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Milan, 10 July 2019

McDonald's

Equity Research

Key points:

Business

McDonald's is the largest fast-food restaurants company in the world. Today it's being challenged by changing consumer preferences, poor quality perception in key markets, and an evolving competitive landscape. Despite this major treats, fast food restaurants business is expected to grow globally, with Asian countries leading the way. McDonald's turnaround strategy employed in 2017, is aimed to capture such growth and improve brand perception.

Valuation

As regards the DCF approach, our analysis implements an APV model, explicitly forecasting the key financial variables for the 2019-23 period. Due to the sector cyclicality, we considered an adjusted growth rate of sale aligned with the expected growth in consumption of the company's main geographies.

Relative valuation is based on the company's main competitors which operate in the same sector and are expected to face similar threats and opportunities.

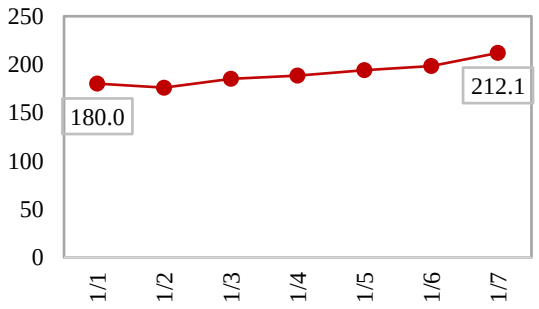
Investment risk

The biggest restraint for growth is the health issue, indeed, this rising concern may result in people switching from fast food to other solutions. In the long run, this sentiment may determinate a resizing or a reshape of the fast-food market

McDonald's (MCD)
NYSE – P 212.09, Currency in USD

Price Target:
250.33 – 276.58 (↑18-30%)

Historical Chart – Closing Price



Key Statistics

Sector :	Consumer Cyclical
Industry :	Foodservice
Full Time Employees :	210,000
Volume (90d avg) :	2,846,621
Market Cap ($Bill.) :	161.294

Earnings History

	Q3 2018	Q4 2018	Q1 2019	Q2 2019
EPS Est.	8.02	8.19	8.28	8.32
EPS Actual	7.34	7.66	7.94	7.95
Difference	0.70	0,50	0,34	0,36

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Recommendation: Overweight

Given the results of our valuation and the analysis of the economic and financial characteristics of McDonald's we recommend to overweight the shares.

Business Description

Company Background

McDonald’s Corp is the largest restaurant company in the world, with a significant presence in more than 100 countries. McDonald’s restaurants are owned and operated under a franchising contract - 80% of McDonald's restaurants are currently owned and operated by independent franchisees - which may assume three structures: conventional franchise, developmental license or affiliate.

In order to protect, improve and enhance McDonald’s brand reputation, the business relationship between McDonald’s and its independent franchisees is supported by adhering to standards and policies.

McDonald’s restaurants offer a substantially uniform menu, which is implemented, modified or reduced according to local consumer preferences and tastes. In addition, McDonald’s deliver new products to the market on an ongoing basis. In case of success, such products may become a persistent part of McDonald’s restaurants' menu.

McDonald’s Corp reached its peak in sales during 2013, with total revenues of c. 28 billion USD. Ever since then the company has shown declining sales.

In March of 2017, the company introduced “Velocity Growth Plan”, which is aimed to modernize the business model and boost sales. The key pillars of our growth strategy were “Retain”, “Regain” and “Convert”:

- Retaining the existing customers, fortifying and extending the company areas of strength with focuses on breakfast and family occasions.
- Regaining the lost customers by improving the taste and quality of food, enhancing the convenience and offering strong value.
- Converting casual customers to more committed customers with coffee and snacks.

The plan has stabilized sales, which have been c. 21 billion USD in 2018 and are expected to grow steadily at a 2% CAGR.

Industry trends

Foodservice. During the 2012-2018 period GDP has grown at a 2.5%-3% annual average rate. Except for Starbucks, the fast-food industry global leaders (McDonald's, KFC, Burger King, Pizza Hut and TacoBell) had shown declining revenues, missing the occasion to capture global recovery and consumption growth which have followed the crisis.

This situation is mainly due to a change in mass-market consumption habits. Fast food restaurants had lost market share, which has been gained by full-service restaurants, street stalls/kiosks cafes/bars, and home delivery/takeaway.

On the one side, the increase in average individual wealth had been a boost for full-service restaurants. On the other side, the evolution of the foodservice industry had lowered barriers to entry, allowing

newcomers to easily gain market share thanks to the digitalization of the sector. Homedelivery is the sub-segment which has gained the most valuable benefits from this scenario.

By contrast, the fast-food industry global leaders are deploying rebranding strategies. During the last period, these players have launched much different marketing plans in order to improve their ingredients quality perception. The prospect of this business strategy appears to be steady growth in revenues.

MCD Stock Performance. McDonald's is listed at the New York Stock Exchange, totaling 161.294 billions of $ in market capitalization with 763.56 million outstanding shares. During the last five years, the stock price more than doubled from 100$ to 212$. The main portion of the growth has been registered since the "Velocity Growth Plan" has been announced (March 2017).

SWOT analysis

Strengths. McDonald can rely on its resilient market leadership position in foodservice subsegment of fast-food restaurants.

This position is time persistent thanks to the strong network built by the company, consisting of more than 38 thousands restaurants in more than 100 countries.

The McDonald brand is among the most valuable brand in the world, it is relevant for the audience and consistent to the target market, flexible and renewable.

Weakness. The wide franchising network had shown slowness in adapting to new consumer habits, this is a crucial aspect for a cyclical and evolving market such as the foodservice industry.

Opportunities. Changing consumers habits in food and beverage consumption are creating new market niches and preferences.

The generational change is bringing new consumers to the market place (i.e. "millennials").

Economic growth and increasing population worldwide will bring an increase in terms of consumer volume and average consumer budget for consumption.

Threats. The increase in health consciousness among the consumers is the major threat for established brands, who are now focused their efforts on improving the consumer's perception of the quality of ingredients and processes.

The home delivery boom has allowed small non-chain restaurant, street stalls, kiosks, cafes, bars, and other players to compete in the market place and access a great number of potential clients.

Financial Analysis

Reclassified Income Statements

in millions of $	2013	2014	2015	2016	2017	2018
Net Revenues	28.105,70	27.441,30	25.413,00	24.621,90	22.820,40	21.025,20
growth rate		- 0,02	- 0,07	- 0,03	- 0,07	- 0,08
Cost of Goods Sold	17.203,00	16.985,60	15.623,80	14.417,20	12.199,60	10.239,20
as % of Revenues	61,21%	61,90%	61,48%	58,55%	53,46%	48,70%
Gross Profit	10.902,70	10.455,70	9.789,20	10.204,70	10.620,80	10.786,00
as % of Revenues	38,79%	38,10%	38,52%	41,45%	46,54%	51,30%
growth rate		-4,10%	-6,37%	4,24%	4,08%	1,56%
SG&A	2.385,60	2.487,90	2.434,30	2.384,50	2.231,30	2.200,20
Other Operating I/E	- 247,20	18,60	209,40	75,70	- 1.163,20	- 236,80
as % of Revenues	7,61%	9,13%	10,40%	9,99%	4,68%	9,34%
Earnings Before Interest and Taxes	8.764,30	7.949,20	7.145,50	7.744,50	9.552,70	8.822,60
as % of Revenues	31,18%	28,97%	28,12%	31,45%	41,86%	41,96%
Net Interest Expense	521,90	576,40	638,30	884,80	921,30	981,20
Earnings Before Interest,Taxes and Unusual Item	8.242,40	7.372,80	6.507,20	6.859,70	8.631,40	7.841,40
growth rate		-10,55%	-11,74%	5,42%	25,83%	-9,15%
Unusual P/L	37,90	0,80	- 48,50	- 6,30	57,90	25,30
EBT	8.204,50	7.372,00	6.555,70	6.866,00	8.573,50	7.816,10
Income Tax Expense	2.618,60	2.614,20	2.026,40	2.179,50	3.381,20	1.891,80
Net Income	5.585,90	4.757,80	4.529,30	4.686,50	5.192,30	5.924,30

Reclassified Annual Statements

in millions of $	2013	2014	2015	2016	2017	2018
Net Revenues	28.105,70	27.441,30	25.413,00	24.621,90	22.820,40	21.025,20
growth rate		- 0,02	- 0,07	- 0,03	- 0,07	- 0,08
Cost of Goods Sold	17.203,00	16.985,60	15.623,80	14.417,20	12.199,60	10.239,20
as % of Revenues	61,21%	61,90%	61,48%	58,55%	53,46%	48,70%
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Unusual P/L	37,90	0,80	- 48,50	- 6,30	57,90	25,30
EBT	8.204,50	7.372,00	6.555,70	6.866,00	8.573,50	7.816,10
Income Tax Expense	2.618,60	2.614,20	2.026,40	2.179,50	3.381,20	1.891,80
Net Income	5.585,90	4.757,80	4.529,30	4.686,50	5.192,30	5.924,30
Other Long-term Assets	1.209,10	1.004,50	792,70	725,90	1.085,70	1.202,80
Net Financial Position	11.331,10	12.911,80	16.436,60	24.655,10	27.072,60	30.209,30
Long-term Debt	14.129,80	14.989,70	24.122,10	25.878,50	29.536,40	31.075,30
Cash And Cash Equivalents	2.798,70	2.077,90	7.685,50	1.223,40	2.463,80	866,00
Total Stockholders' Equity	12.853,40	12.853,40	7.087,90	2.204,30	- 3.268,00	- 6.258,40

Free Cash Flow Statement

in millions of $	2014	2015	2016	2017	2018
Earnings Before Interest and Taxes	7.949,20	7.145,50	7.744,50	9.552,70	8.822,60
Effective Tax Rate (%)	35,46%	30,91%	31,74%	39,44%	24,20%
NOPAT	5.130,32	4.936,79	5.286,13	5.785,33	6.687,19
D&A	1.644,50	1.555,70	1.516,50	1.363,40	1.482,00
as % of Revenues	5,99%	6,12%	6,16%	5,97%	7,05%
Monetary Income	6.774,82	6.492,49	6.802,63	7.148,73	8.169,19
Change in NOWC	54,50	61,90	246,50	36,50	59,90
as % of Revenues	0,20%	0,24%	1,00%	0,16%	0,28%
Operating Cash Flow	6.720,32	6.430,59	6.556,13	7.112,23	8.109,29
CAPEX	- 37,10	- 49,30	42,20	64,20	- 32,60
as % of Revenues	-0,14%	-0,19%	0,17%	0,28%	-0,16%
Free Cash Flow from Operations	6.757,42	6.479,89	6.513,93	7.048,03	8.141,89

DEVELOPMENT RATIOS	2014	2015	2016	2017	2018
Sales growth rate	-2,36%	-7,39%	-3,11%	-7,32%	-7,87%
Cost of sales growth rate	-1,26%	-8,02%	-7,72%	-15,38%	-16,07%
Operating income growth rate	-9,30%	-10,11%	8,38%	23,35%	-7,64%
Net income growth rate	-14,82%	-4,80%	3,47%	10,79%	14,10%
Total assets growth rate	-6,55%	10,84%	-18,23%	8,95%	-2,92%
Debt growth rate	3,67%	44,34%	7,71%	11,57%	5,39%

From the table above, we can deduce some information about the company's development. As mentioned before, sales growth rate has been declining constantly during the period from 2013 to 2018, because of the intense competition that the company is facing in the market. On the other hand, cost of sales growth rate has been positive for the company during the whole period, with a important cost reduction. Operating income and net income are affected by the combined effects of these variables.

Operating income has significantly increased in 2017 and 2016, especially due to other operative income. In the other years the effect of the fall in revenues is greater than the cost reduction, therefore they face a negative growth rate in operating income. Looking to the Net income growth rate, after a decrease until the end of 2015, the company faced again a positive growth in conformity with the trend of the Gross Profit Margin. Total asset growth rate and debt growth rate are affected by some company's events such as acquisitions and new funding. Focusing on 2015, the net increase was primarily due to net issuances of $9.7 billion in connection with the Company's plan to optimize its capital structure.

Balance Sheet Forecasts

in millions of $	2019E	2020E	2021E	2022E	2023E
Cash and cash equivalents	2.129,18	4.953,11	8.915,36	13.831,51	19.691,05
Total Receivables	2.441,50	2.441,50	2.441,50	2.441,50	2.441,50
Inventories	51,10	51,10	51,10	51,10	51,10
Prepaid expenses & Other curr	649,60	649,60	649,60	649,60	649,60
Total current assets	5.271,38	8.095,31	12.057,56	16.973,71	22.833,25
Property, plant and equipment, net	25.117,94	27.164,97	29.468,41	32.037,90	34.883,35
R&D asset	-	-	-	-	-
Leases	8.282,46	8.282,46	8.282,46	8.282,46	8.282,46
Goodwill, Net	2.331,50	2.331,50	2.331,50	2.331,50	2.331,50
Other intangibles, net	2.381,00	2.381,00	2.381,00	2.381,00	2.381,00
Total Utility Plant					
Long term investments	1.202,80	1.202,80	1.202,80	1.202,80	1.202,80
Note Receivable, Long Term					
Other long term assets	-	-	-	-	-
Total other non-current assets	39.315,70	41.362,73	43.666,17	46.235,66	49.081,11
TOTAL ASSETS	**44.587,08**	**49.458,04**	**55.723,73**	**63.209,36**	**71.914,36**
Accounts payable	1.207,90	1.207,90	1.207,90	1.207,90	1.207,90
Accrued expenses	297,00	297,00	297,00	297,00	297,00
Income Taxes					
Other taxes					
Other current liabilities	986,60	986,60	986,60	986,60	986,60
Total current liabilities	2.491,50	2.491,50	2.491,50	2.491,50	2.491,50
Long-term debt	31.336,90	31.600,70	31.866,73	32.134,99	32.405,51
Leases	8.282,46	7.451,19	6.667,70	5.944,37	5.245,12
Deferred revenues	627,80	627,80	627,80	627,80	627,80
Deferred income taxes	1.240,36	1.265,72	1.291,61	1.318,02	1.344,97
Long-term income taxes	479,63	- 1.683,34	- 4.331,74	- 7.478,21	- 11.138,24
Other non current liabilities, Total	1.118,72	1.141,60	1.164,94	1.188,77	1.213,08
Total non-current liabilities	43.085,87	40.403,67	37.287,03	33.735,73	29.698,24
Research asset	-	-	-	-	-
Equity	- 1.442,30	5.061,99	13.026,03	22.487,80	33.493,94
TOTAL LIABILITIES & EQUITY	**44.135,07**	**47.957,16**	**52.804,56**	**58.715,04**	**65.683,68**

Financial Ratios

LIQUIDITY RATIOS	2014	2015	2016	2017	2018
QUICK RATIO	1,11	1,54	0,78	3,05	1,20
CURRENT RATIO	1,36	1,84	1,40	3,27	1,52
Net Working Capital	1.079,70	2.432,60	1.380,30	6.692,60	1.437,60

Liquidity. Liquidity ratios are used to describe a debtor's ability to pay off current debt obligations without using external capital in a short-term time horizon. To do this we use indexes that compare current assets and current liabilities. The current ratio is higher than the quick ratio because it includes inventory among current assets. These ratios are more than satisfying over the period since well above than one except for 2016 that saw a substantial cash reduction.

PROFITABILITY RATIOS	2014	2015	2016	2017	2018
ROE	-94,66%	-158,88%	-212,61%	63,90%	37,02%
ROA	18,06%	15,36%	15,11%	11,94%	13,90%
Profit Margin	28,18%	22,75%	19,03%	17,82%	17,34%
EBIT Margin	41,96%	41,86%	31,45%	28,12%	28,97%

Profitability. Profitability ratios are used to evaluate a company's ability in generating earnings and remunerating its shareholders. Profit and EBIT margin are calculated by comparing profits and EBIT with the revenues. A higher ratio means that the company has the ability to generate more profit and operating income from its revenues. During the period the company had negative levels of ROE in the last three years. As for many other indices, 2016 was the worst year but after that it seems to show signs of recovery.

SOLVENCY RATIOS	2014	2015	2016	2017	2018
Solvency Ratio	18,96%	17,68%	18,67%	19,72%	29,95%
D/E Ratio	- 6,24	- 11,34	- 15,07	4,35	1,66

Solvency. Solvency ratios measure a company's ability to meet its financial obligations in both the long term and the short term. Debt/Equity ratio is useful to understand how a company is using debt to leveraging its assets. Solvency ratio has been declining during the period until the last year considered 2018. D/E declined incredibly in 2016, in conformity with the other ratios.

Valuation

Our analysis implements an APV model, with a steady growth period since the firm seems already stabilized in its operating procedures. The work will consequently consist of an explicit forecast of the key financial variables for the years 2019-2023 and the terminal value. For both computations, we use the same growth rate, following the consideration stated above. Our choice of such model is due to the advantage the APV provides in using, in the beginning, pre-debt cash flows to obtain the unlevered value of the firm and then considering the net effect of debt (mainly consisting in the counterbalancing forces of tax shield and increased bankruptcy costs). We prefer this model since it provides more flexibility in considering the side effects of debt and tax benefits explicitly, rather than embedding them in the discount rate. We also believe that being the company stable and rather financially sound (rating BB+), the risk of underestimating expected bankruptcy costs for CF Industries Holding appears under control.

The key inputs for the explicit forecast period are the following: the growth rate in revenues and other items, the future Capex, the future level of debt, the probability of default and the bankruptcy costs.

Projections. We projected revenues for the explicit forecast period 2019-2023 at a constant growth rate of 2,05%, obtained through a weighted average of the four geographical divisions in which the company operates (US, Europe, Apmea and Australia/UK). Therefore, we assumed the company will be able to lower CGS due to efficiency and they would converge to the industry average (given the current level of 2018 being 48,7%). Furthermore, we converted operating leases into debt (financial leases).

	2019	2020	2021	2022	2023
Sales Growth	2,05%	2,05%	2,05%	2,05%	2,05%
Sales	21.455,17	21.893,92	22.341,65	22.798,54	23.264,77
Costs of sales	10.448,59	9.348,63	8.199,31	6.999,07	5.841,70
Gross profit	11.006,6	12.545,3	14.142,3	15.799,5	17.423,1

Cost of equity. We computed the cost of equity unlevered and levered (5,38% and 6,14%) and we used them as a discount rate for the explicit forecast period 2018-2022.

Going more in detail with the calculations, for the unlevered cost of equity we adopt the formula

$$K_u = r_f + \beta_u * ERP$$

As risk-free rate we select the 30-year US treasury, being the company based in US and hence consistent with the currency of the security selected. We prefer this because in our opinion it incapsulates also the country risk premium embedded in the US market (trade war between China and US, earnings' slowdown in American corporates, …). Even though the company operates in different countries, in our opinion it is conservative to select the 30-year US treasury rate because US represents one of the most mature markets. To this rate, we add a portion of the equity risk premium to which the company is exposed, where beta coefficient expresses the magnitude of this exposure. The equity risk premium is derived from a mature US Equity market index (S&P500). We prefer to use such an index since the company is quoted on the NYSE and therefore it is a good proxy for market returns.

Finally, our beta unlevered estimate (0,56 considering 3 years of weekly data) appears to be lower than Damodaran's estimate for the sector (0,64). Re-levering the beta taking into account the ratio between market value of debt and market value of equity, we obtained a beta of 0,95.

Growth rate. The steady-state growth rate has been selected consistently with the long-term growth rate of the four geographical divisions stated above. The figure we used in the model results from two sources: the website of the OECD and trading economics. The growth rate was not calculated using the alternative method of *reinvestment rate * ROIC* since the resulting growth rate was too small and unrealistic.

Tax rate. In the long-term, the effective tax rate converges to the marginal one. We follow this line of reasoning in making the effective tax rate progressively adjust toward the value of 21% in our explicit period. It has to be noticed, however, that the past figures of the effective tax rate show a bit of volatility: the lowest effective tax rate (24,20%) is observed in 2018, whereas the highest happens to be in 2017 (39,44%).

Working capital. Essentially, for the working capital, we made adjustments for leasing (taking into account also the depreciation effect) and we forecasted depreciation as a fixed percentage of property, plant and equipment.

	2015	2016	2017	2018	2019	2020	2021	2022
Beginning balance			20.989,00	22.842,70	25.117,94	27.164,97	29.468,41	32.037,90
Capital expenditure	1.813,90	1.821,10	1.853,70	2.741,70	2.523,02	2.789,17	3.065,15	3.351,25
Ammortization	-	-	-	-	-	-	-	-
Leases amortization				466,46	476,00	485,73	495,66	505,80
Leased assets capex				-	-	-	-	-
Depreciation	-	-	-	-	-	-	-	-
Ending balance			22.842,70	25.117,94	27.164,97	29.468,41	32.037,90	34.883,35

Operating lease. For the operating leases, we converted them into financial one, in order to consider them as an asset. Therefore, we split them into interest and capital component for the explicit period 2019-2023 and for 2024-onwards. Since the interest rate on lease contract is not known, we applied the cost of long-term debt and we considered as useful period 20 years, as stated in the company's annual report.

Date	Payment outstanding	Interest component	Capital component	2023-onw payment	Amortization
2018	1.147,70	287,98	859,72	364,86	457,11
2019	1.083,10	251,83	831,27		
2020	1.001,20	217,71	783,49		
2021	909,50	186,17	723,33		
2023	830,60	131,36	699,24		
from 2024 onwards	7.297,20				
Cost of borrowing	3,15%				
PV leases 2018-2022	4.557,54				
Typical lease period	20				
PV leases 2023-onwards in 2022	€5.353,67				
PV leases 2023-onwards in 2017	4.584,65				
Total PV leases	9.142,18				
Leases 2018	8.282,46				
Leases 2019	7.451,19				
Leases 2020	6.667,70				
Leases 2021	5.944,37				
Leases 2022	5.245,12				

Debt dynamic. We assumed debt repayment as % of initial long-term debt to be constant at 20,00% and new debt issuance at 25,58% (these percentages come from 2018 statement of financial position and balance sheet).

	2018	2019	2020	2021	2022	2023	2024-onwards
Debt (Long term)	31.075,30	31.336,90	31.600,70	31.866,73	32.134,99	32.405,51	33.068,20
Leasing			8.282,46	7.451,19	6.667,70	5.944,37	6.065,93
Other non current liabilities	1.096,30	1.118,72	1.141,60	1.164,94	1.188,77	1.213,08	1.237,88
Total Debt	32.171,60	32.455,62	41.024,76	40.482,85	39.991,45	39.562,95	40.372,01
Taxes	25,00%	24,20%	21,00%	21,00%	21,00%	21,00%	21,00%
kus	5,38%	5,38%	5,38%	5,38%	5,38%	5,38%	

Present value of Bankruptcy Costs. The present value of bankruptcy costs is computed according to the following formula:

$$PV(BC) = \pi_a\,(BC)$$

where the probability of default multiplies the value of bankruptcy costs, computed as a percentage of the value of unlevered firm plus the present value of tax benefits.

There are two components to the estimation of the present value of bankruptcy costs, that are the probability of default and the bankruptcy costs themselves. Firstly, we defined the probability of default according to the indirect methodology, hence anchoring our estimate to the bond rating issued by the company and then using the empirical estimates of default probabilities for that rating. Secondly, we searched for studies that reported the magnitude of this costs in actual bankruptcies. According to the literature, the total bankruptcy costs (indirect plus direct ones) should be the 25-30% of the firm's value. Nevertheless, there are two main flaws to these figures: the papers that report them are quite dated (Shapiro, 1989; Titman 1984), hence they might not be reliable in their empirical observations if compared to the current times; besides, the papers do not provide any direct evidence of these figures.

Following these considerations, we looked for more recent evidence that could confirm the 25-30% estimation. Analyzing more recent literature (article by A. Rosen, 2016) and empirical cases of bankruptcy, we came to the conclusion that costs of bankruptcy can be estimated as 2-3% of assets for the direct ones, and 25-30% of assets in the case of indirect ones. It has to be noticed that in a valuation framework, it is correct to specify the bankruptcy costs as of % of the value of unlevered firm plus the present value of tax benefits, and not as % of the total asset. The latter is standard practice after the bankruptcy declaration when the firm files for Chapter 11.

Finally, as a probability of default, we follow the results of a study by Altman: since MCD's rating is Baa1 (according to Fitch, A3 for Moody's), the corresponding probability of default is estimated to be 7,54%.

Present Value of Tax Benefit

$$PV(TB) = \sum_{t=1}^{n} \frac{E(t_c * k_d * D_t)}{(1+\rho_u)^t} + \frac{t_c * k_d * D_{n+1}}{(1+\rho_u)^n * (\rho_u - g_n)}$$

We used the above formula to compute the expected tax benefits. In particular, we have the explicit forecast period 2019-2023 and then we have 2024-onwards. As we have access to the market value of debt, we used as cost of debt 3,15% that is the current one for the company.

In the table we included also the short-term cost of debt that comes from FRED website for high quality bonds, even though the company currently does not have any short-term debt outstanding. It needs to be noted that the tax benefits coming from leasing are small if compared to the ones coming from LT debt.

As stated above, the effective tax rate converges to the marginal one in perpetuity, and the growth rate is assumed to be 2,05%.

	2018	2019	2020	2021	2022	2023	2024-onwards
Debt (Long term)	31.075,30	31.336,90	31.600,70	31.866,73	32.134,99	32.405,51	33.068,20
Leasing			8.282,46	7.451,19	6.667,70	5.944,37	6.065,93
Other non current liabilities	1.096,30	1.118,72	1.141,60	1.164,94	1.188,77	1.213,08	1.237,88
Total Debt	32.171,60	32.455,62	41.024,76	40.482,85	39.991,45	39.562,95	40.372,01
Taxes	25,00%	24,20%	21,00%	21,00%	21,00%	21,00%	21,00%
kus	5,38%	5,38%	5,38%	5,38%	5,38%	5,38%	
Cost of debt LT		3,15%	3,15%	3,15%	3,15%	3,15%	3,15%
Tax benefit LT		239	209	211	213	214	219
Cost of debt leasing		3,15%	3,15%	3,15%	3,15%	3,15%	3,15%
Tax benefit Leasing		-	54,79	49,29	44,11	39,32	40,13
Cost of debt ST		3,15%	3,15%	3,15%	3,15%	3,15%	3,15%
Cost of debt ONCL		3,15%	3,15%	3,15%	3,15%	3,15%	3,15%
Tax benefit ONCL		8,53	7,55	7,71	7,86	8,02	8,19
Discount rate	1	0,95	0,90	0,85	0,81	0,77	
Discounted TB		234,82	244,39	228,85	214,54	201,41	
Discounted TB (2018-2023)	1.124,00						
TB (2023-onwards)	7.767,41						
Discounted TB (2023-onwards)	5.977,65						
Present Value Tax Benefit	7.101,65						

Result of the model. We obtained an Equity Value of 211.582,28 , that divided by the number of shares outstanding gives us a target price of 276,58. In order to obtain the equity value, we subtracted from the total Adjusted Present Value the following items:

- Cash & Cash Equivalents: 866,00;
- MV of debt: 31.075,00.

The determinants are the following:

1. Value of unlevered firm:

FCFF 5	8.952,89
Discount 5	76,96%
Kul	5,38%
g	2,05%
TV (not discounted)	274.123,10
TV	210.959,94
Kus	5,38%
VU	242.080,01

2. PV of tax benefits:

Discounted TB (2018-2023)	1.124,00
TB (2023-onwards)	7.767,41
Discounted TB (2023-onwards)	5.977,65
Present Value Tax Benefit	7.101,65

3. PV of bankruptcy costs:

Probability of default	7,54%
Direct Bankruptcy Costs*	2,75%
Indirect Bankruptcy Costs*	28,25%
Value of unlevered firm	242.080
PV of Bankruptcy Costs	**5.658,38**

as a % of value of unlevered firm + pv of tax benefits

Market Multiples Approach

This kind of valuation has been associated to the APV method, in order to have an immediate comparison between FCF method and the market sentiment in this actual moment and a projection of the value of MC Donald's in the future.

The restaurant business is very developed with a great variety of products offered.

	Stock exchange	Sales (th $)
Mc Donalds	NYSE	22.719.000
Yum! Brands	NYSE	5.688.000
Starbucks Corp	NASDAQ	24.719.500
Papa John's Intl	NASDAQ	1.573.316
El Pollo Loco	NASDAQ	435.828
Domino's Pizza	NYSE	3.432.867
Dunkin Brands	NASDAQ	1.321.617
Wendy's Company	NASDAQ	1.589.936
Cheesecake Factory	NASDAQ	2.332.331
Papa Murphy's	NASDAQ	126.429
Restaurant Brands International	TSE	5.357.000
Chipotle Mexican Grill	NYSE	4.864.985
Wingstop Inc	NASDAQ	153.181

We have excluded from our analysis Starbucks Corp, Dunkin Brands and Cheesecake factory because in our opinion their core business is different from our target company's one. Since their offer is limited to a specific segment of products such as coffee, hot and cold drinks, baked goods and ice cream.

El Pollo Loco, Papa Murphy's and Wingstop Inc have been excluded due to their low revenues compared to McDonald's.

Papa John's Intl has been excluded due to the fact that were some missing values in the 2021 forecast.

Subway has not been considered because it is not listed.

The peers selected has been the following: Yum! Brands, Domino's Pizza, Wendy's Company, Restaurant brands International and Chipotle Mexican Grill.

	Stock Exchange	Market Cap (16/04/2019) B$	Sales (th)	EBITDA Margin %	EBIT Margin %
McDonald's	NYSE	146,48	22.719.000		22.75
Yum! Brands	NYSE	31,09	5.688.000	34,35	31,14
Domino's Pizza	NYSE	10,63	3.432.867	18,22	16,65
Wendy's company	NASDAQ	4,28	1.589.936	29,66	16,26
Restaurant brands international	TSE	27,32	5.357.000	39,15	35,79
Chipotle mexican grill	NYSE	19,59	4.864.985	10,34	5,87
Mean		**18,58**	**4.186.558**	**26,34**	**21,14**
Median		**19,59**	**4.864.985**	**29,66**	**16,65**

The mean and the median of the table above exclude McDonald's from the calculation, in order to provide a better summary measure of the pull of peers found.

We have chosen the above comparables because they fullfill the same customers' needs someone with similar products (such as hamburgers) and the others with alternative products (such as chicken or pizza).

Description of the selected comparables

YUM! Brands Inc. operated or franchised in 135 countries and territories with 43.500, operating under the following brands: Pizza Hut, KFC or Taco Bell. Pizza Hut is a restaurant chain specialized in Italian-American cuisine with 18.431 restaurants worldwide. KFC is the second largest restaurant chain by sales. It has 22.621 locations and offers fried and non-fried chicken products, such as sandwiches, chicken strips, chicken-on-the-bone and other chicken products. Taco Bell specializes in Mexican-style food products like tacos, burritos, quesadillas, salads, nachos and other related items. It has 7.072 restaurants serving more than 2 billion customers.

The Wendy's Company is a restaurant company specializing in the hamburger sandwich segment. Wendy's is engaged in the business of operating, developing and franchising a system of restaurants serving food. It operates principally in the American continent, but it is probably the most similar to McDonald's.

Restaurant Brands International Inc. is a quick service restaurant company. The Company had over 23.000 restaurants in more than 100 countries. It operates under Tim Hortons, Burger King and Popeyes Louisiana Kitchen brands. Tim Hortons restaurants are quick service restaurants with a large menu that includes hot and cold coffee, tea, and baked goods. It operates through 4.846 restaurants in 14 countries. Burger King restaurants are quick service restaurants that serves hamburgers, chicken and other specialty sandwiches, French fries and other food items. It has 17.796 restaurants worldwide, half of them in the USA. Popeyes Louisiana Kitchen restaurants are chicken quick service restaurants (it is the second largest in this segment) that feature Louisiana style menu.

Domino's Pizza Inc. is a pizza restaurant chain company. The Company operated in over 13.800 locations in over 85 markets around the world. Its basic menu features pizza products in various sizes and crust types. It is the largest pizza seller worldwide in terms of sales.

Chipotle Mexican Grill Inc. serve a menu of burritos, tacos, burrito bowls and salads. The Company operated 2.198 Chipotle restaurants throughout the United States, as well as 29 international Chipotle restaurants, and it also had 23 restaurants in operation in other non-Chipotle concepts. 29 of its restaurants were located outside of the United States, with 17 in Canada, six in the United Kingdom, five in France and one in Frankfurt, Germany.

Methodology and results

The sample has been mainly selected in terms of business model and dimensions (EBITDA).

The analysis has been conducted through forecasted multiples (2019-2020-2021), with the aim of incorporating the expected evolution in the close future of the sector.

We used both equity side and asset side multiples, in order to have a double check on our results.

The equity side multiple considered is PE. PE is one of the most diffused tools in relative valuation. It provides an immediate reflection of the market's expectations on the business' profitability for the shareholders of the company.

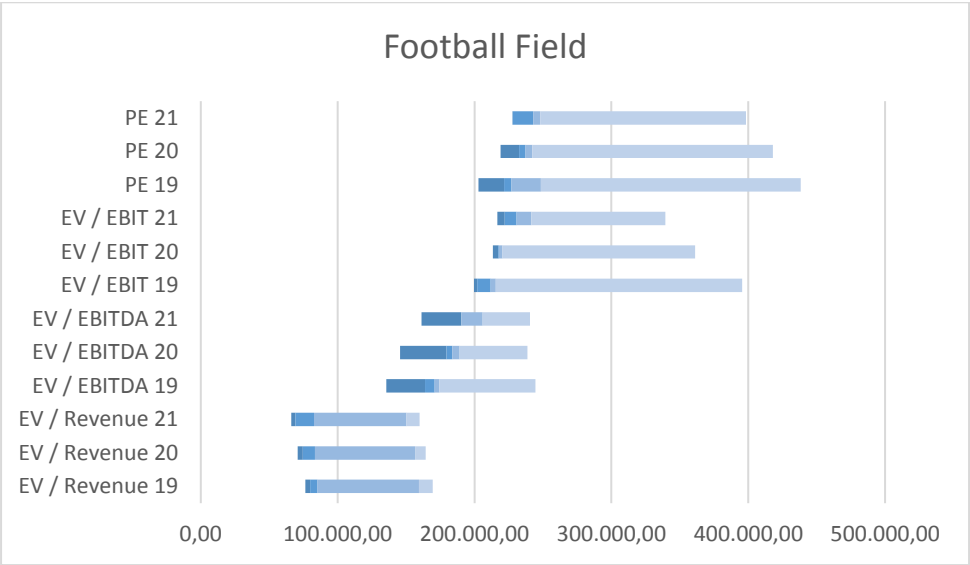
The asset side multiples we considered are EV/Revenues, EV/EBITDA and EV/EBIT. The first factor highlights the market appreciation of company franchising power. The second one and the third one show the market appreciation of different capital and revenues-costs structure.

	YUM			WEN.O			QSR.TO			CMG			DPZ		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
EV/Sales	7,4	7,2	6,7	3,9	3,8	3,7	7,9	7,5	7,16	3,6	3,2	2,9	3,7	3,4	3,1
EV/EBITDA	19,5	18,4	17,4	15,5	14,2	13,6	18,7	17,5	16,1	27,9	23,3	20,4	19,9	17,9	16,1
EV/EBIT	20,8	19,6	18,4	22,3	19,8	19,2	20,6	19,2	17,2	40,8	32,5	27	21,9	19,6	17,6
PE	26,5	23,8	21,6	30,3	24,4	22,1	23,9	21,8	20,6	56,6	44,7	37,4	27,3	23,3	20,0

The model merges the results obtained with the projections of the APV valuation method with the forecasted multiples of the comparables. This ensures consistency and continuity in the whole valuation process, providing additionally a counter-check between the two methodologies.

	McDonald's		
	2019	2020	2021
EV / Revenue	8,47	8,3	8,12
EV / EBITDA	16,37	15,6	15,43
EV / EBIT	19,03	18,1	17,32
PE	23,61	21,82	20,48
Revenue	21.455,17	21.893,92	22.341,65
EBITDA	8.761,38	10.254,19	11.804,38
EBIT	9.684,27	11.107,87	12.571,48
Net Income	7.203,88	8.661,60	9.844,80
PFN 2018	30.506,30		
#Shares	763.480.611		

Share Price Calculation			
	EV	Equity Value	Share Price
MIN	66131,30	35625,00	46,66
Q1	161015,99	130509,69	170,94
MEDIAN	208783,23	178276,93	**233,51**
Q3	233750,68	203244,38	266,21
MAX	438462,01	407955,71	534,34
AVG	221628,64	191122,34	**250,33**
Current Share Price:			209,58



As can be seen from the football field structure and considering the plausible EV, no relevant outliers can be seen.

The MC Donald's enterprise value reasonably ranges from 161,02 $ billions (25th percentile) to 233,75 $ billions (75th percentile). Given the dispersion of the results we decided to continue the analysis assuming an enterprise value equal to 221,73 $ billions (average).

The resulting average price per share is expected to be around 250,33 and it is higher than the current market price.

Investment Risk

In this part of the report we will analyze the main uncertainties and risks that investors of McDonald's and, more in general, in the foodservice industry.

As we already mentioned, in the last five years the stock price more than doubled reaching the current performance of 212$. However, many factors affect the volatility and price of our common stock in addition to our operating results and prospects. One of them, could be the impact of their stock repurchased program started in December 2015.

In 2018, the Company returned approximately $8.5 billion to shareholders through a combination of shares repurchased and dividends paid. This brings the cumulative two-year return to shareholders to $16.2 billion toward our targeted return of about $25 billion for the three-year period ending 2019. The general McDonald's results depend on the effectiveness of their supply chain management to assure reliable and sufficient supply of quality products on favorable terms. Supply chain interruptions, including shortages and transportation issues, and price increases can adversely affect McDonald's as well as their suppliers and franchisees whose performance may have a significant impact on results.

However, as we have noticed before the company's cost of sales has decreasing in the last past years and we believed that the efficiency will continue in the future. The profitability of the company depends also in part on their ability to anticipate and react to changes in commodity costs, including food, paper, supplies, fuel, utilities and distribution, and other operating costs, including labor. Any volatility in certain commodity prices or fluctuation in labor costs could adversely affect our operating results by impacting restaurant profitability.

The commodity markets for some of the ingredients that McDonald's uses, such as beef and chicken, are particularly volatile due to factors such as seasonal shifts, climate conditions, industry demand, international commodity markets, food safety concerns, product recalls and government regulation, that are gaining more and more importance nowadays and, in many instances, they result unpredictable. They can only partially address future price risk through hedging and other activities, and therefore increases in commodity costs could have an adverse impact on their profitability.

Regarding the foodservice industry is expected to gain benefit from the expected worldwide growth in population, consumption, and GDP. However, changing consumers habits and generational change is two drivers whose impact remain uncertain. On the one side, the recent rise of word economy has positively affected the foodservice consumption in terms of volume and value. On the other side, the increase in disposable income, have allowed consumers to evolve and sophisticate their tastes.

Fast-food restaurants chain have struggled to retain old clients or gain new ones. McDonald's turnaround strategy employed in 2017 is oriented to the long term and is aimed to regain its predominant role of family space in North America and Europe, as well as consolidate the company's restaurants perception of the high-end dining space in Asia. The strategy is also targeting the digital dimension, where McDonald is offering its product through either direct or indirect channels. Thanks to digital transformation and rebranding strategy McDonald's have the opportunity to regain market share and beneficiate of the foodservice industry expected growth.

Incidentally, the Velocity Growth Plan appear to miss the generational change. Indeed, Millennials and iGen testes are much more sophisticated from older consumers. Indeed, this segment will tip the balance of the foodservice industry for the coming years, and large restaurant chains will need to be flexible and rapid in answering new market requests.