LISBON SCHOOL OF ECONOMICS & MANAGEMENT
UNIVERSIDADE DE LISBOA

MASTER OF SCIENCE IN FINANCE

MASTERS FINAL WORK

PROJECT

EQUITY RESEARCH:
WENDY'S CO

LUÍS GAIVÃO VAZ PINTO

OCTOBER 2019

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SUPERVISOR:
PROFESSOR PEDRO RINO VIEIRA

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Abstract

This report was prepared in the context of ISEG's Master in Finance, as the final project, and is focused on the evaluation of Wendy's Company, a fast-food burger chain. The report was drafted in accordance with the recommendations of the CFA Institute and is based on the information publicly available until June 30, 2019.

We chose Wendy's Company firstly because of the unique way the same has been able to adjust itself to the new features and opportunities made available by the social media, and also because we believe that our evaluation skills can be better developed in the context of the evaluation of a company with which we have never had contact before.

The target price per share of $23.75 was calculated based on the Discounted Cash Flow Method at the year end of 2020F. This target price represents a BUY recommendation with medium risk.

By way of introduction, this report highlights the most significant moments of the company's history, followed by a description of its strategy and business model, explaining the key drivers of profitability, as well as the board organization and its principal stockholders.

The report includes a high-level assessment of the world's economic environment, with particular emphasis on the US economy, where the company has its most significant presence, and the description of the industry and its main future challenges.

Against this background, the assumptions for the company's performance for the coming four years were based on its performance in the previous five years. Based on these assumptions, we calculated the future Cash Flows and the Cash Flow for the perpetuity, and these were discounted by the end of 2020 with a discount rate calculated by us.

As previously mentioned, this valuation reflects a Buy recommendation, and our recommendation is supported by the multiples valuation method with which we got an average target price per share of $ 22.69, which represents a BUY recommendation.

We further evaluated the company based on the Dividend Discount Model. However, the result was inconclusive because Wendy's Company does not have a stable payout policy.

Since there are some risks associated with these evaluations, we performed some sensibility analysis, as well as a Monte Carlo simulation. From these analyzes, it is worth highlighting the variables associated with the terminal period, especially the discount rate for the perpetuity and the eternal growth rate.

JEL classification: G10; G32; G34;

Keywords: Equity Research; Valuation; Wendy's Corporation; Fast-Food Chain

Resumo

Este trabalho é uma avaliação da cadeia americana de fast-food Wendy's corporation, e foi realizado no âmbito do projeto final do Mestrado em Finanças no ISEG. O relatório foi escrito de acordo com as recomendações do CFA Institute . O projecto é baseado na informação pública disponível até ao dia 30 de Junho de 2019.

O interesse que foi despertado e levou a escolher esta empresa foi a forma singular como a mesma se tem adaptado nos últimos anos aos novos desafios das redes sociais. Por outro lado, o desenvolvimento de ferramentas de avaliação poderiam ser aperfeiçoado com a escolha de uma empresa com a qual nunca houve contacto directo. O preço por acção de 23.75$ no fim do ano de 2020 foi obtido através da avaliação pelo Discounted Cash Flow method. Este preço sugere uma recomendação de compra, apesar do seu risco médio.

Este relatório começa com a narração dos momentos mais importantes da história da empresa, após a qual é feita uma breve descrição da estratégia e modelo de negócio da Wendy's, explicando os principais condutores de rentabilidade, bem como a forma de organização da direção e os seus principais accionistas.

Em seguida é apresentado um breve estudo da economia mundial, focado no mercado dos Estados Unidos da América (EUA) – onde a empresa tem uma presença mais significativa. Posteriormente expõe-se o funcionamento da indústria da Wendy's e os seus principais desafios para o futuro.

Após estes estudos, foram elaborados os pressupostos para os próximos 4 anos da empresa, tendo por base os últimos 5 anos . Com estes pressupostos foram previstos os próximos fluxos de caixa, assim como o fluxo de caixa para a perpetuidade, sendo os mesmos descontados com uma taxa de desconto também ela estimada.

Como foi dito anteriormente , o resultado desta avaliação é uma recomendação de compra. Esta conclusão é suportada pela avaliação elaborada através do método dos múltiplos, com o qual se obteve um preço por acção de 22.69$. Também foi realizada uma avaliação pelo método dos dividendos, cujo resultado foi inconclusivo, uma vez que a empresa não tem uma política de payout estável.

Existem alguns riscos associados a esta avaliação, pelo que foram efetuadas análises de sensibilidade e uma simulação de Monte Carlo. As variavéis que merecem destaque são sobretudo as que dizem respeito aos riscos associados com o período final, nomeadamente a taxa de desconto para a perpetuidade e a de crescimento eterno.

Classificação JEL: G10 ; G32; G34;

Palavras-Chave: Equity Research; Avaliação de Empresas; Wendy's Corporation; Cadeia de Fast-Food

Acknowledgements

The submission of this project means the end of a very significant phase of my life. This space will be used to thank everyone who all along it have helped me so much.

First of all, I thank my supervisor, Professor Pedro Rino Vieira, for his availability and patience during my work on the thesis: even when time was scarce and the deadline seemed impossible to meet, he always provided me with strength and motivation. I thank, as well, to all the teachers, who greatly increased my knowledge and who constantly made me do more and better, and to all the colleagues that accompanied me during this journey.

I am deeply thankful to my family, my support along these years, in particular to my mother, brother and sisters, who helped me in very different yet decisive ways. To my grandmother and to her sisters that, while present among us, always were so proud of each new step in my life, and who, I am sure would have felt the same regarding this one.

To Madalena, for giving me the motivation and the strength to embark on this journey and for all through it helping me to be persistent and demanding and to not discourage in times of greater pressure.

To Zachary, who in his limited free time managed to revise my draft thesis.
Thank you all so much!

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Wendys Co

BUY

Medium risk

30 June 2019

Portugal

WEN: Deliciously Different

(YE2020 Price Target of $ 23.75 (+21.3%); recommendation is to BUY)

1. Research Snapshot

BUY is our recommendation for Wendy's Company (WEN) with a price target of $23.75 at the end of 2020, using the **Discounted Cash Flow method**. Relative valuation through multiples supports our view that WEN is currently **undervalued**, as this method offers an **upside potential of 15.88%** from its latest closing price, June 30 of 2019, of **$ 19.58**, although with **medium risk**.

The main driver of WEN revenues has come from the franchisees, which represent 59% of the total revenues.

In the recent years, WEN has made some adjustments to its modus operandi, with a lot of restaurants managed by the company becoming franchised. This resulted in a significant of the Net Income of 2018. WEN wants to maintain the actual proportion of Franchised/company-operated restaurants.

While WEN has a strong presence in the North American market, it does not have a significant international presence. In fact, one of the company's goals is to expand its business to the international markets, as well as, to expand its brand throughout the world, thereby increasing the company's value.

Although entry costs into the fast-food market are low, it's quite challenging to have a strong brand and to be recognized in this segment. If we look at this industry in developed countries, we find a mature market, although growth is difficult. If we look at emerging markets, there are good opportunities to enter and expand the business. This is what most of Wendy's competition has been doing and it's what Wendy's is starting to do, and this can be an important step toward sustained growth.

This expansion is being made through the establishment of new franchising partners.

Table 1: Analyst's Risk Assessment
Source: Author

LOW	MEDIUM	HIGH

Our risk assessment estimates a medium risk for WEN.

Figure 1: Historical Share Price
Source: Reuters and Author

2. Business Description

Wendy's History:

Wendy's is an international fast-food company founded in 1969 by Dave Thomas in Columbus, Ohio.

By 1978, Wendy's had already opened a thousand restaurants, including in Canada.

By 2001, Wendy's had established six thousand restaurants in Canada and the USA.

In 2008, Triarc announced the acquisition of Wendy's, and its name changed to Wendy's/Arby's Group, Inc.

Currently, the company owns, operates, and franchises fast-food restaurants located throughout countries such as the United States, Singapore, the Middle East, North Africa, the Russian Federation, the Eastern Caribbean, Argentina, the Philippines, and Japan. Wendy's is settled in 6711 places in the world, but the company only owns 353 of them. Wendy's is recognized for its high-quality food and creative advertising.

Wendy's doesn't sell food to franchisees but rather has selected suppliers with agreed prices and costs that supply the ingredients to each restaurant.

Wendy's operational segment

The main business of Wendy's is fast food meals, which in some restaurants include breakfast. WEN specializes in hamburger sandwiches, chicken filet sandwiches, nuggets, chili, French fries, baked potatoes, freshly prepared salads, and desserts.

Two-thirds of Wendy's sales come from pick-up/ drive through windows available in its restaurants.

Nearly 95% of Wendy's restaurants are franchised, and the company has very standardized processes to keep the food's high quality, clean-up, and to train the employees. Wendy's internal auditors make regular visits to evaluate each restaurant and give recommendations to improve its quality.

Figure 2: Wendy's Logo
Source: Wendy's Story

Figure 3: Wendy's Sales Distribution
Source: WEN Annual Report 2018

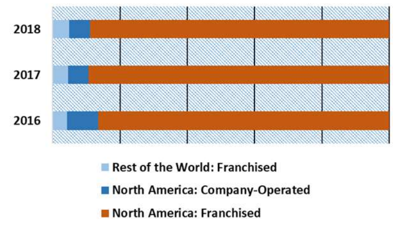


Figure 4: Global System Worldwide
Source: WEN Proxy Statement 2019

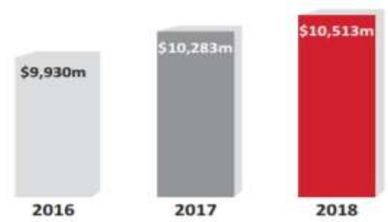
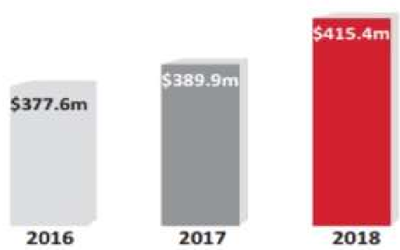


Figure 5: Same-Restaurant Sales
Source: WEN Proxy Statement 2019

Figure 6: Adjusted EBITDA
Source: WEN Proxy Statement 2019

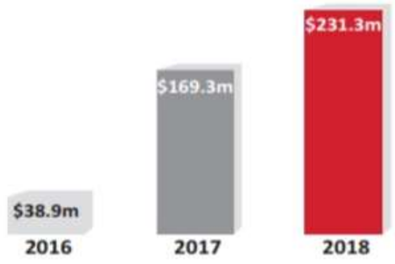


Wendy's Market Share

According to QSR magazine, in 2018, Wendy's was the world third-largest quick-service restaurant burger, following McDonald's and Burger King, with a market share of 3.7%, and the brand was ranked in the sixth position in the quick-service restaurant segment.

As we can see in figure 3, the most significant stake of Wendy's sales in 2018 came from the North American Market (95%), with a residual percentage coming from the rest of the world. Most of Wendy's restaurants are franchised. Company only operates restaurants in North America.

Figure 7: FCFF
Source: WEN annual report 2018



Company key drivers of profitability

In 2018 Wendy's revenues increased roughly 30%. This growth can be explained by a rise in the sales from company-operated restaurants, an increase in franchise rental income and additional advertising funds that came from franchisees.

The sales from company-operated restaurants in 2018 totalled $ 651.6 million, against $ 622.8 million in 2017, which represented an increase of 4.6%. According to the company's financial report for 2018, this increase was due to the rise of 1.3% of company-operated same-restaurant sales, and to an increase in the number of company-operated restaurants in operation during 2018, as opposed to 2017.

In 2017, the company suffered a decrease in sales, and this was explained by the sale of some company-operated restaurants to franchisees which resulted in a reduction in sales of 316.4 million.

However, same-restaurant sales increased in both years and both types of restaurants: franchised and company-operated restaurants. In 2017 and 2018, the increase of the level of same-restaurant sales was respectively 2.2% and 1% for franchised restaurants and 0.2% and 1.3% for company-operated restaurants. The increase in same-restaurant sales was due to the rise in average per customer check amount, and not to the number of customers, which decreased in both years.

The increase of the average per customer check amount can be explained by the changes in product mix, and the strategic price increases of company's menu items.

The increase in franchise revenue during 2018 was due to the end of the image activation program in 2017, as well as to an increase of the number

Figure 8: WEN and Comparables EBIT Margins
Source: Bloomberg

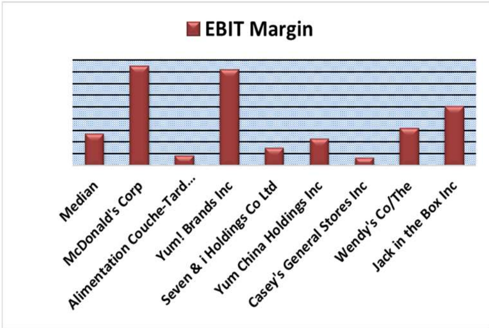
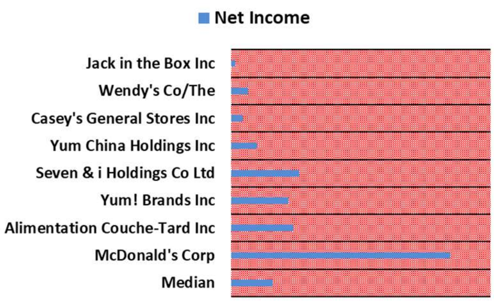


Figure 9: WEN and comparables Net Income
Source: Bloomberg



of franchised restaurants. Also, mentioned above, it is also explained by the 1 % rise of same-restaurant sales.

The small decrease in franchise fees during 2018 was because of changes in accounting policies.

In relation to cost, the firm increased their percentage of revenues expensed as cost of sales in the past two years. In 2018 the percentage of sales expensed as cost of sales increased 1% while in 2017 it had increased 1.5%. These increases were explained by the Company as being primarily due to a rise in restaurant labour rates, higher commodity costs and higher insurance costs, partially offset by benefits from strategic price increases of the menu items.

Wendy's uses the following measures as key drivers of profitability:

- **Same-restaurant sales**- which refers to the difference in revenue generated by the company's existing restaurants over a certain period, compared to an identical period ended 15 months before.
- **Restaurant margin**- Restaurant margin is the revenue of company-operated restaurants minus the operational costs divided by the revenue of company-operated restaurants.
- **Systemwide sales**- which refers to the total amount of the chain's sales, including company-operated restaurants and franchised restaurants. This indicator, which totalled $10,283.2 million in 2017, increased by 3.5%, when compared to the total of $9,930.2 million in 2016. The increasing is explained by the increase in international franchised sales by 14.8%, as well as the increase in North America systemwide-sales by 3%.

  In 2018, systemwide-sales increased by 1% due to the increasing of international systemwide franchised sales by 13% and to the increasing of North America systemwide-sales by 2%.
- **Average Unit Volumes** – This indicator consists of the sum of average weekly sales of all company-operated restaurants and is stated in thousand US Dollars. There was a small increase in these figures, from 1545.9 in 2016 to 1580.4 in 2017 and to 1596.1 in 2018. However, this indicator decreased with respect to international franchised restaurants, which according to the company was due to the instability of the relevant countries, as well as the impact of the currency fluctuations.

Company strategies

Fast food restaurants usually follow a cost leadership strategy. However, WEN's strategy is slightly different. This fast-food company tries to achieve a balance between cost leadership and differentiation.

WEN wants to improve its efficiency without putting the quality of its products at stake. This commitment is illustrated by one of the company's slogans "fresh but not frozen food". As a result, WEN has opted not to charge lower market prices to ensure the quality of its products.

This may be considered a risky strategy, but we have seen the emergence of new brands offering superior products at slightly higher prices. Chipotle and Panera are two good examples of this strategy. This is a new segment inside the fast-food sector that is recognized by this type of approach, which is called fast-casual food, and millennials seem to like it. A fast-casual restaurant offers the facilities of the typical fast-food restaurant but with a more welcoming space.

Millennials are very concerned with their health and try to maintain a balanced diet.

WEN is aware of these concerns and is trying to make a transition to meet the interests of this universe of population.

With this aim, the firm is investing in the development of healthier products.

WEN is also currently changing the brand image to become a reference to the new generations.

WEN is still using the freckled little girl with red braids as the company's logo, but now she is an effective spokeswoman and a millennial.

The fast-food segment needs to be very efficient to maintain low prices, and one of the top winning strategies is technology investment, which allows the company to be more efficient. The company is aware of that and will continue to invest in technology.

The company is still investing in digital marketing.

WEN launched an "image activation program", to remodel its restaurants, including company-operated and franchised restaurants, with the aim of adjusting the design of the restaurants to the new times and to convey the idea of cleanness.

This program was essential to the increase the chain's sales.

Figure 10: Wendy's ownership at 09/05/2019
Source: Nasdaq

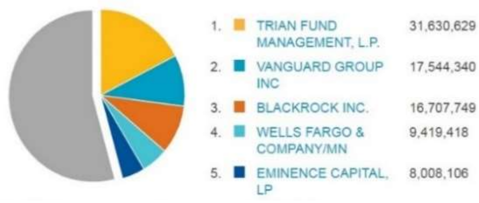
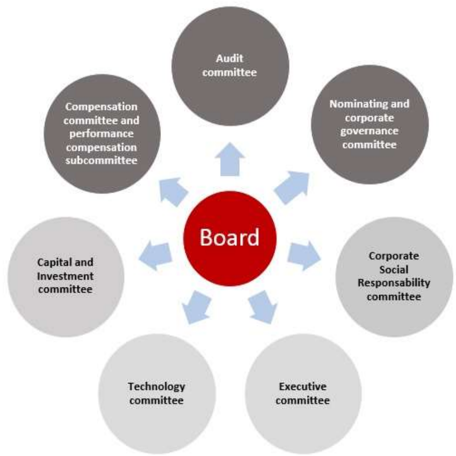


Figure 11: Total Stockholders return
Source: WEN Proxy Statement 2019

Figure 12: Board organization
Source: WEN Proxy Statement 2019



WEN has a poor geographic coverage outside of the North American Market (Canada and USA), but now is trying to expand its market coverage. The firm believes that the best way to generate long-term value for stockholders is expanding to more countries, especially to markets where the wages are lower than in the US.

3. Management and Corporate Governance

Shareholder Structure

Wendy's restaurants, LLC is 100% owned by Wendy's company. Wendy's Company is 17.39% owned by Trian Fund, 9.65% by Vanguard Group, 9.19% by BlackRock, 5.18% by WELLS FARGO, 4.40% by Eminence Capital and the other 54.19% is owned by other institutional holders.

The Wendy's Company's corporate predecessor was incorporated in Ohio in 1929 and was reincorporated in Delaware in June 1994. Effective September 29, 2008, in conjunction with the merger with Wendy's, the Company's corporate name was changed from Triarc Companies, Inc. ("Triarc") to Wendy's/ Arby's Group, Inc. ("Wendy's/Arby's"). Effective July 5, 2011, in connection with the sale of Arby's Restaurant Group, Inc. ("Arby's"), Wendy's/Arby's changed its name to The Wendy's Company.

Management and Corporate Governance

The Company's Board of directors is the ultimate decision-making body of the Company, except concerning matters reserved to the stockholders. The stockholders elect WEN' Company Board.

The board should have between 7 and 15 members. Currently, it has 11 members.

The majority of Board directors should meet the independence criteria required by the applicable rules and listing standards of the NASDAQ Stock Market.

The company's Board should always have an **Audit Committee**, a **Compensation Committee**, and a **Nominating Committee**, and these committees must be composed of independent directors only.

The Board can have more committees if it deems necessary or appropriate.

Figure 13: Board Composition
Source: WEN Proxy Statement 2019

DIRECTOR NOMINEES

Name	Age	Director Since	Occupation	Independent
Nelson Peltz	76	1993 (3)	Chief Executive Officer and Founding Partner of Trian Fund Management, L.P.	
Peter W. May	76	1993 (3)	President and Founding Partner of Trian Fund Management, L.P.	✓
Kristin A. Dolan	53	2017	Chief Executive Officer and Founder of 605 LLC	✓
Kenneth W. Gilbert	68	2017	Former Chief Marketing Officer of VOSS of Norway ASA	✓
Dennis M. Kass	68	2015	Former Chairman and Chief Executive Officer of Jennison Associates, LLC	✓
Joseph A. Levato	78	1996 (3)	Former Executive Vice President and Chief Financial Officer of Triarc Companies, Inc. (predecessor to The Wendy's Company)	✓
Michelle "Mich" J. Mathews-Spradlin	52	2015	Former Chief Marketing Officer and Senior Vice President of Microsoft Corporation	✓
Matthew H. Peltz	36	2015	Partner and Senior Analyst of Trian Fund Management, L.P.	
Todd A. Penegor	53	2016	President and Chief Executive Officer of The Wendy's Company	
Peter H. Rothschild	63	2010	Partner, East Wind Advisors, LLC	✓
Arthur B. Winkleblack	61	2016	Former Executive Vice President and Chief Financial Officer of H. J. Heinz Company	✓

* *Committee Chair*

Figure 14: CEO Pay Mix
Source: WEN Proxy Statement 2019

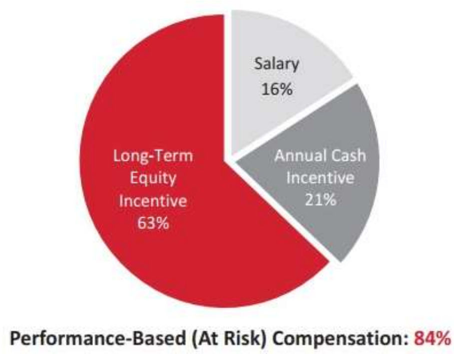
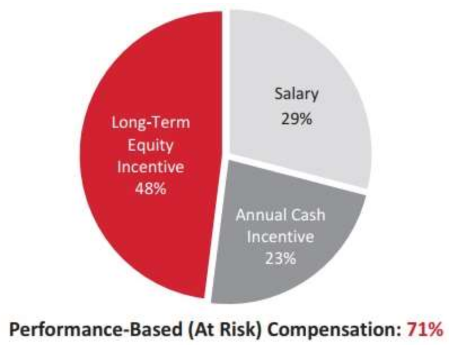


Figure 15: Other Neo Pay Mix
Source: WEN Proxy Statement 2019



4. Industry Overview and Competitive Positioning

Global Economy Outlook

The Quick Service Restaurants (QSR) industry is sensitive to the economic cycles, and there is currently positive global economic outlook. The World Bank estimates an increase of the World's GDP for 2019 of 2.9%. However, it is worth noting that in 2018 the GDP grew 3%, which means that the economy will slightly (0.1%) slowdown this year.

Some events are affecting the economy, such as the trade war between the USA and China (which will possibly be extended to Europe), Brexit, and the rise of interest rates. The latter affects the more indebted countries. The World Bank believes that this deceleration will continue in the next years.

USA Economy Outlook

WEN has its strongest presence in the US market. The World Bank forecasted that the growth of the US market would slightly slow down from 2.9% in 2018 to 2.5% in 2019, and this tends to get worse: the forecast for 2021 anticipates 1.6% growth.

International Economy Outlook

The evolution of the markets outside North America market is more difficult to forecast. WEN is present in a lot of developing countries where there is some political instability. This was the case of Venezuela, and the countries in the Middle East. If the world economy decelerates, these countries will suffer more than developed countries. However, the forecasts are positive, and the World Bank estimates a 4.2% growth for developing countries in 2019, which is the same as 2018.

Industry Overview

WEN is part of QSR industry. This industry had been growing over the years, as illustrated in figure 19, in the USA.

95% of WEN's revenues has come from the North American market, the USA being the major contributor to these revenues. Fast-food companies' most significant costs are food, raw materials and employment.

Figure 16: Real GDP Growth
Source World Bank

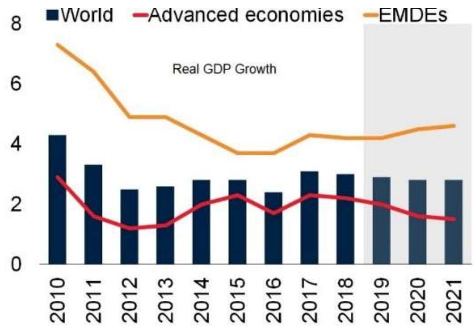


Figure 17: Forecast Growth
Source: World Bank

Figure 18: Forecast Prices Increase
Source: Deloitte

	History						Forecast					
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Chained GDP price index	1.9	1.8	1.9	1.0	1.1	1.9	2.2	2.1	2.0	1.8	2.0	2.1
Consumer price index	2.1	1.5	1.6	0.1	1.3	2.1	2.4	2.0	1.9	1.8	2.0	2.1
Chained price index for personal consumption expenditures	1.9	1.3	1.5	0.3	1.1	1.8	2.0	1.9	1.7	1.7	2.0	2.1
Employment cost index	1.9	1.9	2.1	2.1	2.2	2.5	2.8	2.9	2.3	2.1	2.8	2.8

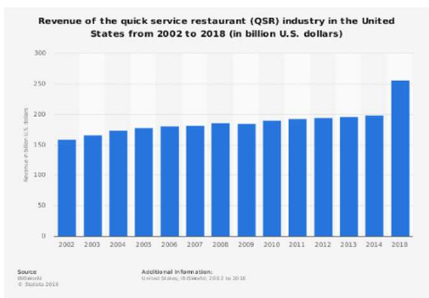
Sources: Historical data: US government agencies and Oxford Economics.
Forecast: Deloitte, using the Oxford Global Economic Model.

Deloitte Insights | deloitte.com/insights

Table 2: Forecast commodities increase
Source: World Bank

Price indices in real 2010 US dollars (2010 = 100)				
	2018	2019f	2020f	2030f
Agriculture	85.11	81.30	81.26	81.09
Beverages	77.64	72.63	72.95	75.79
Food	88.80	84.28	84.30	84.74
Raw Materials	79.93	77.95	77.28	69.36

Figure 19: QSR Industry Revenues in USA
Source: Statista



As illustrated in figure 18, which is based on Deloitte forecasts, the employment costs will increase soon. Fast Food companies should have a concern to adapt their operations in order to reduce the number employees required for each establishment.

On the FY 2018, the weight of operational costs increased due to the increase of wages.

With respect to food and raw materials costs, the World Bank foresees that the same will not increase in the future.

The estimated CAGR of the quick services restaurants segment until 2022 is 4.61%. These are good news to the industry.

Competitive Positioning

SWOT Analysis:

Strengths:

- **Strong brand image:** Wendy's has maintained a strong reputation. Quality, excellent restaurant service, and fresh ingredients are the brand's main characteristics.
- **Successful entrance in new markets:** despite the weak geographic dispersion, Wendy's has been well succeeded in the new markets where it entered.
- **Strong distribution network:** Wendy's has been paying particular attention to its distribution network. The company wants to keep its coverage, retaining proximity to suppliers. The quality of raw materials is of essence.
- **Strong training program for employees:** Wendy's has very well-defined training programs for employees. In a sector where it is hard to hire and to retain employees, the existence of an adequate training program for employees may be essential to attract and retain human capital.

Figure 20: 5 Forces Porter
Source: Author

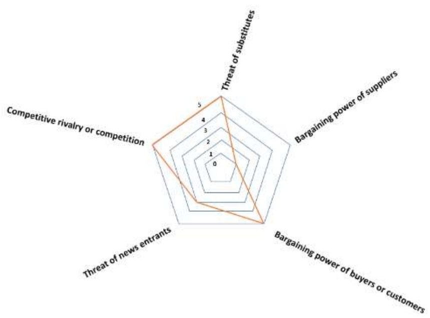


Figure 21: WEN Revenues
Source: Author and Company data

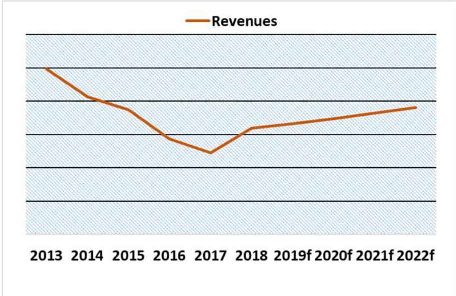


Figure 22: WEN EBIT
Source: Author and Company Data

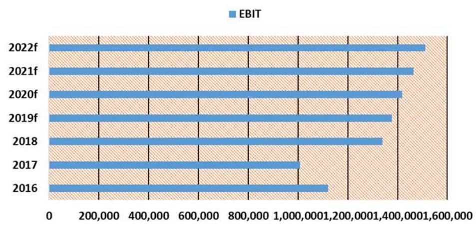
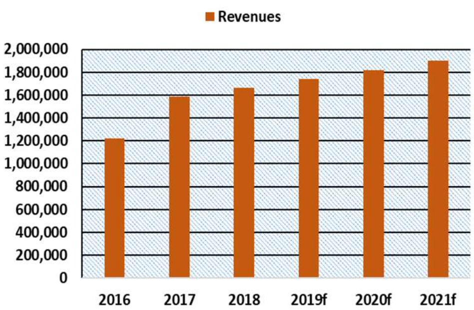


Figure 23: WEN Revenues
Source: Author and Company data



Weaknesses:

- **Poor geographic coverage:** 95% of WEN's restaurants are located in North America.
- **Low profitability rate:** WEN has higher prices comparing to its competitors. However, its profitability is lower, and this could be explained by the higher investment in employees' training, more perishable products (not frozen ingredients) and because Wendy's has a high days sales in inventory.
- **Perceived as unhealthy**
- **Products easily imitable**
- **Low investment in technology**

Figure 24: WEN Revenues by Type
Source: Author and Company data

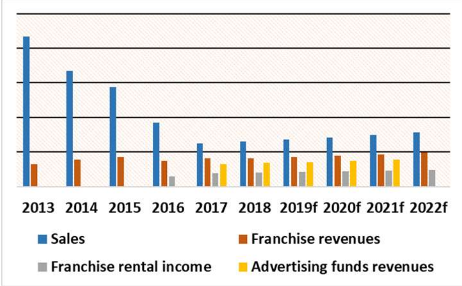
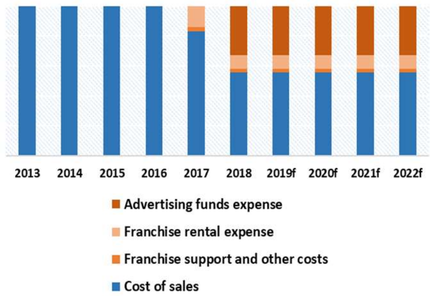


Figure 25: WEN Expenses by Type
Source: Author and Company data



Opportunities:

- **Global Expansion:** Expansion to new markets and new countries.
- **Business Diversification:** WEN is looking for new businesses.
- **Growth of the fast-casual segment**: People are increasing awareness of their health and therefore looking for healthier food. Fast-casual is a concept perceived as less harmful to health than fast-food but with slightly higher prices. Nowadays, this segment is growing. WEN is recognized for being healthier than competitors, which can be used as an opportunity. Conversely, this could be seen as threat if Wendy's stops improving the quality of its meals.

Threats:

- **Franchisees financial health**
- **New healthy alimentation waves**
- **Environmental concerns**
- **Greater local suppliers' power**
- **Wage increases:** The fast-food segment has a high employee turnover and low wages.

Porter 5 forces

1. **Competitive rivalry or competition (Strong force)** - High level of players and low switching costs.

2. **Bargaining power of buyers or customers (Strong force)** – In spite of the considerable number of small clients, the high number of players and the low switching costs result in significant power of costumers.

3. **Bargaining power of suppliers (Weak force)** - There is a high number of suppliers. Consequently, each of them when considered separately does not the ability to influence the price.

4. **Threat of substitution (Strong force)** - There is a significant threat of new substitutes, the potential alternatives ranging from new food chains to small local restaurants.

5. **Threat of new entry (moderate force)** - Besides the high level of supply and the low entrance costs, there are significant costs to make the brand recognized.

5. Investment Summary

With a price target of $23.75 and an **upside potential** of 21.3% at the end of 2020 using the **Discounted Cash Flow method** and with the **FCFF** approach, our recommendation stands for **BUY**.

The **FCFE approach** sustain our perspective that WEN is undervalued**,** with a **price target** of **$ 21.51.**

The **APV approach** reinforce our **BUY** recommendation with a **price target** of **$23.61.**

With the **relative valuation** through the multiples approach, we get a different average target price of $22.69, because the company is operating in a market with a **medium risk**. This reflects a **BUY** recommendation which supports our recommendation. Both methods indicate that WEN is **undervalued**.

Table 3: Recommendations by price for medium companies
Source: Author and CFA

Recommendation System for Medium risk companies		
SELL	≤ 18.60	≤-5%
REDUCE	> 18.60 & ≤ 20.6	>-5% & ≤5%
HOLD/NEUTRAL	> 20.56 & ≤ 22.52	>5% & ≤15%
BUY	>22.52 & ≤ 25.45	>15% & ≤30%
STRONG BUY	> 25.5	>30%

For the forecast period, we estimate that the **Revenues** will increase with a CAGR of 4.61%, which corresponds to the estimate of analysts for the Quick service restaurants industry growth between 2018 and 2022.

Although WEN's Net Income in 2018 significantly increased, this increase was due to the sale of a 12.3% stake in Inspire Brands Inc. Since this extraordinary income in 2018 did not affect the EBIT, we believe that the latter will increase from 2019 until the end of the forecasted period.

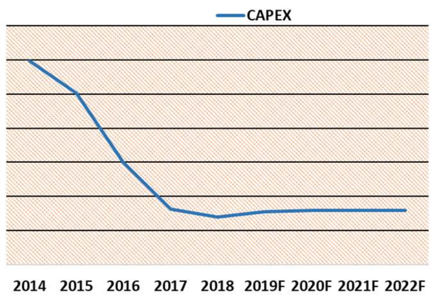
Risks to the price target:

There are some operational risks like the decrease in the selling price or in demand for Wendy's products, an increase in the raw materials costs and wages costs or an increase in the demand for healthy food instead of fast food**.**

There are also risks related with the **Terminal Period** for the forecasted price target: the **WACC rate** and the **growth rate**. The WACC rate is primarily dependent on the **cost of debt**, **cost of equity**, the **risk-free rate**, **the weight of debt**, the **weight of equity** and **the corporate tax r ate.**

So, we will test some of these variables after.

Figure 26: WEN CAPEX
Source: Author and Company data

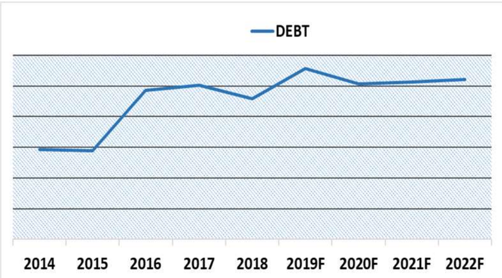


6. Valuation

Discounted Free Cash Flow (DCF) method: Free Cash Flow to the Firm, Free Cash Flow to Equity and Adjusted Present Value

In order to evaluate the company with these methods, we need to predict the **Cash flows** generated by the same in the next years, and these cash flows should be discounted with the **WACC rate, unlevered Cost of Capital for the Adjusted Present Value method** and with the **Cost of Equity** for the **Free Cash Flow to Equity method,** all these rates estimated for the firm.

Figure 27: WEN Debt
Source: Author and Company data



To that end, we relied upon certain assumptions, being the most important ones explained below and the additional ones further detailed in appendix 7.

Assumptions Analysis:

Revenues:

WEN has two sources of revenues: (i) the sales revenues that generated from the company-operated restaurants; and (ii) franchise revenues which came from the monies paid by the the franchisees to WEN. The last type of revenues could be subdivided into three different types: Franchise rental income, Advertising funds revenues and Franchise sales revenues. Considering that, directly or indirectly, all revenues are linked to the sales we used the same CAGR for both types of income.

The analysts estimate that the **CAGR** for the period of 2018-2022 will be 4.61%. Despite the signals that the economy would slow down, the truth is that WEN's CAGR in 2018 and in the first half of 2019 did not slow down, and actually grew faster than the analysts estimated, so it makes sense maintain this growth rate estimated by the analysts in the forecasts.

Cost of Materials and Services

WEN was restructured last year to become more efficient and had to incur in some extraordinary expenses. Consequently, the weight of the costs increased.

Considering that the company is not planning to make significant changes in its structure, we assumed that the weight of costs will be the same in the future. In fact, the weight of costs will most likely decrease, but we chose to take more conservative approach.

Table 4: WEN Net Working Capital ($ millions)
Source: Author and Company data

Years	2018	2019f	2020f	2021f	2022f
Total Δ Current Assets	-4,180	-23,182	-22,119	-23,119	-23,560
Total Δ Current Liabilities	57,023	36,659	35,044	36,960	38,954
Total Δ NWC	$ 52,843	$ 13,477	$ 12,925	$ 13,841	$ 15,394

Debt:

The total financial debt will maintain the same debt to value ratio in the forecasted years which is equal to the median of this ratio of the last 5 years.

Capital Expenditures (CAPEX):

For capital expenditures, we assumed different levels for different years. For 2019 we assumed that the level will be the value estimated by the company, because the information about the types of investments that the company does is not available, so it is quite difficult to predict. For the next years, we assumed that the amount for each year will be the median between 2016 and 2019f. We chose only these years because these were the years where the level of investment stabilized.

Depreciation and Amortization (D&A):

Figure 28: WEN D&A
Source: Author and Company data

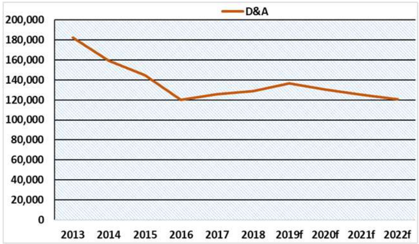


Figure 29: WEN Total Δ NWC
Source: Author and Company data

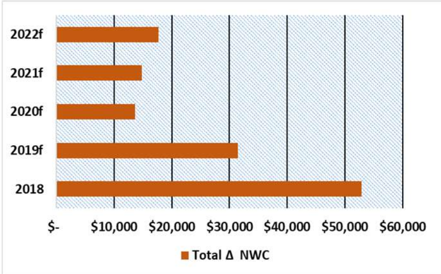


Figure 30: WEN FCFF
Source: Author and Company data

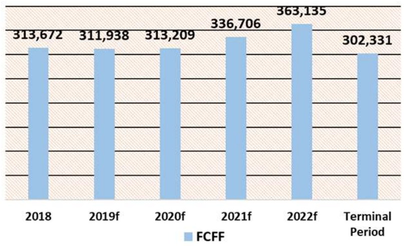
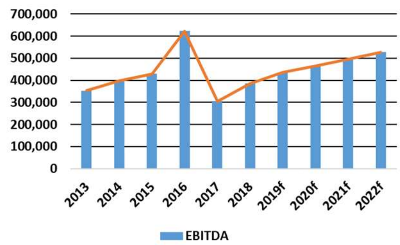


Figure 31: WEN EBITDA
Source: Author and Company data



In the last years, the level of D&A was higher than the level of CAPEX because WEN made significant investments in the past, and since 2014 the level of investment has decreased. Since WEN not expect to do large investments in the next few years and considering that the weight of depreciation and amortization in relation to the total fixed assets has been around 10% in the last three years, we believe it makes sense to maintain percentage.

Net Working Capital (NWC):

We predict that the current liabilities will be higher than the current assets. This difference could be explained by the increase in the accounts payable, especially the increase in the expenses related to the franchises. Due to this increase, the variation of NWC will be negative (Table 3).

For the Terminal Period we predict that the NWC will be the median of the last 5 years.

Interests:

As further detailed below, the **Cost of Debt** was assumed to be the total interest paid divided by the Total Debt, so for the forecasted years, we used the same cost of debt.

DCF Valuation

The estimated period considered was four years, from December 31, 2018 to December 31, 2022. After this period, the **Terminal Value** is then added.

With the **FCFF method**, we obtained a share **target price** of **23.75$** at the end of 2020, which represents an **upside potential** of **21.3%.** Our calculation shows that WEN is **undervalued**, and our recommendation is **BUY.**

We estimate that the FCFF of the company will continue to be positive, and the amount will increase until the end of the forecasted period.

To compute the FCFF we used the following formula:

FCFF = EBIT * (1-Tax rate) – Net increase in NWC - CAPEX + D&A

Table 5: WEN DCF output
Source: Author and Company data

DCF Output	
Enterprise Value	7,871,439
Net Debt	2,232,294
Other Assets	96,907
Other Liabilities	248,977
Equity Value	5,487,075
# Shares Outstanding	231,029
Price at the end of 2020	**23.75**
Upside Potential	21.3%
Price at 30/06/2019	19.58

Table 6: WEN WACC Rate
Source: Author and Company data

2020F	
Risk Free Rate	2.1%
Country Risk Premium	0.0%
Beta Levered	0.89
Cost of Debt	4.3%
Cost of Equity	7.4%
Marginal Tax Rate	27.0%
After tax cost of Debt	3.2%
Weight of Debt	36.0%
Weight of Equity	64.0%
WACC	5.86%

WACC Assumptions

The **Weighted Average Cost of Capital (WACC)** was estimated to discount the futures **FCFF**. To determine this measure, first, we need to compute the **Cost of Equity (ke)** and the **Cost of Debt (kd),** because **WACC** is especially dependent on the cost of each one and their respective weight in the capital structure.

Because the capital structure of the company is quite stable and the **risk-free** used is similar to the average of the last ten years, we decided to compute only one **Cost of Debt rate and one Cost of Equity rate,** but the weights of each one in the capital structure changes during the years.

To calculate the WACC rate we used the following formula:

WACC = ke * [E(E+D)] + kd * [D(E+D)] * (1-T)

The WACC rate computed for 2020 was **5.86%** (table 6). According to the **Aswath Damodaran's** calculations we reach a value of **6.31%,** near the value that we estimated for 2020, the difference is related to the **weight of debt,** which is higher in WEN. The **cost of debt** is lower than the **cost of equity**, so a higher weight of debt turns the WACC rate lower.

The **Cost of Equity** (ke) is the rate of return that stockholders require for a company.

We used the **Capital Asset Pricing Model (CAPM)** to estimate the **Cost of Equity** for 2020, and we reached a value of **7.4%**. Because WEN is located in the USA, the **country risk premium (CRP)** is equal to zero. We used the following formula to calculate the cost of equity:

ke = Rf + β * (MRP + CRP)

We used as **Risk-free rate (Rf)** the US 3 months treasury bill on 30 June of 2019, which was 2.09%.

To compute the **Beta Levered (β)** was used the formula below:

βL = βu * [1+ D/E*(1-T)]

We used as **unlevered Beta (βu)** the Beta of the industry. According to the Aswath Damodaran's calculations on January 5, 2019, the value is equal to 0.63. For the **Effective Tax Rate (T)** we used the Corporate tax rate by country calculated by KPMG, which was **27%.** After all the computations we reached a levered beta of **0.89**.

For the **Market Risk Premium (MRP)**, we used the final value of the Aswath Damodaran's calculations at the end of 2018, corresponding to 5.96%.

The **Cost of Debt (Kd)** is the total interest paid in the last year divided by the average of the previous two years of total debt, and we reached a value of **4.3%.**

For the **Tax Rate (T)** we used the Corporate tax rate by country calculated by KPMG, which corresponds to 27%.

For the Terminal Value (TV), we follow the **Perpetuity Growth Model** approach.

For the computations, we assumed a **Perpetuity WACC** equal to the 2022 WACC rate of **5.80%,** and a **Perpetual Growth rate (g) of 1.9%.** This growth rate is lower than the growth rate that we used for the explicit period, as it is more realistic for the long term and is in line with the **USA inflation rate**. The TV after these computations is discounted in the same way that the last forecasted FCFF was discounted.

The formula that we used is the following:

TV = [FCFF(TV)] / [(WACC – g)

Free Cash Flow to Equity method

FCFE is the cash available for the stockholders at the end of the year, after the expenses related to Debt's payment.

To evaluate the company with this method, we need to calculate the FCFE for each year, and then, discount these amounts with the **Cost of Equity** estimated above.

To pass for the FCFF to the FCFE we used the following formula:

FCFE = FCFF – Interests * (1-T) + Net Borrowing

Because firm cannot increase or decrease its leverage forever, for the **Terminal Period** we assumed that the **Net Borrowing** is equal to zero.

The **Interests Expenses** in the **Terminal Period** will be the average of the six years before and the estimated for the forecasted years.

With this valuation, we got a share target price of $21.51, which represent an upside potential of 9.9% and sustain our perspective that WEN is undervalued.

You can find more information of these computations in the Appendix 14.

Adjusted Present Value Method

With this method we get the valuation of the company if this was only financed by equity, and after is added the benefits associated with financing.

We discounted the FCFF with the unlevered cost of capital, which is calculated based on the following formula:

Ru = ke * [E(E+D)] + kd * [D(E+D)]

After discounted we add the deductible benefits that come from the financing, i.e., the PV of **interest tax shields**, which come from the following formula:

Interest Tax Shield = Interests * Tax Rate

With this method, we got a target price of **$ 23.61,** and this sustain our recommendation for **BUY.** You can find more information in Appendix 13.

Multiples Valuation:

To get a price target with the multiples valuation we used the **Enterprise Value to EBITDA (EV/EBITDA)** and the **Price to Sales (P/S)** ratios.

With the **EV/EBITDA** ratio, at the end of 2020, we reached a price target of $ **23.31,** representing an **upside potential** of **19.05%** (table 8).

With the **P/S ratio**, at the end of 2020, we reached a price target of **$ 22.07**, representing an **upside potential** of 12.72% (table 7).

These results sustain our perspective that WEN is currently **undervalued**. The average of the two multiples price target is $ 22.69, which represents an **upside potential** of **15,89%.** Despite the negative difference of 4,47% when compared with the DCF approach, our recommendation remains on **BUY** (table 11).

On Appendix 16, there is a graph with the comparison between the price target from relative valuation and the real price per share, and usually, in the past, the real price was above the price target from the relative valuation.

Multiples Assumptions:

Our peer group consists of five companies. Bloomberg's suggested nine companies as the peer group. We compared last year's multiples of these nine companies with the WEN's multiples and among them we chose the companies which multiples were similar to WEN's (table 9).

Table 7: WEN Price/Sales relative Valuation
Source: Author, Company data and Bloomberg

Comparable Price Target Valuation		
Price to Sales		2020F
Peers Median P/SALES		2.93
WEN Sales		1,739,907
Equity Value		5,097,928
#Shares		231,029
Price Target	**$**	**22.07**
Price at 30/06/2019	$	19.58

Table 8: WEN EV/EBITDA relative Valuation
Source: Author, Company Data, Bloomberg

Comparable Price Target Valuation		
EV/EBITDA		2020F
Peers Median EV/EBITDA		16.70
WEN EBITDA		465,070
WEN EV		7,766,662
WEN Net Debt		2,232,294
WEN Other Assets		96,907
WEN Other Liabilities		245,226
Equity Value		5,386,049
#Shares		231,029
Price Target	**$**	**23.31**
Price at 30/06/2019	$	19.58

Table 9: Peer Group
Source: Author, Company Data, Bloomberg

Peer Group	
McDonald's Corp	Yes
Starbucks Corp	No
Yum! Brands Inc	Yes
Chipotle Mexican Grill Inc	No
Darden Restaurants Inc	Yes
Jack in the Box Inc	Yes
Papa John's International Inc	No
Panera Bread Co Inc	No
Domino's Pizza Inc	Yes

Table 10: Peer Group Median Ratios
Source: Author, Company Data, Bloomberg

Name	P/S	EV/EBITDA
Peers Median 2020F	**2.93**	**16.70**
McDonald's Corp	7.32	16.70
Yum! Brands Inc	6.03	20.41
Darden Restaurants Inc	1.53	10.6
Domino's Pizza Inc	2.93	18.60
Jack in the Box Inc	2.42	12.90

Table 11: Relative and absolute valuation comparison
Source: Author, Company data and Bloomberg

Multiples Average	$	22.69
DCF output	$	23.75
Difference		-4.47%

This peer group was selected to compute the median of the forecasted **EV/EBITDA** and the forecasted **P/S** for 2020.

As we can see in table 10, the forecasted median for **P/S** is equal to **2.93,** and the forecasted median for **EV/EBITDA** is **16.70**.

7. Financial Analysis

Between 2013 and 2015, WEN's **Net Income** increased and in 2016 decreased. This decrease can be explained by the sale of some company-operated restaurants and the consequent decrease in the sales volume, and the net income (without extraordinary income and expenses) fell again in 2018. In figure 32, we can see a considerable **Net Income** increase in 2018 but this is explained by the sale of stake in Inspire Brands, so it is not based on **operating profit**.

If we analyse the **EBIT** and the **EBIT margin** (figure 33), and since indicators do not include the extraordinary income and expenses, we can see that these two indicators decreased between 2016 and 2018, and this was the reason why WEN decided to undergo a major restructuring in its core business, so as to turn the company more efficient and more profitable. WEN sold a significant number of its company-operated restaurants and is now more focused on increasing the number of franchisees rather than the number of company-operated restaurants.

If we look at figure 34, we can see that the percentage of revenues generated from of company-operated restaurants is decreasing since 2013, and that in 2018 it represented roughly 40%.

The **Gross profit margin** increased until 2016 and decreased from then until 2018, and we estimate that it will remain unchanged for the forecasted.

With regard to **liquidity**, if we look at figure 41, we can see that the current ratio increased in 2015, decreased until 2017, and in 2018 started to grow again. This increase is explained by the rise in **cash and cash equivalents**, this means that the company is more prepared to meet its short-term obligations.

WEN **equity ratio** is quite unstable, and if we look at figure 36, we can see that this ratio has been decreasing since 2014, except for 2017-2018, which are an exception. The increases of net income, including

Figure 32: WEN Net Income
Source: Author and Company data

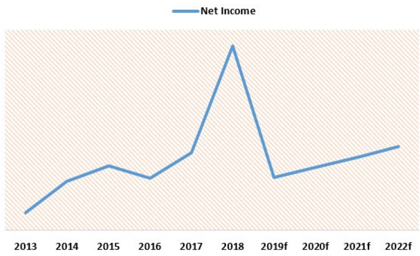


Figure 33: WEN EBIT & EBIT Margin
Source: Author and Company data

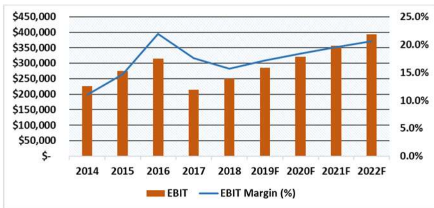


Figure 34: WEN Revenues % per type
Source: Author and Company data

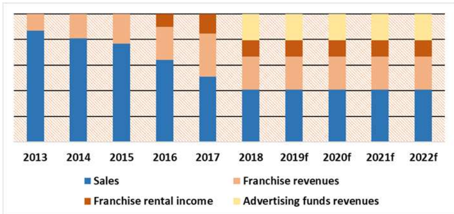
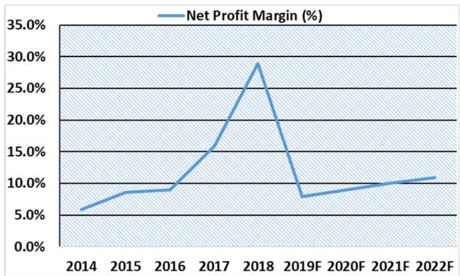


Figure 35: WEN Net Profit Margin
Source: Author and Company data



extraordinary income, explain the increases of the equity ratio during those years, so this is not a reliable indicator. In terms of solvency, the same should not be favourable for the company in the future and we do not forecast any improvement in this area. If we look at figure 39, we can see that debt is increasing, so the increase in the leverage of the company is a risk in the long-term.

We do not forecast an increase in the number of shares outstanding, and in WEN's outlook for the next years there is no reference to an increase of this number. If the increase occurs, it will most likely not be significant. Considering that we estimate an increase of the net income until 2022 with the same number of shares, the **EPS** will increase in the future, which is a good indicator for potential investors.

8. Investment Risks

Market Risk & Financial risk | Commodities Quality

Shortages or interruptions in the supply or delivery of perishable food products can affect the brand reputation.

There are potential problems related to the commodities. In the past, there were scandals such as the horse meat scandal, and these types of problems significantly and negatively affect companies' image and reputation.

The likelihood of these two risks being materialised is low, because WEN is very careful with the selection of suppliers and maintains very tight controls over supply and consumption chains.

Market Risk & Financial risk | Interest Rate Risk

An increase in the interest rate can have a significant impact on company's accounts. WEN has reported solid financial results but has been increasing their leverage. We believe that the company is hedging this risk and the probability is therefore low. However, if the interest rate increases, it can cause significant damage to the company's profitability and solvency.

Market Risk & Financial risk | Commodities Costs

Raw materials are the main production costs in WEN's business. If the commodities prices increase, profit margins will be harmed. Franchisees' profit margins are low, so if the prices rise, franchisees' financial health will be affected.

Figure 36: WEN Total Assets & Equity Ratio
Source: Author and Company data

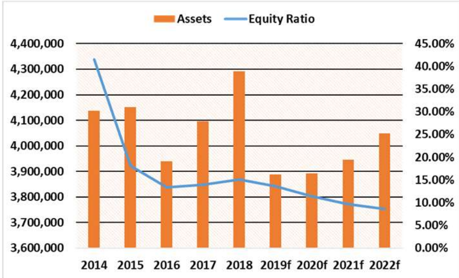


Figure 37: WEN Gross Profit Margin
Source: Author and Company data

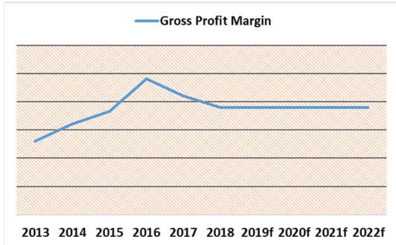


Figure 38: WEN EPS
Source: Author and Company data

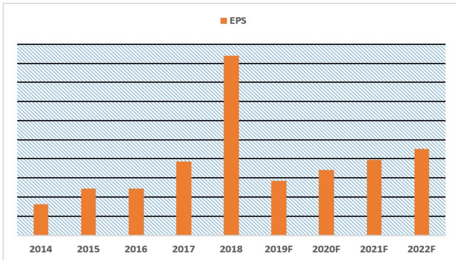
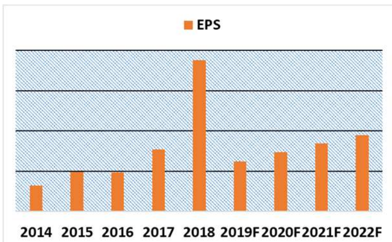


Figure 39: WEN Debt
Source: Author and Company data

Figure 40: WEN ROE
Source: Author and Company data



Market Risk & Financial risk | Wage Expenses

The QSR industry has a big employee turnover because the wages are very low, and it is difficult to maintain employees. The majority of them receive the national minimum wage and if that minimum wage increases, the company will have an increase in the costs and a decrease in the profit margins. Commodities' costs and wages expenses are the higher production costs.

Market Risk & Financial risk | Changes in dietary habits

Nowadays the increasing concern with health issues is leading people to adopt a different lifestyle by changing their eating habits. This is particularly noticed among younger generations and could potentially harm the WEN business by decreasing WEN sales.

Market Risk & Financial risk | Efficiency & IT

As mentioned above, the profit margins are low like the salaries paid to the employees. To improve work conditions, restaurants need to create efficient processes to maintain or increase their returns. Nowadays, this efficiency depends on how the company is developed technologically. A failure in the IT systems could harm the business. One example of this development is the online orders.

Market Risk & Financial risk | Exchange and inflation rates

Even though developing countries are a huge opportunity to expand the business, their economic and political systems tend to be more unstable. One of the major risks when companies expand to these countries, is the exchange rates because the local currencies are weaker and more easily devalued. Another problem is inflation, and we can take the example of countries like Venezuela and Argentina where inflation is affecting WEN's business.

Regulatory & Legal Risk | Changes in regulation

Countries have been changing their health policies and introducing some regulations to prevent illnesses related to malnutrition, especially in what concerns children and young people. These changes can represent significant costs.

Also, social concerns with the environment have been putting pressure on governments to impose environmentally friendly policies and practices. There is for instance a general concern to ban disposable materials, and this type of regulation may increase company spending.

Figure 41: WEN Current Ratio
Source: Author and Company data

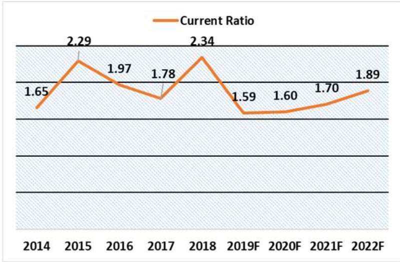


Figure 42: WEN Total Assets Turnover
Source: Author and Company data

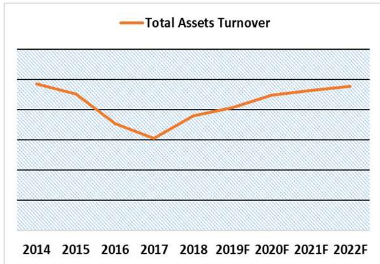
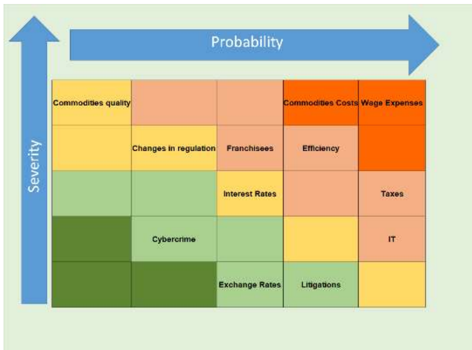


Figure 43: Risk Matrix
Source: Author and Company data



Regulatory & Legal Risk | Taxes

The increase of the tax rates will affect the company profits. These taxes can be labour taxes, disposable materials taxes, unhealthy food taxes, and profit taxes. WEN is present in some developed countries but is expanding to some developing countries. In developing countries the profit margins can be higher, as well as the revenues, but the tax system is more unstable, and this could affect the business.

Regulatory & Legal Risk | Cybercrime

Cybercrime is a significant risk when a company expands the business to the internet. WEN had problems in the past with cybercrime, and this affected not only the brand image but ultimately affected the customers' confidence. If a company cannot assure that the personal and payment data is safe, the customer will avoid ordering online.

Regulatory & Legal Risk | Litigation

Firms could lose money with litigation associated with employees, suppliers, States, or franchisees. Although the likelihood of some level of litigation is high, we do not anticipate that it will have a considerable impact on the company.

Sensitivity Analysis

All the sensitivity analysis was based on the **DCF valuation** with the price target equal to $23.75/sh.

In our valuation, the **terminal period** represents 88% of WEN's **Enterprise Value**. So, first, we tested some possible changes in the **terminal period**. We started with a sensitivity analysis of the **WACC rate** for the terminal period and the **growth rate (g)** for the **terminal period**.

Table 12: Effects of change in terminal growth rate and WACC rate
Source: Author and Company data

		Changes in the terminal growth rate									
	$ 23.75	1%	1.20%	1.50%	1.70%	1.90%	2.10%	2.30%	2.50%	2.70%	3%
Wacc terminal period	5.40%	20.37	21.64	23.78	25.40	27.20	29.23	31.51	34.11	37.10	42.51
	5.50%	19.78	20.99	23.03	24.57	26.28	28.19	30.33	32.77	35.55	40.56
	5.70%	18.68	19.78	21.64	23.03	24.57	26.28	28.19	30.33	32.77	37.10
	5.80%	18.14	19.20	20.97	22.29	$ 23.75	25.37	27.17	29.19	31.47	35.49
	6.00%	17.19	18.16	19.78	20.99	22.32	23.78	25.40	27.20	29.23	32.77
	6.20%	16.29	17.19	18.68	19.78	20.99	22.32	23.78	25.40	27.20	30.33
	6.50%	15.06	15.86	17.19	18.16	19.22	20.37	21.64	23.03	24.57	27.20
	6.75%	14.14	14.87	16.07	16.96	17.91	18.95	20.08	21.31	22.67	24.98
	7.00%	13.29	13.96	15.06	15.86	16.73	17.66	18.68	19.78	20.99	23.03

In the table 12, we can see that if we maintain the **growth rate** at the same level and if the **WACC** rate starts to be 7% (1.20% higher) the recommendation instead of being **BUY** or **HOLD** will be **SELL.** If the **WACC** rate increases 0.20% the recommendation will be **HOLD** instead of **BUY**. So, the price target is susceptible to a change in the **WACC** rate for the terminal period.

The **growth rate** for the **terminal period** is very important to the firm's intrinsic value. If the **WACC** rate remains at the same level and the growth rate decreases 0.4%, the recommendation will be **HOLD** instead of **BUY**, and if it decreases 0.9%, the recommendation will be **SELL**.

Another risk to the price target is the **risk-free rate (RF)** in the long term. In the table below, we can see that if the capital structure remains unchanged in the long term, i.e., the **debt weight** remains the same and if the **RF** increases to 2.78% the recommendation will be **HOLD,** and if the **RF** increases 1.61% the recommendation will be **SELL**.

Because the cost of debt is lower than the cost of equity, we can see that if all other factors remain the same and the debt weight decreases 20% the recommendation starts to be **SELL**.

Table 13: Effects of change in RF and in the terminal Debt Weight
Source: Author and Company data

		Debt Weight in Long Term							
RF long term	$ 23.75	12.3%	17.3%	22.3%	27.3%	32.3%	37.3%	42.3%	47.3%
	1.57%	19.81	20.91	22.12	23.44	24.88	26.48	28.25	30.22
	1.73%	19.03	20.12	21.31	22.60	24.03	25.60	27.35	29.30
	1.90%	18.23	19.30	20.46	21.74	23.14	24.69	26.42	28.35
	2.09%	17.41	18.46	19.60	20.85	22.22	23.75	25.45	27.35
	2.30%	16.57	17.59	18.70	19.93	21.28	22.78	24.45	26.33
	2.53%	15.71	16.70	17.79	18.99	20.31	21.78	23.42	25.26
	2.78%	14.84	15.80	16.86	18.03	19.32	20.76	22.36	24.18
	3.06%	13.95	14.89	15.92	17.05	18.31	19.71	21.29	23.06
	3.37%	13.06	13.97	14.97	16.07	17.29	18.66	20.19	21.93
	3.70%	12.17	13.05	14.01	15.08	16.26	17.59	19.08	20.77
	4.07%	11.28	12.12	13.05	14.08	15.23	16.52	17.97	19.61
	4.48%	10.39	11.20	12.10	13.09	14.20	15.44	16.85	18.44
	4.93%	9.52	10.30	11.16	12.11	13.18	14.37	15.73	17.28
	5.42%	8.65	9.40	10.22	11.14	12.16	13.31	14.62	16.11

Even though the **explicit period** only represents 12% of the company's **intrinsic value**, we believe that it makes sense to test the sensitivity of the growth rate for this period.

We tested the COGS as percentage of revenues, for both, explicit and terminal period.

Some analysts estimated a **CAGR** for the explicit period lower than 4.61%, so we tested the growth rate for lower levels than this estimate (3.03% estimate), and we tested the values accordingly. We can see that if the **COGS** maintain the same percentage of revenues and if the **growth rate** changes to 2.86% the company will reach a price target of $21.90, which is lower than our estimate and is a **HOLD** recommendation.

The higher percentage of **COGS** that WEN achieved in the last six years was 73.96%. We therefore tested the price target up to a **COGS** percentage of 75.1% and assumed that all other factors remain unchanged. The price target will be 2.09$/sh which is a **SELL** recommendation. So, the efficiency of the company is an essential factor for its intrinsic value.

You can find more sensitivity analysis in **Appendix 16**.

Table 14: Effects of change in COGS % and in the growth rate for explicit period
Source: Author and Company data

		Growth rate in the Explicit Period								
	$ 23.75	2.86%	3.15%	3.46%	3.81%	4.19%	4.61%	5.07%	5.58%	6.14%
COGS	38.54%	57.69	58.52	59.44	60.46	61.59	62.85	64.25	65.82	67.56
	42.39%	51.61	52.39	53.25	54.20	55.27	56.45	57.76	59.23	60.86
	46.63%	44.92	45.64	46.44	47.32	48.31	49.40	50.62	51.98	53.49
	51.29%	37.57	38.22	38.95	39.76	40.65	41.65	42.76	44.00	45.39
	56.42%	29.47	30.06	30.71	31.43	32.23	33.13	34.12	35.23	36.47
	62.06%	20.57	21.08	21.65	22.27	22.97	23.75	24.62	25.58	26.66
	68.27%	10.77	11.20	11.68	12.20	12.79	13.44	14.16	14.97	15.87
	75.10%	0.00	0.34	0.71	1.12	1.58	2.09	2.66	3.29	4.00

Monte Carlo Simulation

We used the Crystal Ball Software to do the Monte Carlo Simulation, covering a total of 100.000 trials. We tested some variables related to the terminal period (**cost of debt, cost of equity, debt weight, growth rate, COGS%, effective tax rate, equity risk premium and the risk-free rate**), and for the explicit period we tested the **COGS percentage** and the **growth rate** in the **explicit period.**

It is possible to find the sensitivity price distribution in figure 45.

The **Monte Carlo price's** mean is equal to $**23.79** representing an **Upside Potential** of 21.5%, and that is a **BUY** recommendation.

This mean is higher than our DCF price target of 23.75$.

Figure 44: Recommendations probabilities
Source: Author and CFA

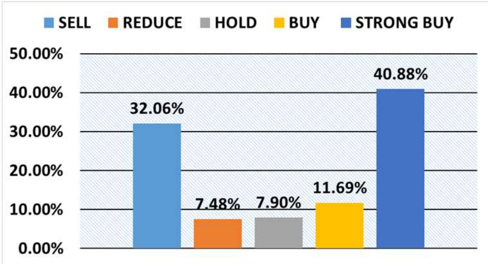
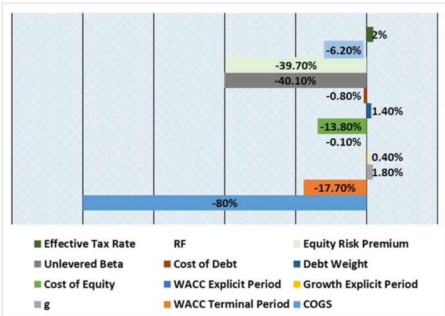


Figure 45: Sensitivity price distribution
Source: Author and Company data



Appendices

Appendix 1: Statement of Financial Position

Wendy's Balance Sheet										
In Millions of USD	2013	2014	2015	2016	2017	2018	2019f	2020f	2021f	2022f
ASSETS										
Cash and cash equivalents	580,152	267,276	327,216	198,240	171,447	431,405	287,171	319,310	389,825	502,351
Restricted cash			42,869	57,612	32,633	29,860	19,877	22,101	26,982	34,771
Deferred income tax benefit	120,206	73,661								
Accounts and notes receivable, net	62,885	68,211	104,854	98,825	114,390	109,805	117,265	122,671	128,326	134,242
Inventories	10,226	6,861	4,312	2,851	3,156	3,687	3,253	3,423	4,205	5,003
Prepaid expenses and other current assets	81,759	72,258	112,800	19,244	20,125	14,452	15,456	16,169	16,914	17,694
Advertising funds restricted assets	67,183	65,308	67,399	75,760	62,602	76,509	91,057	106,276	122,196	138,851
Current assets of discontinued opearations		8691								
Total Current Assets	**922,411**	**562,266**	**616,569**	**452,532**	**404,353**	**665,718**	**534,079**	**589,950**	**688,448**	**832,911**
Properties	1,165,487	1,241,170	1,227,944	1,192,339	1,263,059	1,213,236	1,161,857	1,104,750	1,053,685	1,008,024
Goodwill	842,544	822,562	770,781	741,410	743,334	747,884	747,884	747,884	747,884	747,884
Other intangible assets	1,305,780	1,351,307	1,339,587	1,322,531	1,321,585	1,294,153	1,294,153	1,294,153	1,294,153	1,294,153
Investments	83,197	74,054	58,369	56,981	56,002	47,660	53,041	58,422	63,803	69,184
Other assets		56,272	95,470	173,521	79,516	96,907	96,907	96,907	96,907	96,907
Noncurrent assets of discontinued operations		30,132								
Total Assets	**4,363,000**	**4,137,763**	**4,151,601**	**3,939,314**	**4,096,900**	**4,292,000**	**3,887,921**	**3,892,065**	**3,944,880**	**4,049,063**
LIABILITIES AND STOCKHOLDERS' EQUITY										
Current portion of long-term debt	38,543	53,202	23,290	24,652	22,800	31,700	28,805	29,121	29,626	31,463
Accounts payable	83,700	77,309	53,681	27,635	22,764	21,741	47,805	50,009	52,314	54,726
Accrued expenses and other current liabilities	160,100	125,880	124,404	102,034	111,624	150,636	161,365	172,589	184,330	196,613
Advertising funds restricted liabilities	67,183	65,308	67,399	75,760	62,602	80,153	98,513	117,720	137,812	158,830
Current liabilities of discontinued operations		18,525								
Total current liabilities	**349526**	**340224**	**268,774**	**230,081**	**227,162**	**284,185**	**336,488**	**369,439**	**404,082**	**441,631**
Long-term debt	1,425,285	1,384,972	2,402,823	2,487,630	2,263,700	2,752,783	2,501,379	2,528,857	2,572,691	2,732,229
Deferred income taxes	482,499	493,843	459,713	446,513	299,053	269,160	271,544	274,365	277,622	281,262
Other liabilities	176,244	199,833	224,496	247,354	273,290	245,226	248,977	275,391	305,479	245,226
Noncurrent liabilities of discontinued operations		1,151								
Total liabilities	**2,433,554**	**2,420,023**	**3,355,806**	**3,411,578**	**3,523,700**	**3,643,586**	**3,358,388**	**3,448,051**	**3,559,874**	**3,700,349**
470,424 shares issued	47,042	47,042	47,042	47,042	47,042	47,042	47,042	47,042	47,042	47,042
Additional paid-in capital	2,794,445	2,826,965	2,874,752	2,878,589	2,885,955	2,884,696	2,876,671	2,876,671	2,876,671	2,876,671
Retained earnings (accumulated deficit)	-492,215	-445,917	-356,632	-290,857	-163,289	146,277	209,268	298,561	414,148	552,777
Common stock held in treasury, at cost	-409,449	-679,220	-1,741,425	-2,043,797	-2,150,307	-2,367,893	-2,542,893	-2,717,893	-2,892,893	-3,067,893
Accumulated other comprehensive loss	-10,337	-31,294	-70,823	-63,241	-46,198	-61,673	-61,673	-61,673	-61,673	-61,673
Net Income	44,632	121,434	161,142	129,624	194,029	460,115	143,523	169,825	196,119	219,161
Total stockholders' equity	**1,929,500**	**1,717,600**	**752,900**	**527,700**	**573,200**	**648,400**	**528,415**	**442,707**	**383,294**	**346,923**
Total liabilities and stockholders' equity	**4,363,000**	**4,137,763**	**4,151,601**	**3,939,314**	**4,096,900**	**4,292,000**	**3,887,921**	**3,892,065**	**3,944,880**	**4,049,063**

Source: Author and Company data

Appendix 2: Income Statement

Wendy's Income Statement										
In Millions of USD	2013	2014	2015	2016	2017	2018	2019f	2020f	2021f	2022f
Sales % of revenues	87%	81%	77%	64%	51%	41%	41%	41%	41%	41%
Sales	2,165,829	1,670,247	1,438,802	920,758	622,802	651,577	681,615	713,037	745,908	780,295
Franchise % of revenues	13%	19%	23%	26%	34%	26%	26%	26%	26%	26%
Franchise revenues	321,581	390,816	431,495	371,545	410,503	409,043	427,900	447,626	468,262	489,848
Franchise Rental Income % of Revenues	-	-	-	10%	16%	13%	13%	13%	13%	13%
Franchise rental income				143,115	190,103	203,297	212,669	222,473	232,729	243,458
Advertising funds % of revenues				-	-	21%	21%	21%	21%	21%
Advertising funds revenue						326,019	341,048	356,771	373,218	390,423
Total Revenues	**2,487,410**	**2,061,063**	**1,870,297**	**1,435,418**	**1,223,408**	**1,589,936**	**1,663,232**	**1,739,907**	**1,820,117**	**1,904,024**
Costs and expenses:	**73.96%**	**67.96%**	**63.31%**	**51.88%**	**57.92%**	**62.06%**	**62.06%**	**62.06%**	**62.06%**	**62.06%**
Total Operational Costs and expenses:	**1,839,740**	**1,400,796**	**1,184,073**	**744,701**	**617,287**	**986,761**	**1,032,251**	**1,079,837**	**1,129,618**	**1,181,693**
% Cost of Sales	**73.96%**	**67.96%**	**63.31%**	**51.88%**	**41.93%**	**34.504%**	**34.50%**	**34.50%**	**34.50%**	**34.50%**
Cost of sales	1,839,740	1,400,796	1,184,073	744,701	512,947	548,588	573,878	600,334	628,009	656,960
% Franchise support and other costs					1.33%	1.59%	1.59%	1.59%	1.59%	1.59%
Franchise support and other costs					16,325	25,203	26,365	27,580	28,852	30,182
% Franchise rental expense					14.654%	5.730%	5.730%	5.730%	5.730%	5.730%
Franchise rental expense					88,015	91,104	95,304	99,697	104,293	109,101
% Advertising funds expense					0.0000%	20.2440%	20.2440%	20.2440%	20.2440%	20.2440%
Advertising funds expense						321,866	336,704	352,226	368,464	385,450
Gross Profit	**647,670**	**660,267**	**686,224**	**690,717**	**514,853**	**603,175**	**630,981**	**660,070**	**690,499**	**722,331**
Gross Profit Margin	**26.04%**	**32.04%**	**36.69%**	**48.12%**	**42.08%**	**37.94%**	**37.94%**	**37.94%**	**37.94%**	**37.94%**
% General and administrative expenses						13.7%	11.7%	11.2%	10.7%	10.2%
General and administrative	293,792	263,257	256,553	67,760	208,581	217,489	195,000	195,000	195,000	195,000
EBITDA	**353,878**	**397,010**	**429,671**	**622,957**	**306,272**	**385,686**	**435,981**	**465,070**	**495,499**	**527,331**
EBITDA margin	**14.23%**	**19.26%**	**22.97%**	**43.40%**	**25.03%**	**24.26%**	**26.21%**	**26.73%**	**27.22%**	**27.70%**
Depreciation and amortization	182,359	159,353	145,051	120,110	125,687	128,879	136,712	130,669	125,266	120,434
System optimization gains, net			-74,009	122,704	39,076	-463	0	0	0	0
Reorganization and realignment costs			21,910	-71,931	22,574	9,068	9,068	9,068	9,068	9,068
Impairment of long-lived assets	15,879	10,985	25,001	10,083	4,097	4,697	4,697	4,697	4,697	4,697
Impairment of goodwill	9,397			16,241						
Other operating expense, net	245	4,264	37,248	-14,789	7,673	-6,387				
Total Costs	2,341,167	1,834,391	1,595,827	1,120,638	1,008,650	1,340,044	1,377,728	1,419,272	1,463,649	1,510,892
EBIT	**146,243**	**226,672**	**274,470**	**314,780**	**214,758**	**249,892**	**285,504**	**320,635**	**356,468**	**393,132**
EBIT margin	**5.88%**	**11.00%**	**14.68%**	**21.93%**	**17.55%**	**15.72%**	**17.17%**	**18.43%**	**19.58%**	**20.65%**
Interest expense	-69,012	-52,192	-86,067	-114,802	-118,059	-119,618	-108,694	-109,888	-111,792	-118,725
Loss on early extinguishment of debt	-28,563		-7,295			-11,475				
Investment income, net	23,565	1,199	52,214	723	2,703	450,736	3,000	3,000	3,000	3,000
Other income (expense), net	-2,080	754	806	989	1,617	5,381	5,381	5,381	5,381	5,381
Profit/Loss before income taxes	**59,052**	**201,269**	**234,128**	**201,690**	**101,019**	**574,916**	**185,191**	**219,129**	**253,057**	**282,788**
% of Taxes	24.0%	39.7%	40.2%	35.7%	92.1%	20.0%	22.50%	22.50%	22.50%	22.50%
Income taxes	-14154	-79835	-94,149	-72,066	93,010	-114,801	-41,668	-49,304	-56,938	-63,627
Income from continuing operations after taxes	**44,898**	**121,434**	**139,979**	**129,624**	**194,029**	**460,115**	**143,523**	**169,825**	**196,119**	**219,161**
Discontinued operations:										
Income (loss) from discontinued operations, net of income taxes	-266		10,494							
Gain on disposal of discontinued operations, net of income taxes			10,669							
Net income (loss) from discontinued operations			21,163							
Net income	**$ 44,632.00**	**$ 121,434.00**	**$ 161,142**	**$ 129,624**	**$ 194,029**	**$ 460,115**	**$ 143,523**	**$ 169,825**	**$ 196,119**	**$ 219,161**

Source: Author and Company data

Appendix 3: Cash Flow Statement

Wendy's Cash Flow Statement										
In Millions of USD	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019f**	**2020f**	**2021f**	**2022f**
Net Income	44,632	121,434	161,142	129,624	194,029	460,115	143,523	169,825	196,119	219,161
Depreciation and amortization	200,219	159,860	153,732	124,304	125,687	128,879	136,712	130,669	125,266	120,434
Share-based payments	19,613	28,243	23,231	18,141	20,928	17,918	20,271	20,271	20,271	20,271
EBITDA	353,878	397,010	429,671	622,957	306,272	385,686	300,506	320,765	341,655	359,865
Operating Activities										
Change in inventories	1,477	706	-62	34	-305	-434	170	782	798	211
Change in receivables	174	5,326	36,643	-6,029	15,565	-4,585	7,460	5,406	5,655	5,916
Change in Prepaid Expenses						-5,673	1,004	713	745	780
Change in payables	-380	-6,391	-23,628	-26,046	-4,871	-1,023	26,064	2,204	2,305	2,412
Accrued Expenses		-34,220	-1,476	-22,370	9,590	39,012	10,729	11,224	11,741	12,282
Current Portion Long-Term Debt		14,659	-29,912	1,362	-1,852	8,900	-2,895	316	505	1,837
Advertising funds restricted assets						13,907	14,548	15,219	15,920	16,654
Advertising funds restricted liabilities		-1,875	2,091	8,361	-13,158	17,551	18,360	19,207	20,092	21,018
Other funds		-42,800	-81,140	-26,480	69,080	-415,500				
Deferred income tax	12,853	69,540	89,026	-14,213	-119,330	-6,568	2,384	2,821	3,258	3,640
Change in Working Capital		-43,670	-74,300	-29,840	-30,670	54,657	31,460	13,652	14,782	17,629
Cash flow from operations (CFO)	**353,878**	**254,780**	**236,120**	**179,200**	**238,790**	**224,230**	**331,966**	**334,417**	**356,437**	**377,494**
Investing Activities										
Capital Expenditures	-224,225	-298,471	-251,622	-150,023	-81,710	-69,857	-77,500	-79,605	-79,605	-79,605
Other investments	-2,080	754	806	989	1,617	5,381	5,381	5,381	5,381	5,381
Cash Flow from investments (CFI)	**-76,690**	**-187,812**	**35,380**	**92,107**	**-92,250**	**362,911**	**-72,119**	**-74,224**	**-74,224**	**-74,224**
Financing Activities										
Increase in Financial Debt	-	40,313	1,017,851	84,807	- 223,930	489,083	- 203,656	27,478	43,834	64,789
Repurchases of Common Stock	- 69,320	- 301,216	- 1,098,717	- 336,958	- 126,231	- 269,809	- 175,000	- 175,000	- 175,000	- 175,000
Dividends	- 70,681	- 75,117	- 71,845	- 63,832	- 68,322	- 80,532	- 80,532	- 80,532	- 80,532	- 80,532
Cash Flow from financing activities (CFF)	**-122,901**	**-374,562**	**-175,724**	**-404,535**	**-217,084**	**-305,762**	**-459,188**	**-228,054**	**-211,698**	**-190,743**

Net Change in Cash	126,791	- 312,876	59,940	- 128,976	- 63,130	273,688	- 199,341	32,139	70,515	112,527
Net Cash - Beginning Period	453,361	580,152	267,276	327,216	198,240	212,824	486,512	287,171	319,310	389,825
Net Cash - Ending Period	580,152	267,276	327,216	198,240	171,447	486,512	287,171	319,310	389,825	502,351

Source: Author and Company data

Appendix 4: Key Financial Ratios

Key Financial Ratios	2014	2015	2016	2017	2018	2019F	2020F	2021F	2022F
Liquidity Ratios									
Current Ratio (x)	1.65	2.29	1.97	1.78	2.34	1.59	1.60	1.70	1.89
Quick Ratio (x)	1.20	2.03	1.37	1.35	1.96	1.25	1.24	1.32	1.48
Cash Ratio (x)	0.79	1.22	0.86	0.75	1.52	0.85	0.86	0.96	1.14
Efficiency Ratios									
Total Assets Turnover (x)	0.48	0.45	0.35	0.30	0.38	0.41	0.45	0.46	0.48
Accounts Receivables Turnover (x)	22.12	20.08	15.41	13.13	14.18	14.18	14.18	14.18	14.18
Collection Period (days)	11.61	16.89	25.90	31.81	25.73	24.92	25.17	25.17	25.17
Inventory Turnover (x)	204.17	274.60	261.21	162.53	148.79	148.79	148.79	148.79	148.79
Days in Inventory (days)	3.03	2.18	1.82	1.79	1.57	1.52	1.40	1.53	1.77
Payables Turnover (x)	29.30	24.77	15.58	10.73	12.00	12.00	12.00	12.00	12.00
Payables Period (days)	16.86	13.59	10.94	13.35	12.19	25.58	25.61	25.63	25.63
Operating Cycle (days)	14.63	19.07	27.72	33.60	27.31	26.44	26.57	26.70	26.93
Cash Cycle (days)	-2.23	5.47	16.78	20.25	15.12	0.86	0.96	1.07	1.31
Profitability Ratios									
Gross Profit Margin (%)	32.04%	36.69%	48.12%	49.54%	37.94%	37.94%	37.94%	37.94%	37.94%
EBITDA Margin (%)	19.26%	22.97%	43.40%	25.03%	24.26%	26.21%	26.73%	27.22%	27.70%
EBIT Margin (%)	11.00%	14.68%	21.93%	17.55%	15.72%	17.17%	18.43%	19.58%	20.65%
Net Profit Margin (%)	5.89%	8.62%	9.03%	15.86%	28.94%	8.63%	9.76%	10.78%	11.51%
ROA (%)	2.93%	3.88%	3.29%	4.74%	10.72%	3.69%	4.36%	4.97%	5.41%
ROCE (%)	5.86%	7.18%	8.41%	5.47%	6.47%	7.93%	8.97%	10.03%	11.08%
ROE (%)	7.07%	21.40%	24.56%	33.85%	70.96%	27.16%	38.36%	51.17%	63.17%
EPS (x)	0.32	0.49	0.49	0.77	1.88	0.62	0.74	0.85	0.95

Source: Author and Company data

Appendix 5: Common-Size Statement of Financial Position

Wendy's Balance Sheet										
In %	2013	2014	2015	2016	2017	2018	2019f	2020f	2021f	2022f
Cash and cash equivalents	13.3%	6.5%	7.9%	5.0%	4.2%	10.1%	7.4%	8.2%	9.9%	12.4%
Restricted cash	0.0%	0.0%	1.0%	1.5%	0.8%	0.7%	0.5%	0.6%	0.7%	0.9%
Deferred income tax benefit	2.8%	1.8%								
Accounts and notes receivable, net	1.4%	1.6%	2.5%	2.5%	2.8%	2.6%	3.0%	3.2%	3.3%	3.3%
Inventories	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Prepaid expenses and other current assets	1.9%	1.7%	2.7%	0.5%	0.5%	0.3%	0.4%	0.4%	0.4%	0.4%
Advertising funds restricted assets	1.5%	1.6%	1.6%	1.9%	1.5%	1.8%	2.3%	2.7%	3.1%	3.4%
Current assets of discontinued opearations	0.0%	0.2%								
Total Current Assets	**21.14%**	**13.59%**	**15.88%**	**11.49%**	**9.87%**	**15.51%**	**13.74%**	**15.16%**	**17.45%**	**20.57%**
Properties	26.7%	30.0%	29.6%	30.3%	30.8%	28.3%	29.9%	28.4%	26.7%	24.9%
Goodwill	19.3%	19.9%	18.6%	18.8%	18.1%	17.4%	19.2%	19.2%	19.0%	18.5%
Other intangible assets	29.9%	32.7%	32.3%	33.6%	32.3%	30.2%	33.3%	33.3%	32.8%	32.0%
Investments	1.9%	1.8%	1.4%	1.4%	1.4%	1.1%	1.4%	1.5%	1.6%	1.7%
Other assets	0.0%	1.4%	2.3%	4.4%	1.9%	2.3%	2.5%	2.5%	2.5%	2.4%
Noncurrent assets of discontinued operations	0.0%	0.7%								
Total Non-Current Assets	**77.86%**	**86.41%**	**84.12%**	**88.51%**	**84.54%**	**79.21%**	**86.26%**	**84.84%**	**82.55%**	**79.43%**
Total Assets	**99%**	**100%**	**100%**	**100%**	**94%**	**95%**	**100%**	**100%**	**100%**	**100%**
Current portion of long-term debt	0.88%	1.29%	0.56%	0.63%	0.56%	0.74%	0.74%	0.75%	0.75%	0.78%
Accounts payable	1.92%	1.87%	1.29%	0.70%	0.56%	0.51%	1.23%	1.28%	1.33%	1.35%
Accrued expenses and other current liabilities	3.67%	3.04%	3.00%	2.59%	2.72%	3.51%	4.15%	4.43%	4.67%	4.86%
Advertising funds restricted liabilities	1.54%	1.58%	1.62%	1.92%	1.53%	1.87%	2.53%	3.02%	3.49%	3.92%
Current liabilities of discontinued operations		0.45%								
Total current Liabilities	**8.01%**	**8.22%**	**6.47%**	**5.84%**	**5.36%**	**6.62%**	**8.65%**	**9.49%**	**10.24%**	**10.91%**
Long-term debt	32.67%	33.47%	57.88%	63.15%	55.25%	64.14%	64.34%	64.97%	65.22%	67.48%
Deferred income taxes	11.06%	11.94%	11.07%	11.33%	7.30%	6.27%	6.98%	7.05%	7.04%	6.95%
Other liabilities	4.04%	4.83%	5.41%	6.28%	6.67%	5.71%	6.40%	7.08%	7.74%	6.06%
Noncurrent liabilities of discontinued operations	0.00%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Non-Current Liabilities	**55.78%**	**58.49%**	**80.83%**	**86.60%**	**74.59%**	**82.74%**	**86.38%**	**88.59%**	**90.24%**	**91.39%**
Total Liabilities	**63.79%**	**66.71%**	**87.31%**	**92.44%**	**79.95%**	**89.37%**	**95.03%**	**98.08%**	**100.48%**	**102.29%**
470,424 shares issued	1.1%	1.1%	1.1%	1.2%	1.1%	1.1%	1.2%	1.2%	1.2%	1.2%
Additional paid-in capital	64.0%	68.3%	69.2%	73.1%	70.4%	67.2%	74.0%	73.9%	72.9%	71.0%
Retained earnings (accumulated deficit)	-11.3%	-10.8%	-8.6%	-7.4%	-4.0%	3.4%	5.4%	7.7%	10.5%	13.7%
Common stock held in treasury, at cost	-9.4%	-16.4%	-41.9%	-51.9%	-52.5%	-55.2%	-65.4%	-69.8%	-73.3%	-75.8%
Accumulated other comprehensive loss	-0.2%	-0.8%	-1.7%	-1.6%	-1.1%	-1.4%	-1.6%	-1.6%	-1.6%	-1.5%
Net Income	1.0%	2.9%	3.9%	3.3%	4.7%	10.7%	3.7%	4.4%	5.0%	5.4%
Total stockholders' equity	**45.25%**	**44.44%**	**22.02%**	**16.69%**	**18.73%**	**25.83%**	**17.28%**	**15.74%**	**14.69%**	**13.98%**
Total liabilities and stockholders' equity	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: Author and Company data

Appendix 6: Common-Size Income Statement

Wendy's Income Statement										
In %	2013	2014	2015	2016	2017	2018	2019f	2020f	2021f	2022f
Sales	87%	81%	77%	64%	51%	41%	41%	41%	41%	41%
Franchise revenues	13%	19%	23%	26%	34%	26%	26%	26%	26%	26%
Franchise rental income				10%	16%	13%	13%	13%	13%	13%
Advertising funds revenue						21%	21%	21%	21%	21%
Total Revenues	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Costs and expenses:	**74%**	**68%**	**63%**	**52%**	**58%**	**62%**	**62%**	**62%**	**62%**	**62%**
Cost of sales	-74%	-68%	-63%	-52%	-42%	-35%	-35%	-35%	-35%	-35%
Franchise support and other costs					-1%	-2%	-2%	-2%	-2%	-2%
Franchise rental expense					-7%	-6%	-6%	-6%	-6%	-6%
Advertising funds expense						-20%	-20%	-20%	-20%	-20%
Gross Profit	**26%**	**32%**	**37%**	**48%**	**42%**	**38%**	**38%**	**38%**	**38%**	**38%**
General and administrative	12%	13%	14%	5%	17%	14%	12%	11%	11%	10%
EBITDA	**14%**	**19%**	**23%**	**43%**	**25%**	**24%**	**26%**	**27%**	**27%**	**28%**
Depreciation and amortization	-7%	-8%	-8%	-8%	-10%	-8%	-8%	-8%	-7%	-6%
System optimization gains, net			4%	-9%	-3%					
Reorganization and realignment costs			-1%	-5%	2%	1%	1%	1%		
Impairment of long-lived assets	-1%	-1%	-1%	-1%						
Impairment of goodwill				-1%						
Other operating expense, net			-2%	1%	-1%					
Total Costs	**-94%**	**-89%**	**-85%**	**-78%**	**-82%**	**-84%**	**-83%**	**-82%**	**-80%**	**-79%**
EBIT	**6%**	**11%**	**15%**	**22%**	**18%**	**16%**	**17%**	**18%**	**20%**	**21%**
Interest expense	-3%	-3%	-5%	-8%	-10%	-8%	-7%	-6%	-6%	-6%
Loss on early extinguishment of debt	-1%		-7,295			-0.7%				
Investment income, net	1%	0.1%	2.8%	0.1%	0.2%	28.3%	0.2%	0.2%	0.2%	0.2%
Other income (expense), net		0.0%	0.0%	0.1%	0.1%	0.3%	0.3%	0.3%	0.3%	0.3%
Profit/Loss before income taxes	**2%**	**10%**	**13%**	**14%**	**8%**	**36%**	**11%**	**13%**	**14%**	**15%**
Income taxes	-1%	-4%	-5%	-5%	8%	-7%	-3%	-3%	-3%	-3%
Income from continuing operations after taxes	**2%**	**6%**	**7%**	**9%**	**16%**	**29%**	**9%**	**10%**	**11%**	**12%**
Discontinued operations:										
Income (loss) from discontinued operations	-0.01%		1%							
Gain on disposal of discontinued operations			1%							
Net income (loss) from discontinued operations			1%							
Net income	**2%**	**6%**	**9%**	**9%**	**16%**	**29%**	**9%**	**10%**	**11%**	**12%**

Source: Author and Company data

Appendix 7: Forecasting Assumptions

Balance Sheet	2019f	2020f	2021f	2022f	Assumptions
Cash and cash equivalents	-33%	11%	22%	29%	"Cash Flow Statement"
Restricted cash	-33%	11%	22%	29%	In % of Cash & Cash Equivalents, the same percentage of 2018 (6.9%)
Accounts and notes receivable, net	7%	5%	5%	5%	Based on Accounts Receivables Turnover of 2018 (Key Financial Ratios)
Inventories	-12%	5%	23%	19%	Based on Inventory Turnover of 2018 (Key Financial Ratios)
Prepaid expenses and other current assets	7%	5%	5%	5%	Median of last 5 years in % of the total operational costs
Advertising funds restricted assets	19%	17%	15%	14%	The same % of the Advertising Revenue as 2018
Current assets of discontinued opearations					
Total Current Assets					
Properties	-4%	-5%	-5%	-4%	PP&En-1+ CapEx on PP%E - dep. and impairment losses on PP&E
Goodwill	0%	0%	0%	0%	The same value as 2018
Other intangible assets	0%	0%	0%	0%	The same value as 2018
Investments	11%	10%	9%	8%	Investments_{n-1} + Other investments ("Cash Flow Statement")
Other assets	0%	0%	0%	0%	The same value as 2018
Noncurrent assets of discontinued operations					
Total Assets					
LIABILITIES AND STOCKHOLDERS' EQUITY					
Current portion of long-term debt	-9%	1%	2%	6%	The same % as 2018 compared with the Long Term debt
Accounts payable	120%	5%	5%	5%	Based on Payables Turnover
Accrued expenses and other current liabilities	7%	7%	7%	7%	The Median of the last 3 years in % of cost of sales
Advertising funds restricted liabilities	23%	19%	17%	15%	The same percentage as 2018 of (Advertising funds restricted liabilities / Advertising expenses)
Current liabilities of discontinued operations					
Total current liabilities					
Long-term debt	-9%	1%	2%	6%	Median % of Total Assets in the last 5 years
Deferred income taxes	1%	1%	1%	1%	The same % as 2018 of the total taxes paid
Other liabilities	2%	11%	11%	-20%	The same weight of total expenses as 2018
Noncurrent liabilities of discontinued operations					
Total liabilities					
470,424 shares issued	0%	0%	0%	0%	The same value as 2018
Additional paid-in capital	0%	0%	0%	0%	The same value as 2018
Retained earnings (accumulated deficit)	43%	43%	39%	33%	$\text{Retained earnings}_{n-1}$ + Net Income_n - Dividends Paid_n
Common stock held in treasury, at cost	7%	7%	6%	6%	Estimated Repurchase of Common Stock by WEN
Accumulated other comprehensive loss	0%	0%	0%	0%	The same value as 2018
Net Income	-69%	18%	15%	12%	"Income Statement"
Total stockholders' equity					

Income Statement	2019f	2020f	2021f	2022f	Assumptions
Sales	4.6%	4.6%	4.6%	4.6%	Forecasted CAGR for the Quick Service Restaurant Industry by Research and Markets for the period between 2018 and 2022
Franchise revenues	4.6%	4.6%	4.6%	4.6%	The same as sales
Franchise rental income	4.6%	4.6%	4.6%	4.6%	The same as sales
Advertising funds revenue	4.6%	4.6%	4.6%	4.6%	The same as sales
Cost of Sales	-34.5%	-34.5%	-34.5%	-34.5%	The same percentage as 2018
Franchise support and other Costs	-1.6%	-1.6%	-1.6%	-1.6%	The same percentage as 2018
Franchise rental expense	-5.7%	-5.7%	-5.7%	-5.7%	The same percentage as 2018
Advertising funds expense	-20.2%	-20.2%	-20.2%	-20.2%	The same percentage as 2018
General and Administrative Expenses	-10.3%	0.0%	0.0%	0.0%	Forecasted by the company
Depreciation and Amortization	6.1%	-4.4%	-4.1%	-3.9%	We calculated the median of the last 4 years of Depreciation % of Properties, and used this percentage rate for each year
System organization gains	-100%	0.0%	0.0%	0.0%	The value was very low in 2018, so we assume 0 in the next years
Reorganization and realignment costs	0.0%	0.0%	0.0%	0.0%	The same value as 2018
Impairment of long-lived assets	0.0%	0.0%	0.0%	0.0%	The same value as 2018
Other operating expense, net	-100%	0.0%	0.0%	0.0%	The value was very low in 2018, so we assume 0 in the next years
Interest expense	-9.1%	1.1%	1.7%	6.2%	The total interests divided by total debt in 2018, and the same rate was used
Loss on early extinguishment of debt	-100%	0.0%	0.0%	0.0%	In the past was rare WEN having these losses, so we assumed 0
Investment income, net	-99%	0.0%	0.0%	0.0%	WEN had an extraordinary investment income in 2018 because the sale of ownership in the *Inspire Brands,* we assumed the same as 2017
Other income (expense), net	0.0%	0.0%	0.0%	0.0%	The same value as 2018

Cash Flow Statement					
Change in inventories	5%	5%	5%	5%	"Balance Sheet"
Change in receivables	7%	5%	5%	5%	"Balance Sheet"
Change in Prepaid Expenses	24%	2%	2%	2%	"Balance Sheet"
Change in payables	120%	5%	5%	5%	"Balance Sheet"
Accrued Expenses	7%	7%	7%	7%	"Balance Sheet"
Current Portion Long-Term Debt	-9%	1%	2%	6%	"Balance Sheet"
Advertising funds restricted assets	19%	17%	15%	14%	"Balance Sheet"
Advertising funds restricted liabilities	23%	19%	17%	15%	"Balance Sheet"
Deferred income tax	1%	1%	1%	1%	"Balance Sheet"
Cash flow from operations (CFO)					
Investing Activities					
Capital Expenditures	6%	7%	7%	8%	Forecasted by the company for 2019, and the median of the last 3 years and the forecast for 2019
Other investments	11%	10%	9%	8%	"Balance Sheet"
Cash Flow from investments (CFI)					
Financing Activities					
Increase in Financial Debt	-7%	1%	2%	3%	"Balance Sheet"
Repurchases of Common Stock	7%	7%	6%	6%	"Balance Sheet"
Dividends (% of Net Income)	56%	47%	41%	37%	Company forecasted the same as 2018
Cash Flow from financing activities (CFF)					

Source: Author and Company data

Appendix 8: WACC Assumptions

	2019f	2020f	2021f	2022f	TV	Assumptions
Market Risk Premium	5.96%	5.96%	5.96%	5.96%	5.96%	Aswath Damodaran´s computations on January 5, 2019
Country Risk Premium	0%	0%	0%	0%	0%	Aswath Damodaran´s computations on January 5, 2019
Unlevered Beta	0.63	0.63	0.63	0.63	0.63	Aswath Damodaran´s computations on January 5, 2019
Corporate Tax Rate	27%	27%	27%	27%	27%	KPMG's corporate tax table
Levered Beta	0.89	0.89	0.89	0.89	0.89	Calculated based on the formula: βL = βu * [1+ D/E*(1-T)]
Risk Free Rate	2.09%	2.09%	2.09%	2.09%	2.09%	US treasury bill 3 months at 30 Jun 2019
Ke	7.4%	7.4%	7.4%	7.4%	7.4%	Calculated with the CAPM model
Terminal growth rate					1.90%	US inflation at December 2018
Interests	108,694	109,888	111,792	118,725	118,725	Company Data
Total Debt	2,657,333	2,544,081	2,580,147	2,683,004	2,683,004	Company Data
Kd	4.3%	4.3%	4.3%	4.3%	4.3%	Interests/Total Debt
Weight of Debt = D/(D+E)	37%	36%	36%	37%	37%	Total Debt/(Total Debt + Market Capitalization at 30 Jun 2019)
Weigh of Equity = E/(D+E)	63%	64%	64%	63%	63%	Market Capitalization/(Total Debt + Market Capitalization at 30 Jun 2019)
Unlevered Cost of Capital	6.25%	6.28%	6.27%	6.24%	6.24%	
WACC	5.81%	5.86%	5.84%	5.80%	5.80%	WACC method

Source: Author, Aswath Damodaran and Company data

Appendix 9: Discounted Cash Flow Assumptions

	2018	2019f	2020f	2021f	2022f	Terminal Value
Revenues	1,589,936	1,663,232	1,739,907	1,820,117	1,904,024	**1,940,201**
Growth Rate	29.96%	4.61%	4.61%	4.61%	4.61%	1.90%
EBIT	249,892	285,504	320,635	356,468	393,132	400,601
EBIT YOY%	15.7%	17.2%	18.4%	19.6%	20.6%	1.9%
t	20.0%	22.5%	22.5%	22.5%	22.5%	22.5%
Tax Expense	49,899	64,238	72,143	80,205	88,455	90,135
EBIT (1-t)	199,993	221,266	248,492	276,263	304,677	310,466
Δ Net Working Capital	54,657	31,460	13,652	14,782	17,629	-8,135
CAPEX	- 69,857	- 77,500	- 79,605	- 79,605	- 79,605	-79,605
CAPEX YOY%	-14.51%	10.94%	2.72%	0.00%	0.00%	
D&A	128,879	136,712	130,669	125,266	120,434	79,605
D&A YOY%	-93.92%	6.08%	-4.42%	-4.14%	-3.86%	
g			0.41%	7.50%	7.85%	1.90%
FCFF	**313,672**	**311,938**	**313,209**	**336,706**	**363,135**	**302,331**

Terminal Value	**7,744,674**
PV of FCFF	955,603
PV of TV	6,915,836
Enterprise Value	7,871,439
Net Debt	2,232,294
Other Assets	96,907
Other Liabilities	245,226
Equity Value	5,487,075
# Shares Outstanding	231,029
Price at 30/06/2019	$ 19.58
Price Target	**$ 23.75**
Upside Potential	21.3%

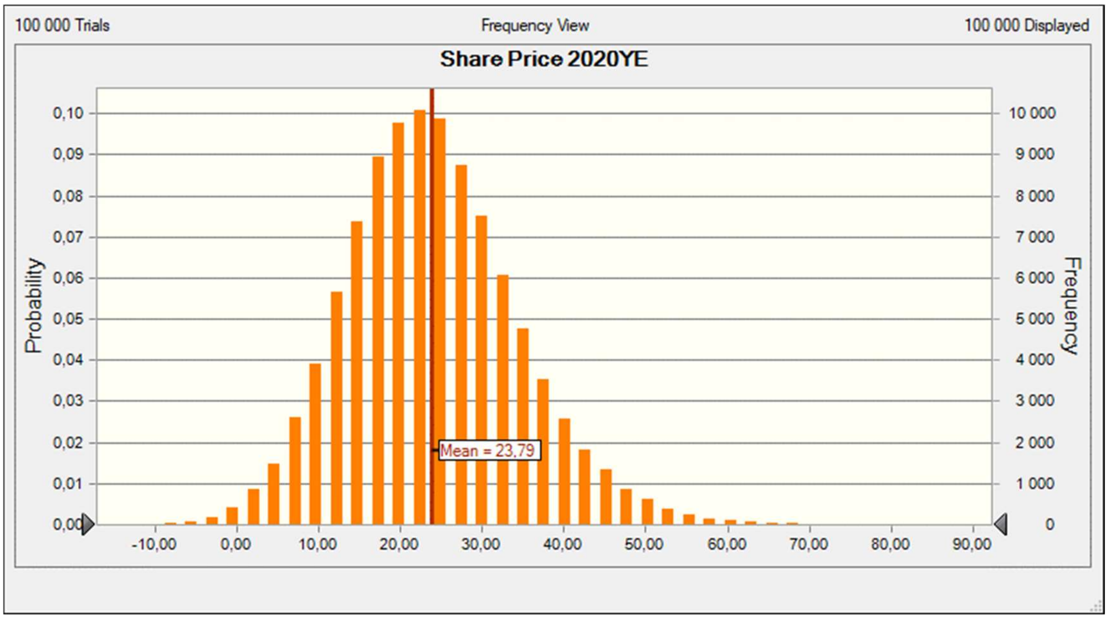
Source: Author and Company data

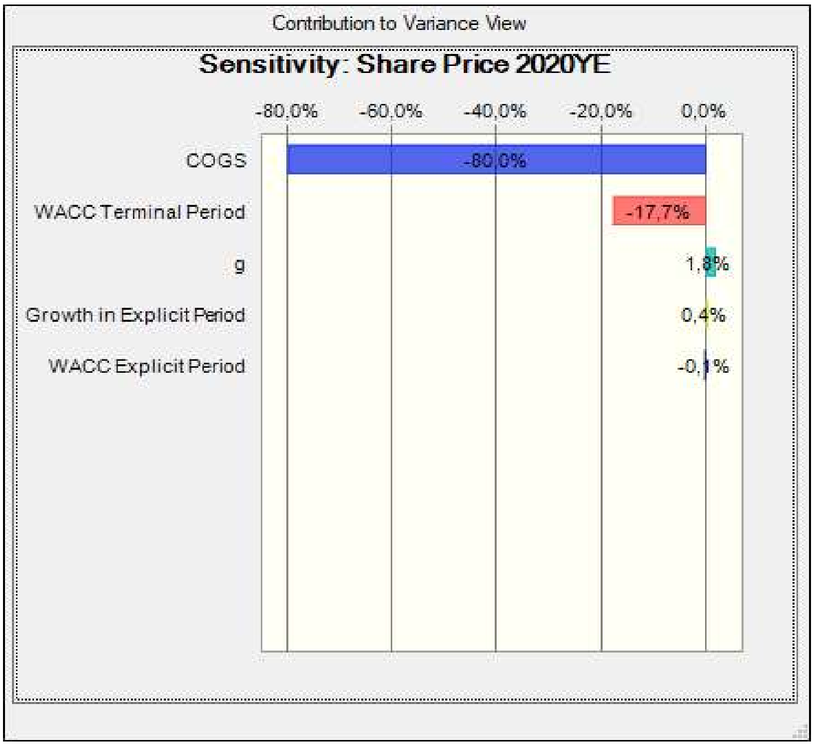
Appendix 10: Multiples Assumptions

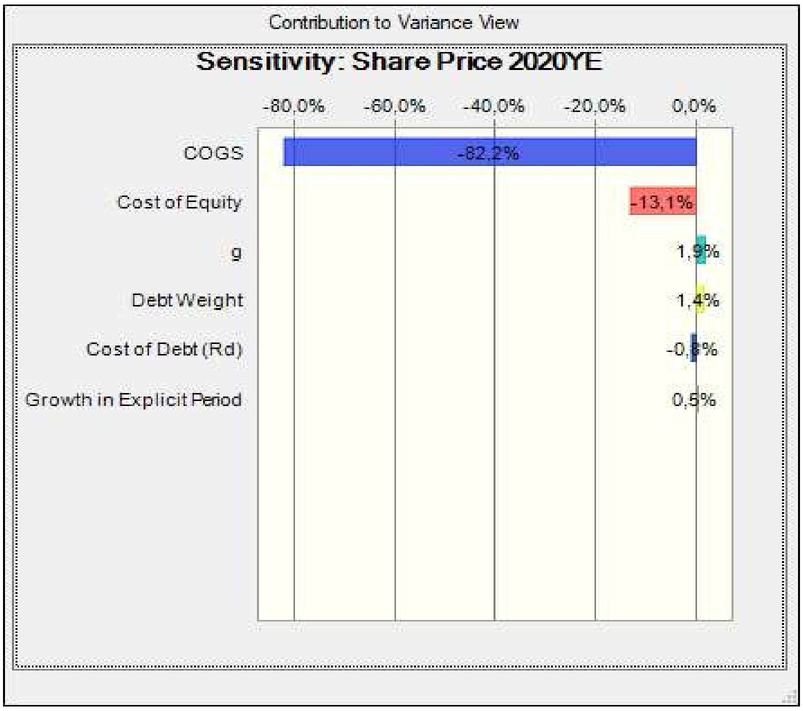
Source: Bloomberg	Price/Sales					EV/EBITDA				
Year	2016	2017	2018	2019F	2020F	2016	2017	2018	2019F	2020F
McDonald's Corp	4.02	6.02	6.65	7.95	7.32	12.96	15.9	16.8	17.7	16.70
Yum! Brands Inc	1.8	4.44	4.82	5.32	6.03	9.89	17.78	19.82	21.3	20.41
Darden Restaurants Inc	1.25	1.35	1.66	1.92	1.53	9.97	12.94	12.98	11.8	10.6
Jack in the Box Inc	2.21	2.22	0.83	3.68	2.93	13.85	12.02	11.23	13.2	18.60
Domino's Pizza Inc	3.17	3.27	3.3	2.42	2.42	20.86	20.61	19.03	19.6	12.90

Source: Author, Bloomberg and Company data

Appendix 11: Monte Carlo Simulation







Source: Author and Company data

Appendix 12: Dividend Discount Model

	2019 F	2020 F	2021 F	2022 F	TV
Dividends per Share	0.35	0.35	0.35	0.35	0.36
Discounted Dividends	0.35	0.35	0.34	0.32	18.56

Price Target	19.57
Upside Potential	-0.1%

Source: Author and Company data

Appendix 13: Adjusted Present Value Computations

	2018	2019 f	2020 f	2021 f	2022 f	TV
FCFF		311,938	313,209	336,706	8,107,810	302,331
PVt	7,209,318	7,661,930	7,811,437	7,968,241		
Debt Capacity Short-Term	2,597,123	2,760,174	2,839,425	2,968,867	3,020,869	
Interests Paid Short-Term		119,939	123,383	129,008	131,267	
Interest Tax Shield Short-Term		7,530	7,746	8,099	8,241	

EV Unlevered	7,811,437
PV (ITS)	22,667
EV	7,834,104
Net Debt	2,232,294
Other Assets	96,907
Other Liabilities	245,226
Equity Value	5,453,491
#Shares	231,029
Price Target	**23.61**
Upside Potential	20.6%

Source: Author and Company data

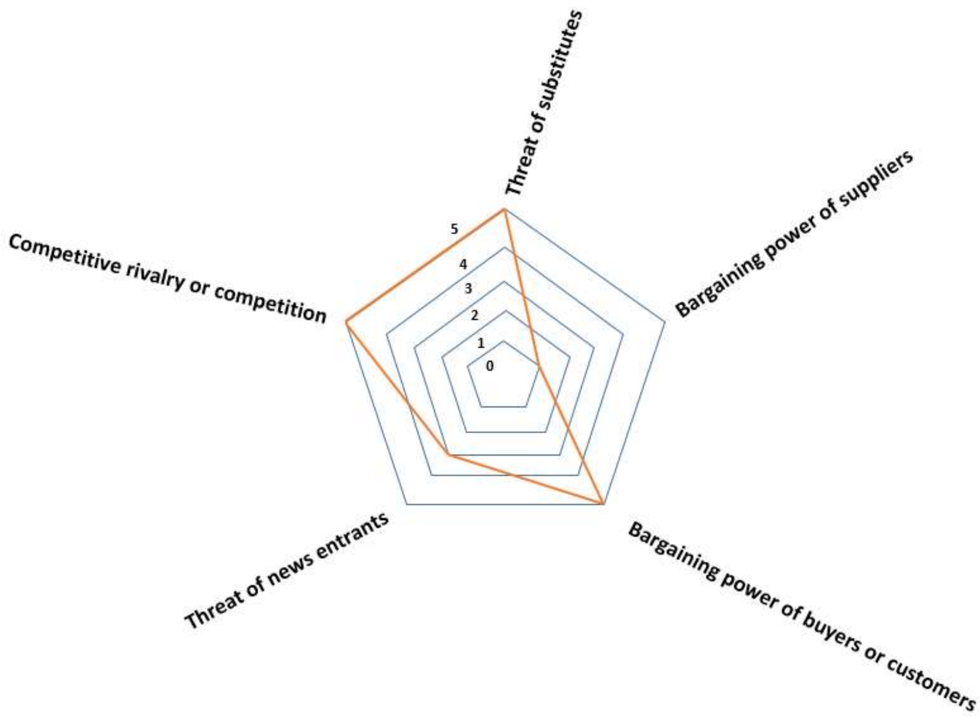
Appendix 14: Free Cash Flow to Equity Computations

	2020 f	2021 f	2022 f	TV
FCFF	313,209	336,706	363,135	302,331
Interests * (1-t)	-85,163	-86,639	-92,012	-78,186
Debt Borrowing	27,794	44,338	161,376	0
FCFE	255,840	294,405	432,499	224,145
	238,287	255,392	349,445	4,274,788

Equity Value (Before adjustments)	5,117,912
Other Assets	96,907
Other Liabilities	245,226
Equity Value	4,969,593
#Shares	231,029
Price Target	**21.51**
Upside Potential	9.9%

Source: Author and Company data

Appendix 15: Porter's Five Forces



Source: Author

Appendix 16: Sensitivity Analysis

Operational Tax Rate	Effective Tax Rate						
$ 23.75	20%	22%	25%	27%	30%	32%	35%
17%	24.36	24.82	25.53	26.02	26.78	27.31	28.13
18%	23.97	24.42	25.12	25.60	26.36	26.88	27.70
20%	23.19	23.63	24.31	24.78	25.52	26.03	26.82
22.50%	22.21	22.63	23.29	23.75	24.46	24.96	25.72
25%	21.23	21.64	22.28	22.72	23.41	23.89	24.63
27%	20.45	20.85	21.47	21.90	22.57	23.03	23.75
30%	19.27	19.66	20.25	20.66	21.30	21.75	22.44
32%	18.49	18.86	19.44	19.84	20.46	20.89	21.56
35%	17.32	17.67	18.22	18.60	19.20	19.61	20.25

Source: Author and Company data

Appendix 17: Relative Valuation vs Price

Source: Reuters

Appendix 18: CFA Recommendation System

Level of Risk	SELL	REDUCE	HOLD/NEUTRAL	BUY	STRONG BUY
High Risk	0%≤	>0% & ≤10%	>10% & ≤20%	>20% & ≤45%	>45%
Medium Risk	-5%≤	>-5% & ≤5%	>5% & ≤15%	>15% & ≤30%	>30%
Low Risk	-10%≤	>-10% & ≤0%	>0% & ≤10%	>10% & ≤20%	>20%

Source: CFA Institute

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Abbreviations

CapEx	Capital Expenditure
CFF	Cash Flow from Financing Activities
CFI	Cash Flow from Investing
CFO	Cash Flow from Operations
D&A	Depreciations & Amortizations
WACC	Weighted Average Cost of Capital
Ru	Unlevered Cost of Capital
DCF	Discount Cash Flow
g	Growth rate for the terminal period
CRP	Country Risk Premium
WEN	Wendy’s Co
RF	Risk Free Rate
Ke	Cost of Equity
MRP	Market Risk Premium
Kd	Cost of Debt
FCFF	Free Cash Flow to the Firm
FCFE	Free Cash Flow to Equity
APV	Adjusted Present Value
EBITDA	Earnings Before Interests, Taxes, Depreciation and Amortization
EBIT	Earnings Before Interests and Taxes
T	Tax Rate