	2,770	2,636	2,572	2,510	2,449	2,390	2,332
Net change in Company-operated restaurants (%)	*-44.73%*	*-11.59%*	*-4.84%*	*-2.42%*	*-2.42%*	*-2.42%*	*-2.42%*	*-2.42%*
Revenue per company-operated restaurant	**4.06**	**3.61**	**3.57**	**3.09**	**3.31**	**3.25**	**3.19**	**3.14**
Franchise revenue	$ 10,102	$ 11,013	$ 11,656	$ 10,759	$ 12,272	$ 12,807	$ 13,331	$ 13,843
% growth	*8.31%*	*9.02%*	*5.84%*	*-7.69%*	*14.06%*	*4.36%*	*4.09%*	*3.84%*
% of total revenue	44.27%	52.38%	55.30%	57.54%	59.66%	61.68%	63.59%	65.41%
Number of Franchised Restauants	34,108	35,085	36,059	37,076	38,122	39,197	40,302	41,439
Net change in franchised restaurants (%)	*9.22%*	*2.86%*	*2.78%*	*2.82%*	*2.82%*	*2.82%*	*2.82%*	*2.82%*
Revenue per franchised restaurant	**0.30**	**0.31**	**0.32**	**0.29**	**0.32**	**0.33**	**0.33**	**0.33**
Total Restaurants	37,241	37,855	38,695	39,338	40,005	40,695	41,409	42,149
Number of franchised restaurants	34,108	35,085	36,059	37,076	38,122	39,197	40,302	41,439
% of total	*91.59%*	*92.68%*	*93.19%*	*94.25%*	*95.29%*	*96.32%*	*97.33%*	*98.32%*
Number of Company-Owned Restaurants	3,133	2,770	2,636	2,572	2,510	2,449	2,390	2,332
% of total	*8.41%*	*7.32%*	*6.81%*	*6.54%*	*6.27%*	*6.02%*	*5.77%*	*5.53%*
Number of Domestic Stores	14,036	13,914	13,846	13,745	13,644	13,544	13,445	13,346
% of total	*37.69%*	*36.76%*	*35.78%*	*34.94%*	*34.11%*	*33.28%*	*32.47%*	*31.66%*
Number of International Stores	23,205	23,941	24,849	25,594	26,361	27,151	27,965	28,803
% of total	*62.31%*	*63.24%*	*64.22%*	*65.06%*	*65.89%*	*66.72%*	*67.53%*	*68.34%*

McDonald's Corporation

Income Statement

Fiscal Years Ending Dec. 31	2017	2018	2019	2020E	2021E	2022E	2023E	2024E
Sales by Company-operated restaurants	$ 12,718.90	$ 10,012.70	$ 9,420.80	$ 7,940.60	$ 8,297.93	$ 7,957.92	$ 7,631.85	$ 7,319.13
Revenues from franchised restaurants	10,101.50	11,012.50	11,655.70	10,759.40	12,272.07	12,807.49	13,330.84	13,842.70
Total revenues	**$ 22,820.40**	**$ 21,025.20**	**$ 21,076.50**	**$ 18,700.00**	**$ 20,570.00**	**$ 20,765.42**	**$ 20,962.69**	**$ 21,161.83**
OPERATING COSTS AND EXPENSES								
COGS (excluding D&A)	10,836.20	8,757.20	8,343.30	8,041.00	8,845.10	8,929.13	9,013.96	9,099.59
Gross margin %	*0.53*	*0.58*	*0.60*	*0.57*	*0.57*	*0.57*	*0.57*	*0.57*
Selling, general & administrative expenses	2,231.30	2,200.20	2,229.40	1,870.00	2,057.00	2,076.54	2,096.27	2,116.18
Depreciation and Amortization	1,363.40	1,482.00	1,617.90	1,618.72	1,637.57	1,688.65	1,741.33	1,795.15
Other operating (income) expense, net	(1,163.20)	(236.80)	(183.90)	(187.00)	(205.70)	(207.65)	(209.63)	(211.62)
Total operating costs and expenses	13,267.70	12,202.60	12,006.70	11,342.72	12,333.97	12,486.66	12,641.92	12,799.31
Operating income	**9,552.70**	**8,822.60**	**9,069.80**	**$ 7,357.28**	**$ 8,236.03**	**$ 8,278.75**	**$ 8,320.76**	**$ 8,362.53**
Interest expense-net of capitalized interest	921.30	981.20	1,121.90	729.22	816.58	853.34	925.84	953.37
Nonoperating (income) expense, net	57.90	25.30	(70.20)	0	0	0	0	0
Income before provision for income taxes	8,573.50	7,816.10	8,018.10	$ 6,628.06	$ 7,419.45	$ 7,425.41	$ 7,394.93	$ 7,409.16
Provision for income taxes	3,381.20	1,891.80	1,992.70	$ 1,617.25	$ 1,810.35	$ 1,811.80	$ 1,804.36	$ 1,807.83
Net income	**$ 5,192.30**	**$ 5,924.30**	**$ 6,025.40**	$ 5,010.81	$ 5,609.11	$ 5,613.61	$ 5,590.57	$ 5,601.32
Earnings per common share-basic	$ 6.43	$ 7.61	$ 7.95	$ 6.75	$ 7.71	$ 7.87	$ 7.99	$ 8.15
Dividends declared per common share	$ 3.83	$ 4.19	$ 4.73	$ 5.16	$ 5.16	$ 5.31	$ 5.47	$ 5.64
Weighted-average shares outstanding-basic	807.40	778.20	758.10	742.21	727.21	713.05	699.69	687.09

McDonald's Corporation

Balance Sheet

Fiscal Years Ending Dec. 31	2017	2018	2019	2020E	2021E	2022E	2023E	2024E
ASSETS								
Current Assets								
Cash and equivalents	$ 2,464	$ 866	$ 899	$ 1,361	$ 2,226	$ 694	$ 2,747	$ 831
Accounts and notes receivable	1,976	2,442	2,224	1,870	2,057	2,077	2,096	2,116
Inventories, at cost, not in excess of market	59	51	50	45	49	50	50	51
Prepaid expenses	828	695	385	516	568	573	579	584
Assets of businesses held for sale	-	-	-	-	-	-	-	-
Total current assets	**5,327**	**4,053**	**3,558**	**3,792**	**4,900**	**3,394**	**5,472**	**3,582**
Property and equipment, at cost	36,626	37,194	39,051	40,951	43,351	45,826	48,370	50,980
Accumulated depreciation and amortization	(14,178)	(14,351)	(14,891)	(16,510)	(18,147)	(19,836)	(21,577)	(23,372)
Net property and equipment	22,448	22,843	24,160	24,441	25,204	25,990	26,793	27,608
Investments and advances to affiliates	1,086	1,203	1,270	1,303	1,401	1,506	1,619	1,741
Goodwill	2,380	2,332	2,677	2,677	2,677	2,677	2,677	2,677
Operating leases	10,312	10,636	13,261	14,026	14,189	14,632	15,088	15,555
Capitalized intangible software	536	610	665	599	532	466	399	333
Deferred tax asset	868	1,219	1,139	1,205	1,275	1,348	1,426	1,509
Other assets	1,176	569	796	514	566	571	576	582
Total Assets	**44,132**	**43,463**	**47,527**	**48,558**	**50,744**	**50,585**	**54,053**	**53,586**
LIABILITIES AND SHAREHOLDERS' EQUITY								
Current liabilities								
Accounts payable	925	1,208	988	752	827	835	843	851
Income tax payable	266	228	332	167	187	187	186	186
Accrued interest	278	297	338	200	220	222	224	226
Accrued payroll	1,101	970	1,024	864	950	959	968	978
Current maturities of long-term debt	-	-	680	59	2,132	2,250	6,007	2,819
Other Current Liabilities	321	270	259	2,496	2,746	2,772	2,799	2,825
Total current liabilities	**2,891**	**2,974**	**3,621**	**4,538**	**7,062**	**7,225**	**11,027**	**7,885**
Long-term debt	29,536	31,075	34,118	36,305	37,322	38,377	39,466	43,581
Long-term lease liability	10,312	10,636	12,758	14,026	14,189	14,632	15,088	15,555
Deferred revenues - initial franchise fees	-	628	661	572	629	635	641	648
Deferred tax liability	1,119	1,216	1,318	1,394	1,475	1,561	1,651	1,747
Other liabilities	3,525	3,178	3,246	2,496	2,746	2,772	2,799	2,825
Total Liabilities	**47,383**	**49,705**	**55,721**	**59,333**	**63,424**	**65,203**	**70,672**	**72,240**
Shareholders' equity (deficit)								
Common stock	7,106	7,409	7,687	8,005	8,323	8,641	8,960	9,278
Retained earnings	48,326	50,487	52,931	54,111	55,968	57,792	59,552	61,280
Accumulated other comprehensive income (loss)	(2,178)	(2,610)	(2,483)	(2,483)	(2,483)	(2,483)	(2,483)	(2,483)
Common stock in treasury	(56,504)	(61,529)	(66,329)	(70,409)	(74,489)	(78,569)	(82,649)	(86,729)
Total shareholders' equity (deficit)	**(3,251)**	**(6,242)**	**(8,194)**	**(10,775)**	**(12,680)**	**(14,618)**	**(16,620)**	**(18,654)**
Total liabilities and shareholders' equity (deficit)	**$ 44,132**	**$ 43,463**	**$ 47,527**	**$ 48,558**	**$ 50,744**	**$ 50,585**	**$ 54,053**	**$ 53,586**

McDonald's Corporation

Historical Cash Flow Statement

Fiscal Years Ending Dec. 31	2017	2018	2019
Net income	**$ 5,192.30**	**$ 5,924.30**	**$ 6,025.40**
Adjustments to reconcile to cash provided by operations			
Charges and credits:			
Depreciation and amortization	1,363.40	1,482.00	1,617.90
Deferred income taxes	(36.40)	102.60	149.70
Share-based compensation	117.50	125.10	109.60
Net gain on sale of restaurant businesses	(1,155.80)	(308.80)	(128.20)
Other	1,050.70	114.20	49.20
Changes in working capital items:			
Accounts receivable	(340.70)	(479.40)	27.00
Inventories, prepaid expenses and other current assets	(37.30)	(1.90)	128.80
Accounts payable	(59.70)	129.40	(26.80)
Income taxes	(396.40)	(33.40)	173.40
Other accrued liabilities	(146.40)	(87.40)	(3.90)
Cash provided by operations	**$ 5,551.20**	**$ 6,966.70**	**$ 8,122.10**
Investing activities			
Capital expenditures	(1,853.70)	(2,741.70)	(2,393.70)
Purchases of restaurant and other businesses	(77.00)	(101.70)	(540.90)
Sales of restaurant businesses	974.80	530.80	340.80
Proceeds from sale of businesses in China and Hong Kong	1,597.00	-	-
Sales of property	166.80	160.40	151.20
Other	(245.90)	(302.90)	(628.50)
Cash provided by (used for) investing activities	**$ 562.00**	**$ (2,455.10)**	**$ (3,071.10)**
Financing activities			
Net short-term borrowings	(1,050.30)	95.90	799.20
Long-term financing issuances	4,727.50	3,794.50	4,499.00
Long-term financing repayments	(1,649.40)	(1,759.60)	(2,061.90)
Treasury stock purchases	(4,685.70)	(5,207.70)	(4,976.20)
Common stock dividends	(3,089.20)	(3,255.90)	(3,581.90)
Proceeds from stock option exercises	456.80	403.20	350.50
Excess tax benefit on share-based compensation	-	-	-
Other	(20.50)	(20.00)	(23.50)
Cash (used for) financing activities	**(5,310.80)**	**(5,949.60)**	**(4,994.80)**
Effect of exchange rates on cash and equivalents	264.00	(159.80)	(23.70)
Cash and equivalents increase (decrease)	1,066.40	(1,597.80)	32.50
Change in cash balances of businesses held for sale	174.00	-	-
Cash and equivalents at beginning of year	1,223.40	2,463.80	866.00
Cash and equivalents at end of year	**$ 5,464.80**	**$ 5,464.80**	**$ 5,464.80**

McDonald's Corporation

Forecasted Cash Flow Statement

Fiscal Years Ending Dec. 31	2020E	2021E	2022E	2023E	2024E
Operating Activities					
Net Income	$ 5,011	$ 5,609	$ 5,614	$ 5,591	$ 5,601
Depreciation and Amortization of Intangibles	$ 1,619	$ 1,638	$ 1,689	$ 1,741	$ 1,795
Changes in Working Capital Accounts					
Accounts and Notes Receivable	354	(187)	(20)	(20)	(20)
Inventories, at cost, not in excess of market	5	(4)	(0)	(0)	(0)
Prepaid Expenses	(131)	(52)	(5)	(5)	(5)
Accounts Payable	(236)	75	8	8	8
Income Taxes Payable	(165)	20	0	(1)	0
Accrued Interest	(138)	20	2	2	2
Accrued Payroll	(160)	86	9	9	9
Deferred Tax Assets	(66)	(70)	(74)	(78)	(83)
Deferred Tax Liabilities	76	81	85	90	96
Other Current Liabilities	2,238	250	26	26	27
Other Noncurrent Liabilities	(749)	250	26	26	27
Deferred Revenues - Initial Franchise Fees	(88)	57	6	6	6
LT Lease Liability	1,268	163	443	456	466
Net Cash Provided by Operating Activities	**$ 8,837**	**$ 7,936**	**$ 7,808**	**$ 7,852**	**$ 7,929**
Investing Activities					
Capital Expenditures	(1,900)	(2,400)	(2,475)	(2,545)	(2,610)
Investments and Advances to Affiliates	(33)	(98)	(105)	(113)	(121)
Operating Leases	(765)	(163)	(443)	(456)	(466)
Capitalized intangible software	67	67	67	67	67
Other Assets	282	(51)	(5)	(5)	(5)
Net Cash used by Investing Activities	**$ (2,349)**	**$ (2,646)**	**$ (2,961)**	**$ (3,053)**	**$ (3,137)**
Changes in Financing Activities					
Current Maturities of Long-Term Debt	(621)	2,073	118	3,757	(3,188)
Long-term debt	2,187	1,016	1,055	1,089	4,115
Payment of Dividends	(3,830)	(3,752)	(3,790)	(3,830)	(3,874)
Proceeds from issuance of common stock (ESOP)	318	318	318	318	318
Repurchases of Common Stock	(4,080)	(4,080)	(4,080)	(4,080)	(4,080)
Net Cash used by Financing Activities	**$ (6,025)**	**$ (4,425)**	**$ (6,378)**	**$ (2,747)**	**$ (6,709)**
Net change in Cash	462	865	(1,531)	2,053	(1,916)
Beginning Cash	899	1,361	2,226	694	2,747
Ending Cash	$ 1,361	$ 2,226	$ 694	$ 2,747	$ 831

McDonald's Corporation

Common Size Income Statement

Fiscal Years Ending Dec. 31	2017	2018	2019	2020E	2021E	2022E	2023E	2024E
Sales by Company-operated restaurants	55.73%	47.62%	44.70%	42.46%	40.34%	38.32%	36.41%	34.59%
Revenues from franchised restaurants	44.27%	52.38%	55.30%	57.54%	59.66%	61.68%	63.59%	65.41%
Total revenues	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
OPERATING COSTS AND EXPENSES								
Company-operated restaurant expenses								
COGS (excluding D&A)	47.48%	38.37%	36.56%	35.24%	38.76%	39.13%	39.50%	39.87%
Selling, general & administrative expenses	9.78%	10.46%	10.58%	10.00%	10.00%	10.00%	10.00%	10.00%
Depreciation and amortization	5.97%	7.05%	7.68%	8.66%	7.96%	8.13%	8.31%	8.48%
Other operating (income) expense, net	-5.10%	-1.13%	-0.87%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%
Total operating costs and expenses	58.14%	58.04%	56.97%	60.66%	59.96%	60.13%	60.31%	60.48%
Operating income	41.86%	41.96%	43.03%	39.34%	40.04%	39.87%	39.69%	39.52%
Interest expense-net of capitalized interest	4.04%	4.67%	5.32%	3.90%	3.97%	4.11%	4.42%	4.51%
Nonoperating (income) expense, net	0.25%	0.12%	-0.33%	0.00%	0.00%	0.00%	0.00%	0.00%
Income before provision for income taxes	37.57%	37.17%	38.04%	35.44%	36.07%	35.76%	35.28%	35.01%
Provision for income taxes	14.82%	9.00%	9.45%	8.65%	8.80%	8.73%	8.61%	8.54%
Net income	22.75%	28.18%	28.59%	26.80%	27.27%	27.03%	26.67%	26.47%

McDonald's Corporation

Common Size Balance Sheet

Fiscal Years Ending Dec. 31	2017	2018	2019	2020E	2021E	2022E	2023E	2024E
ASSETS								
Current Assets								
Cash and equivalents	10.80%	4.12%	4.26%	7.28%	10.82%	3.34%	13.10%	3.92%
Accounts and notes receivable	8.66%	11.61%	10.55%	10.00%	10.00%	10.00%	10.00%	10.00%
Inventories, at cost, not in excess of market	0.26%	0.24%	0.24%	0.24%	0.24%	0.24%	0.24%	0.24%
Prepaid expenses	3.63%	3.30%	1.83%	2.76%	2.76%	2.76%	2.76%	2.76%
Assets of businesses held for sale	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total current assets	23.34%	19.28%	16.88%	20.28%	23.82%	16.34%	26.10%	16.92%
Property and equipment, at cost	160.50%	176.90%	185.28%	218.99%	210.75%	220.68%	230.75%	240.91%
Accumulated depreciation and amortization	-62.13%	-68.26%	-70.65%	-88.29%	-88.22%	-95.52%	-102.93%	-110.45%
Net property and equipment	98.37%	108.64%	114.63%	130.70%	122.53%	125.16%	127.81%	130.46%
Investments in and advances to affiliates	4.76%	5.72%	6.03%	6.97%	6.81%	7.25%	7.72%	8.23%
Goodwill	10.43%	11.09%	12.70%	14.32%	13.02%	12.89%	12.77%	12.65%
Operating leases	45.19%	50.59%	62.92%	75.01%	68.98%	70.46%	71.98%	73.50%
Capitalized intangible software	2.35%	2.90%	3.16%	3.20%	2.59%	2.24%	1.90%	1.57%
Deferred tax asset	3.80%	5.80%	5.40%	6.44%	6.20%	6.49%	6.80%	7.13%
Other assets	5.15%	2.70%	3.78%	2.75%	2.75%	2.75%	2.75%	2.75%
Total Assets	193.39%	206.72%	225.50%	259.67%	246.69%	243.60%	257.85%	253.22%
LIABILITIES AND SHAREHOLDERS' EQUITY								
Current liabilities								
Accounts payable	4.05%	5.75%	4.69%	4.02%	4.02%	4.02%	4.02%	4.02%
Income tax payable	1.16%	1.09%	1.57%	0.89%	0.91%	0.90%	0.89%	0.88%
Accrued interest	1.22%	1.41%	1.60%	1.07%	1.07%	1.07%	1.07%	1.07%
Accrued payroll	4.82%	4.61%	4.86%	4.62%	4.62%	4.62%	4.62%	4.62%
Current maturities of long-term debt	0.00%	0.00%	3.23%	0.32%	10.37%	10.84%	28.66%	13.32%
Other Current Liabilities	1.41%	1.29%	1.23%	13.35%	13.35%	13.35%	13.35%	13.35%
Total current liabilities	12.67%	14.14%	17.18%	24.27%	34.33%	34.80%	52.60%	37.26%
Long-term debt	129.43%	147.80%	161.88%	194.15%	181.44%	184.81%	188.27%	205.94%
Long-term lease liability	45.19%	50.59%	60.53%	75.01%	68.98%	70.46%	71.98%	73.50%
Deferred revenues - initial franchise fees	0.00%	2.99%	3.13%	3.06%	3.06%	3.06%	3.06%	3.06%
Deferred tax liability	4.91%	5.78%	6.25%	7.46%	7.17%	7.52%	7.88%	8.25%
Other liabilities	15.45%	15.11%	15.40%	13.35%	13.35%	13.35%	13.35%	13.35%
Total Liabilities	207.64%	236.41%	264.38%	317.29%	308.33%	314.00%	337.13%	341.37%
Shareholders' equity (deficit)								
Common stock	31.14%	35.24%	36.47%	42.81%	40.46%	41.61%	42.74%	43.84%
Retained earnings	211.77%	240.13%	251.14%	289.37%	272.09%	278.31%	284.09%	289.58%
Accumulated other comprehensive income (loss)	-9.55%	-12.41%	-11.78%	-13.28%	-12.07%	-11.96%	-11.84%	-11.73%
Common stock in treasury	-247.60%	-292.64%	-314.70%	-376.52%	-362.12%	-378.36%	-394.27%	-409.84%
Total shareholders' equity (deficit)	-14.25%	-29.69%	-38.88%	-57.62%	-61.64%	-70.40%	-79.28%	-88.15%
Total liabilities and shareholders' equity (deficit)	193.39%	206.72%	225.50%	259.67%	246.69%	243.60%	257.85%	253.22%

McDonald's Corporation

Value Driver Estimation

Fiscal Years Ending Dec. 31	2017	2018	2019	2020E	2021E	2022E	2023E	2024E
NOPLAT:								
EBITA:								
Net Sales	$ 22,820	$ 21,025	$ 21,077	$ 18,700	$ 20,570	$ 20,765	$ 20,963	$ 21,162
COGS (excluding D&A)	$ 10,836	$ 8,757	$ 8,343	$ 8,041	$ 8,845	$ 8,929	$ 9,014	$ 9,100
Gross margin %	*52.52%*	*58.35%*	*60.41%*	*57.00%*	*57.00%*	*57.00%*	*57.00%*	*57.00%*
Selling, general & administrative expenses	$ 2,231	$ 2,200	$ 2,229	$ 1,870	$ 2,057	$ 2,077	$ 2,096	$ 2,116
Depreciation and Amortization	$ 1,363	$ 1,482	$ 1,618	$ 1,619	$ 1,638	$ 1,689	$ 1,741	$ 1,795
Other operating (income) expense, net	$ (1,163)	$ (237)	$ (184)	$ (187)	$ (206)	$ (208)	$ (210)	$ (212)
Operating Expenses	13,268	12,203	12,007	11,343	12,334	12,487	12,642	12,799
Implied Interest on Operating Leases	242	250	311	329	333	343	354	365
Nonoperating (income) expense, net	58	25	(70)	-	-	-	-	-
EBITA	9,853	9,097	9,311	7,686	8,569	8,622	8,675	8,728
Adjusted Taxes:								
Provision for Income Taxes	3,381	1,892	1,993	1,617	1,810	1,812	1,804	1,808
Marginal Tax Rate	31.60%	24.30%	24.40%	24.40%	24.40%	24.40%	24.40%	24.40%
Tax Shield on Interest Expense	1,068	460	486	395	442	442	440	441
Tax Shield on Implied Lease Interest	76	61	76	80	81	84	86	89
Adjusted Taxes	4,526	2,412	2,555	2,092	2,333	2,338	2,331	2,338
Change in Deferred Taxes:								
Deferred Tax Liability CY	1749.7	1949.1	5,459	1,394	1,475	1,561	1,651	1,747
Deferred Tax Asset CY	1498	1953	5280	1,205	1,275	1,348	1,426	1,509
Deferred Tax Liability PY	2824	1750	1949	1,318	1,394	1,475	1,561	1,651
Deferred Tax Asset PY	1996	1498.2	1953	1,139	1,205	1,275	1,348	1,426
Change in Deferred Taxes	-576	-255	183	10	11	12	12	13
NOPLAT	4,750	6,430	6,939	5,605	6,247	6,296	6,356	6,403
Invested Capital (IC):								
Operating Working Capital (WC):								
Operating Current Assets:								
Normal Cash	1,634	866	899	1,339	1,473	694	1,501	831
Accounts Receivable, Net	1,976	2,442	2,224	1,870	2,057	2,077	2,096	2,116
Inventory	59	51	50	45	49	50	50	51
PPD	828	695	385	516	568	573	579	584
Operating Current Assets	4,497	4,053	3,558	3,770	4,147	3,394	4,226	3,582
Operating Current Liabilities:								
Accounts Payable	925	1,208	988	752	827	835	843	851
Accrued Expenses	1,379	1,267	1,362	1,064	1,170	1,182	1,193	1,204
Income Taxes Payable	266	228	332	167	187	187	186	186
Deferred Revenue	-	628	661	572	629	635	641	648
Operating Current Liabilities	2,570	3,331	3,343	2,555	2,813	2,839	2,863	2,889
Net Operating Working Capital:	1,928	722	215	1,215	1,333	555	1,363	693
Net PPE	22,448	22,843	24,160	24,441	25,204	25,990	26,793	27,608
Capitalized intangible software	536	610	665	599	532	466	399	333
PV of Operating Leases	10,312	10,636	13,261	14,026	14,189	14,632	15,088	15,555
Invested Capital:	35,223	34,810	38,302	40,281	41,259	41,643	43,644	44,188
Free Cash Flow (FCF):								
NOPLAT	4,750	6,430	6,939	5,605	6,247	6,296	6,356	6,403
Change in IC	2,305	(413)	3,492	1,979	977	384	2,001	544
FCF	2,445	6,843	3,448	3,625	5,269	5,912	4,355	5,858
Return on Invested Capital (ROIC):								
NOPLAT	4,750	6,430	6,939	5,605	6,247	6,296	6,356	6,403
Beg. IC	32,918	35,223	34,810	38,302	40,281	41,259	41,643	43,644
ROIC	14.43%	18.25%	19.93%	14.63%	15.51%	15.26%	15.26%	14.67%
Economic Profit (EP):								
Beg. IC	32,918	35,223	34,810	38,302	40,281	41,259	41,643	43,644
x (ROIC - WACC)	10.04%	13.86%	15.54%	10.24%	11.11%	10.87%	10.87%	10.28%
EP	3,304	4,882	5,410	3,922	4,477	4,483	4,526	4,485

McDonald's Corporation
Weighted Average Cost of Capital (WACC) Estimation

Cost of Equity:			
	Risk-Free Rate	0.85%	
	Beta	0.84	
	Equity Risk Premium	4.86%	
	Cost of Equity	**4.96%**	
Cost of Debt:			
	Risk-Free Rate	0.85%	
	Implied Default Premium	2.25%	
	Pre-Tax Cost of Debt	3.10%	
	Marginal Tax Rate	24.40%	
	After-Tax Cost of Debt	**2.35%**	
Market Value of Common Equity:			**MV Weights**
	Total Shares Outstanding	758.10	
	Current Stock Price	$218.18	
	MV of Equity	**165,402.26**	78.48%
Market Value of Debt:			
	Short-Term Debt	680	
	Current Portion of LTD		
	Long-Term Debt	34,118	
	PV of Operating Leases	10,564	
	MV of Total Debt	**45,362.45**	21.52%
Market Value of the Firm		**210,764.71**	100.00%
		Estimated WACC	**4.39%**

McDonald's Corporation

Dividend Discount Model (DDM) or Fundamental P/E Valuation Model

Fiscal Years Ending Dec. 31	2020E	2021E	2022E	2023E	2024CV
EPS	$ 6.75	$ 7.71	$ 8.07	$ 8.38	$ 8.74
% growth		*14.25%*	*4.57%*	*3.88%*	*4.29%*
Key Assumptions					
CV growth of EPS	2.50%				
CV Year ROE	-30.03%				
Cost of Equity	4.96%				
Future Cash Flows					
P/E Multiple (CV Year)					26.28
EPS (CV Year)					$ 8.74
Future Stock Price					$ 229.66
Dividends Per Share	$ 5.16	$ 5.16	$ 5.31	$ 5.47	$ 5.64
Discounted Value	1.05	1.10	1.16	1.21	1.21
Discounted Cash Flows	$ 4.92	$ 4.68	$ 4.60	$ 4.51	$ 189.27
Intrinsic Value as of Last FYE	$ 207.98				
Implied Price as of Today	$ 212.48				

McDonald's Corporation

Discounted Cash Flow (DCF) and Economic Profit (EP) Valuation Models

Key Inputs:

CV Growth of NOPLAT	2.00%
CV Year ROIC	14.94%
WACC	4.39%
Cost of Equity	4.96%

Fiscal Years Ending Dec. 31	**2020E**	**2021E**	**2022E**	**2023E**	**2024CV**
DCF Model:	T=1	T=2	T=3	T=4	T=5(CV)
Free Cash Flow (FCF)	3,625	5,269	5,912	4,355	5,858
Continuing Value (CV)					231,664
PV of FCF	3,473	4,835	5,196	3,667	195,057
Value of Operating Assets:	212,228				
Non-Operating Adjustments					
(-) MV of Debt	(45362.5)				
(-) ESOP	(1456.8)				
Investments	1270.3				
Pension (Underfunded)	(243.7)				
Value of Equity	166435.1				
Shares Outstanding	758.1				
Intrinsic Value of Last FYE	$ 219.54				
Implied Price as of Today	$ 224.30				
EP Model:	T=1	T=2	T=3	T=4	T=5(CV)
Economic Profit (EP)	3,922	4,477	4,483	4,526	4,485
Continuing Value (CV)					188,020
PV of EP	3,757	4,108	3,941	3,811	158,309
Total PV of EP	173,926				
Invested Capital (last FYE)	38,302				
Value of Operating Assets:	212,228				
Non-Operating Adjustments					
(-) MV of Debt	(45362.5)				
(-) ESOP	(1456.8)				
Investments	1270.3				
Pension (Underfunded)	(243.7)				
Value of Equity	166435.1				
Shares Outstanding	758.1				
Intrinsic Value of Last FYE	$ 219.54				
Implied Price as of Today	$ 224.30				

McDonald's Corporation

Relative Valuation Models

Ticker	Company	Price	Price	EPS 2020E	EPS 2021E	P/E 20	P/E 21	2020 EV	2020 EBITDA	EV/EBITDA	2019 Total Debt	2019 TotalDebt/EBITDA
YUM	Yum! Brands, Inc.	YUM! BRANDS, INC. (XNYS:YUM)	$ 93.33	$3.31	$3.94	28.20	23.69	41608	1,888	22.04	11269	5.97
YUMC	Yum! China Holdings	YUM CHINA HOLDINGS, INC. (XNYS:YU	$ 53.23	$1.35	$2.01	39.43	26.48	20009	1,479	13.53	2211	1.49
WEN	The Wendy's Company	THE WENDY'S COMPANY (XNAS:WEN)	$ 21.85	$0.55	$0.70	39.73	31.21	6994	402	17.40	3714	9.24
QSR	Restaurant Brands International	Restaurant Brands International Inc. (X	$ 52.00	$2.70	$2.98	19.26	17.45	49836	2,535	19.66	17328	6.84
SBUX	Starbucks	STARBUCKS CORPORATION (XNAS:SBU	$ 86.96	$2.74	$3.26	31.74	26.67	122877	3,021	40.67	25259	8.36
DPZ	Domino's	DOMINO'S PIZZA, INC. (XNYS:DPZ)	$ 378.32	$11.00	$21.42	34.39	17.66	18907	748	25.28	4350	5.82
DNKN	Dunkin' Brands	DUNKIN' BRANDS GROUP, INC. (XNAS:	$ 99.71	$2.76	$3.17	36.13	31.45	11107	444	25.02	3460	7.79
		https://finance.yahoo.com/			Average	**32.70**	**24.95**			**23.37**		**6.50**
	McDonald's Corporation	(XNYS:MCD)	$ 213.00	$ 6.75	$ 7.71	31.6	27.6	193,178	9,305.1	20.76	50390	4.61

Implied Relative Value:

P/E (EPS20)		**$ 220.73**
P/E (EPS21)		**$ 192.42**
EV/EBITDA		
	Enterprise Value	**$ 217,462.15**
	(-) Debt	**$ 34,118.10**
	(+) Cash	**$ 898.50**
	Equity Value	**$ 184,242.55**
	Price per Share	**$ 243.03**

Mean Relative Valuation **$ 218.73**

McDonald's Corporation
Key Management Ratios

Fiscal Years Ending Dec. 31	2017	2018	2019	2020E	2021E	2022E	2023E	2024E
Liquidity Ratios:								
Current Ratio (Current Assets / Current Liabilities)	1.84	1.36	0.98	0.84	0.69	0.47	0.50	0.45
Cash Ratio (Cash + Cash Equivalents) / Current Liabilities	0.85	0.29	0.25	0.30	0.32	0.10	0.25	0.11
Quick Ratio (Cash + Accounts Receivable) / Current Liabilities	0.09	0.07	0.06	0.05	0.07	0.04	0.07	0.04
Asset-Management Ratios:								
Asset Turnover (Revenue / Average Total Assets)	0.53	0.48	0.46	0.39	0.41	0.41	0.40	0.39
Receivables Turnover (Revenue / Average Accounts Receivable)	13.23	9.52	9.03	9.13	10.48	10.05	10.05	10.05
Inventory Turnover (COGS / Average Inventories)	184.13	159.37	164.72	169.14	187.70	180.01	180.01	180.01
Financial Leverage Ratios:								
Debt to Assets (Debt / Assets)	0.67	0.71	0.73	0.75	0.78	0.80	0.84	0.87
Debt to Equity (Debt / Equity)	-9.08	-4.98	-4.25	-3.38	-3.11	-2.78	-2.74	-2.49
Equity Ratio (Total Equity / Total Assets)	-0.07	-0.14	-0.17	-0.22	-0.25	-0.29	-0.31	-0.35
Debt to NOPLAT (Debt / NOPLAT)	6.22	4.83	5.01	6.49	6.32	6.45	7.15	7.25
Profitability Ratios:								
Gross Margin (Revenue - COGS) / Revenue	52.52%	58.35%	60.41%	57.00%	57.00%	57.00%	57.00%	57.00%
Operating Profit Margin (Operating Income / Revenue)	41.86%	41.96%	43.03%	39.34%	40.04%	39.87%	39.69%	39.52%
Net Profit Margin (Net Income / Revenue)	22.75%	28.18%	28.59%	26.80%	27.27%	27.03%	26.67%	26.47%
Return on Assets (Net Income / Total Assets)	11.77%	13.63%	12.68%	10.32%	11.05%	11.10%	10.34%	10.45%
Return on Equity (Net Income / Shareholder's Equity)	-159.69%	-94.91%	-73.54%	-46.51%	-44.24%	-38.40%	-33.64%	-30.03%
Payout Policy Ratios:								
Dividend Payout Ratio (Dividend/EPS)	59.6%	55.1%	59.5%	76.4%	66.9%	67.5%	68.5%	69.2%
Total Payout Ratio ((Divs. + Repurchases)/NI)				76.8%	67.2%	67.8%	68.8%	69.4%

McDonald's Corporation

Present Value of Operating Lease Obligations

Fiscal Years Ending Dec. 31		2017	2018	2019
Year	1	1152.0	1145.0	1147.0
Year	2	1087.0	1083.0	1096.0
Year	3	997.0	1001.0	1014.0
Year	4	904.0	909.0	933.0
Year	5	805.0	831.0	854.0
Thereafter		6912.0	7297.0	7090.0
Total Minimum Payments		11857.0	12266.0	12134.0
Less: Cumulative Interest		1545.2	1630.3	1569.6
PV of Minimum Payments		**10311.8**	**10635.7**	**10564.4**
Implied Interest in Year 1 Payment		**226.0**	**216.5**	**223.3**
Pre-Tax Cost of Debt		2.10%	2.10%	2.10%
Years Implied by Year 6 Payment		8.6	8.8	8.3
Expected Obligation in Year 6 & Beyond		805	831	854
Present Value of Lease Payments				
PV of Year 1		1128.3	1121.4	1123.4
PV of Year 2		1042.7	1038.9	1051.4
PV of Year 3		936.7	940.5	952.7
PV of Year 4		831.9	836.5	858.6
PV of Year 5		725.5	749.0	769.7
PV of 6 & beyond		5646.5	5949.4	5808.6
Capitalized PV of Payments		**10311.8**	**10635.7**	**10564.4**

McDonald's Corporation

Effects of ESOP Exercise and Share Repurchases on Common Stock Account and Number of Shares Outstanding

Number of Options Outstanding (shares):	17
Average Time to Maturity (years):	5.90
Expected Annual Number of Options Exercised:	2.81
Current Average Strike Price:	$ 113.06
Cost of Equity:	4.96%
Current Stock Price:	$218.18

Fiscal Years Ending Dec. 31	2020E	2021E	2022E	2023E	2024E
Increase in Shares Outstanding:	2.81	2.81	2.81	2.81	2.81
Average Strike Price:	$ 113.06	$ 113.06	$ 113.06	$ 113.06	$ 113.06
Increase in Common Stock Account:	**318**	**318**	**318**	**318**	**318**
Change in Treasury Stock	4,080	4,080	4,080	4,080	4,080
Expected Price of Repurchased Shares:	$ 218.18	$ 228.99	$ 240.34	$ 252.25	$ 264.75
Number of Shares Repurchased:	**19**	**18**	**17**	**16**	**15**
Shares Outstanding (beginning of the year)	758	742	727	713	700
Plus: Shares Issued Through ESOP	2.81	2.81	2.81	2.81	2.81
Less: Shares Repurchased in Treasury	19	18	17	16	15
Shares Outstanding (end of the year)	**742**	**727**	**713**	**700**	**687**

McDonald's Corporation

Valuation of Options Granted under ESOP

Current Stock Price	$218.18
Risk Free Rate	0.85%
Current Dividend Yield	2.28%
Annualized St. Dev. of Stock Returns	20.84%

Range of Outstanding Options	Number of Shares	Average Exercise Price	Average Remaining Life (yrs)	B-S Option Price	Value of Options Granted
Range 1	17	113.06	5.90	$ 87.76	$ 1,457
Total	17	$ 113.06	5.90	$ 112.94	**$ 1,457**

McDonald's Corporation
Sensitivity Tables

Structural Assumptions

Beta

ERP	224.3	0.54	0.64	0.74	0.84	0.94	1.04	1.14
	4.11%	669.01	481.89	371.37	298.38	246.55	207.82	177.78
	4.36%	594.12	432.39	334.93	269.73	223.03	187.92	160.54
	4.61%	533.22	391.21	304.17	245.33	202.87	170.76	145.62
	4.86%	482.73	356.4	277.87	224.3	185.38	155.82	132.57
	5.11%	440.19	326.59	255.12	205.97	170.07	142.68	121.07
	5.36%	403.84	300.78	235.25	189.86	156.55	131.03	110.85
	5.61%	372.44	278.2	217.73	175.59	144.52	120.64	101.7

Operating Assumptions

Revenue Growth

COGS (All Fcst Yrs)	224.3	2.25%	2.50%	2.75%	3.00%	3.25%	3.50%	3.75%
	42.25%	241.16	243.46	245.78	248.11	250.45	252.81	255.17
	42.50%	239.42	241.71	244.02	246.34	248.67	251.01	253.36
	42.75%	237.68	239.96	242.26	244.56	246.88	249.21	251.55
	43.00%	235.94	238.21	240.49	242.79	245.09	247.41	249.73
	43.25%	234.2	236.46	238.73	241.01	243.3	245.61	247.92
	43.50%	232.46	234.71	236.97	239.24	241.52	243.81	246.11
	43.75%	230.72	232.96	235.2	237.46	239.73	242.01	244.3

Risk-Free Rate

CV Growth of NOPLAT	224.3	0.55%	0.65%	0.75%	0.85%	0.95%	1.05%	1.15%
	1.55%	212.99	205.02	197.5	190.39	183.67	177.29	171.23
	1.70%	225.33	216.53	208.24	200.44	193.07	186.11	179.51
	1.85%	239.29	229.48	220.29	211.66	203.55	195.91	188.69
	2.00%	255.18	244.16	233.9	224.3	215.3	206.86	198.91
	2.15%	273.44	260.96	249.39	238.62	228.57	219.18	210.38
	2.30%	294.65	280.37	267.19	254.99	243.68	233.14	223.31
	2.45%	319.59	303.03	287.85	273.9	261.02	249.1	238.03

Marginal Tax Rate

Pre-Tax Cost of Debt	224.3	21.40%	22.40%	23.40%	24.40%	25.40%	26.40%	27.40%
	0.60%	237.81	233.35	228.78	224.1	219.32	214.43	209.43
	1.10%	237.88	233.42	228.85	224.17	219.39	214.5	209.5
	1.60%	237.95	233.48	228.91	224.23	219.45	214.57	209.57
	2.10%	238.01	233.54	228.97	224.3	219.52	214.63	209.64
	2.60%	238.06	233.6	229.03	224.35	219.58	214.69	209.7
	3.10%	238.12	233.65	229.08	224.41	219.63	214.75	209.76
	3.60%	238.17	233.71	229.14	224.46	219.69	214.8	209.81

CV ROIC

WACC	224.3	13.44%	13.94%	14.44%	14.94%	15.44%	15.94%	16.44%
	3.64%	349.08	351.51	353.77	355.87	357.85	359.7	361.44
	3.89%	294.59	296.68	298.62	300.43	302.13	303.72	305.21
	4.14%	252.82	254.64	256.34	257.92	259.41	260.8	262.11
	4.39%	219.77	221.39	222.9	224.3	225.62	226.85	228.01
	4.64%	192.97	194.42	195.78	197.03	198.22	199.32	200.36
	4.89%	170.81	172.12	173.34	174.48	175.55	176.55	177.49
	5.14%	152.17	153.37	154.48	155.52	156.5	157.41	158.27