MERGERS AND ACQUISITIONS:

THE CASE OF KRAFT FOODS AND CADBURY

Sara de Paula Ribeiro

Advisor: Peter Tsvetkov

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ABSTRACT

The aim of this dissertation is to focus on a determinant aspect of Corporate Finance that is Mergers and Acquisitions (M&A). This dissertation not only provides a practical analysis of main issued regarding a process of M&A, but also provides a theoretical framework about M&A.

Specifically, this dissertation explores the real case of Kraft Foods - world's second largest manufacturer and packager food products – and Cadbury - the world's second largest confectionery firm.

Despite Food & Beverage Industry being a non-cyclical industry is a highly competitive one, where players compete for price, quality, innovation, brand recognition and loyalty.

Together, Kraft Foods and Cadbury will become the largest manufacturer and packager food products in the world. Benefiting from economies of scale, Kraft Foods will be more efficient and better price competitive than its competitors.

Kraft Foods should acquire Cadbury through a tender offer. Synergies are estimated to be 25% of Cadbury's market capitalization at 9th of November of 2009. The price offered should be £7.93 for each Cadbury's share. To conclude, Kraft Foods should pay 88% in Debt and 12% in Cash through an emission of more than 90 million new shares.

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1. Introduction

The aim of this dissertation is to focus on a determinant aspect of Corporate Finance that is Mergers and Acquisitions (M&A). In order to achieve that, it is necessary to present two firms and their respective strategic and financial reasons to justify a process of M&A. Specifically, this dissertation explores the real case of Kraft Foods - world's second largest manufacturer and packager of food products – and Cadbury - the world's second largest confectionery firm.

This dissertation not only provides a practical analysis of the main issue regarding a process of M&A, but also theoretical framework about M&A.

The first part of the dissertation is composed by the literature review section where a compendium of diverse academic articles regarding valuation process and aspects related to M&A deals is presented, such as type of acquisitions, M&A activity and methods of payment. This theoretical part is going to be used as a guideline for the practical part – valuation and acquisitions section.

The second part is the industry and firms analysis section. The Food & Beverage and Confectionery Industry are going to be introduced and its performance accessed through present and past data. In addition, Kraft Foods and Cadbury are going to be described and analysed based on the information collected in their interim reports. This section is highly important to help identify the market drivers in the each industry and to understand the determinant factors that made Kraft Foods and Cadbury grow over time.

Afterwards the performance forecast section is presented, where Kraft Foods' and Cadbury's standalone valuations are defined, according to the literature guidelines. To access the value of each firm it was created a model with its respective assumptions. To analyse the M&A process, another model was created but this time to access the merged value and the mix of synergies created.

After concluding the valuation process, the last section is dedicated to the acquisition offer. This section is going to be partially explored by addressing how the synergy's benefits should be distributed and how much Kraft Foods should pay for Cadbury. Also, in this section are presented some models that can help to certify if there are enough mix of synergies to compensate the premium offered and if the expectable synergies are plausible or not.

2. About Valuation Methods

Value the value is the basis of market economy (Copeland, T.E., et al, 2000). To have access to the performance of an investment, a bond, a derivative or a firm's share, it is indispensable to measure the amount of the value it creates. According to Luehrman (1997), every resource-allocation decision a firm makes lies in what that move is worth and if the firm estimates that that value is a key driver of the firm's overall performance.

In the M&A process, valuation is the most important component in the analysis (Hitchner, 2006). However, given the multiplicity of valuation methods it is important to understand their inputs to better apply them, since they "are different ways of expressing the same underlying model" (Young, M. et al, 1999).

Table 1 - Valuation Methods

	Equity	Enterprise Values
Cash Flow Approaches	Dividend Discount Model	Discounted Cash Flow
Returns Based Approaches	Dynaminc ROE	Economic Value Added
Multiples	Dividend Yield	Free Cash Flow Yield
	P/E Ratio	Enterprise - Value to EBIT
	P/B Value	Enterprise - Value to EBITDA
		Enterprise Value to Capital

Young's classification first characteristic is based on the distinction of methods focus on Equity Values – this approach estimates the value of a firm to equity holders - and methods focus on Enterprise Value – while these approach values the whole enterprise, not only the equity but also the debt.

Second characteristic of Young's classification is the distinction between cash-flows, returns and multiples. Damodaran (2002), defines that cash-flow assumes the value of an asset that corresponds to the present value of all expected future cash-flows. Whereas Returns-Based approaches are focused on the capital stock and the spread between the return and cost of capital. (Young, M.et al, 1999).

At last, Multiples (Relative Valuation) is based on the principle that a firm's asset can be compared with other similar firms in the same industry by using a multiple (Damodaran, 2002). The value is estimated by multiplying the ratio, or multiple, from the comparable firm by the performance measure for the firm being valued (Kaplan et al., 1996).

According to Luerhman (1999), most firms use a set of approaches to better estimate value, but discounted-cash flow analysis (DCF) is considered the best practice for valuation, despite valuation models being always a function of three factors – cash, timing and risk.

In this dissertation only Free Cash Flow to the Firm (FCFF), Adjusted Present Value (APV) – both methods belong to cash-flow approaches –and Relative Valuation are going to be used in the valuation process.

3. Cash Flow Approaches

These approaches are heavily based on assumptions and can be explained in two steps. The first step is to forecast the future cash flows of a firm, which means the future intrinsic value of a firm's assets for each period on the analysis, the second step is to discount the forecasts to present value at a properly discount rate that reflects the riskiness of those streams (Luehrman, 1997).

3.1. Free Cash Flow to the Firm (FCFF)

Free Cash Flow to the Firm is the most common used valuation technique to compute Enterprise Value. This approach consists in discounting all the firm's expected cash flows using the WACC rate (Damodaran, 2002).

$$Enterprise\ Value = \underbrace{\sum_{i=1}^{n} \frac{FCFF_i}{(1+R_{WACC})^i}}_{\text{Explicit Period}} + \underbrace{\frac{\frac{FCFF_{n+1}}{(R_{WACC}-g)}}{(1+R_{WACC})^n}}_{\text{Terminal Value}}$$

Free Cash Flow is the cash generated by an all-equity financed project to distribute to all its suppliers of capital (Kester, W. et al., 1995), prior to operating expenses, taxes and reinvestment needs, but before any payment of interests to debt-holders or dividends to stockholders (Damodaran, 2002).

$$FCFF = EBIT\ (1 - T_C) + Depreciations - Capital\ Expenditure - \Delta\ Working\ Capital$$

There is no mention of tax benefits, such as interest tax shields, in computing FCFF because the WACC is computed after-taxes and already captures them (Damodaran, 2002).

3.2. Terminal Value (TV)

FCFF approach is divided in two stages, the first one that represents the present value of cash flow for an explicit period of time and the second one, that represents a Terminal Value. Since it is impossible to compute firms' cash flows forever, after the explicit period is determined the Terminal Value that represents the firms' value at that period (Damodaran, 2002).

This Terminal Value is heavily dependent on the growth rate that cash flows are expected to grow as and the discount rate.

3.3. Growth Rate (g)

According to Damodaran (2005), growth rate is the critical input in valuation process, since it determines how revenues and earnings will evolve in the future.

To determine a consistent growth rate, Damadoran (2005), suggests observing the firms' past earnings (historical growth rates) or to estimate the growth rate accordingly with the firms' fundamentals, based on the firms' reinvestment rate and return on capital.

$$g = Reinvestment\ Rate\ \times Return\ on\ Capital$$

$$Reinvestment\ Rate = \frac{Capex - Depreciation + \Delta\, Non - Cash\ Working\ Capital}{EBIT\ (1 - T_C)}$$

$$Return\ on\ Capital = \frac{EBIT\ (1 - T_C)}{Capital\ Invested}$$

3.4. Weighted Average Cost of Capital

The weighted average cost of capital (WACC) is the most commonly-used DFC approach that represents the opportunity cost of investing capital in projects with similar risk and duration; it is difficult to measure it reliably because it is an excepted rate of return. The opportunity cost of capital varies differently depending on the firm and business' risk

This method is quite contested by academics. Modigliani & Miller (1958) defended that managers by changing a firm's capital structure cannot change a firm's value.. For some

academics[1], it is a valid and simple model suitable for less complex structural firms. Others believe that this method is obsolete, since it is a method suitable only for simple firms with a stable capital structure, tax position or fund-raising strategy[2]. They also argued that WACC is modeled to handle with financial side effects automatically, but only for interest tax shields according to very inflexible assumptions (Luehrman, 1997).

To successfully implement the cost of capital it is very important to analyse the components that the WACC embraces: the cost of equity, the after-tax cost of debt, and the company's target capital structure (Copeland, T.E. et al., 2000).

$$WACC = R_E \times \frac{E}{V} + R_D \times \frac{D}{V} \times (1 - T_C)$$

3.5. Cost of Equity

The capital asset pricing model (CAPM) was first introduced by Sharpe (1964), Lintner (1965) & Mossin (1966) and allows pricing securities by exploring the relationship between the risk of an asset and its expected return. This model is focused only on non-diversifying risk, since investors can reduce their exposure to other risks – specific to that security - by diversifying their investments.

Based on a set of assumptions[3], this model allows to reach a benchmark rate of return for investments.

$$E(R_s) = R_f + \beta_s(R_m - R_f)$$

Where $E(R_s)$ is the security expected return, R_f is the risk-free rate, β_s is security's beta and R_m is the expected return on the stock market as a whole. These components are going to be mentioned later.

The **cost of equity** is defined as the expected return on a company's stock and the expected return is the shareholder's opportunity cost of the equity funds employed by the company (Mullins, Jr., 1982). Therefore, using CAPM makes it possible to compute the firm's cost of equity levered and unlevered. The use of debt makes the firm riskier than an all-equity firm, since it faces the existence of distress costs. Because of that, the cost of equity turns out to be more expensive. That is why the cost of equity unlevered is smaller than cost of equity levered.

[1]Damodaran, A. (2002) *Investment Valuation* 2nd Edition. New York: Wiley Finance.

[2] When is expected that the firm will vary its capital structure it is needed to make adjustments not only project by project, as well as period by period in each project (Luehrman, 1997).

[3]The model assumes a perfect capital market (no taxes on returns or transaction costs), also that all investors are mean-variance optimizers and all with homogeneous expectations and beliefs, and that they can borrow and lend any amount at a fixed risk-free rate.

$$R_E = R_f + \beta_L(R_M - R_f)$$

$$R_U = R_f + \beta_U(R_M - R_f)$$

3.6. Risk-free rate

According to Damodaran (2005), risk can be defined as "the likelihood that we will receive a return on an investment that is different from the return we expected to make".

By this definition a risk-free rate is when the outcome of an investment is expected with certainty, meaning there is no default risk. The default risk is measured with a bond rating and the interest rate is computed by adding a default spread to the riskless rate (Damodaran, 2002).

Since any firm has a measure of default risk for larger or safest it can be common practice to view government securities - Treasury Bills (short-term) and Treasury Bonds (long-term) – as risk-free assets.

In valuation Treasury Bonds are used more often. Copeland, T. et al (2000*)* indicates for valuation purposes a 10-year Treasury Bond[4], however it is imperative to have consistency between the risk-free rate and the cash-flows' period in the analysis process.

3.7. Beta ($\boldsymbol{\beta}$)

Beta is a measure of sensitivity. In the CAPM beta represents a stock's incremental risk to a diversified investor, where risk is defined as how the stock co-varies with the market (Copeland, T. el al, 2000).

$$\beta_M = \frac{Cov_{(r_M, r_M)}}{\sigma_M^2}$$

To estimate a firms' beta, in the valuation process, accordingly to Copeland, T. el al (2000), it is better to use an industry-derived unlevered beta re-levered to the firms' capital structure, since firms' specific betas vary too much to be reliable.

$$\beta_L = \beta_U \left[1 + \frac{D}{E} \times (1 - T_C)\right]$$

[4]For developed economies.

3.8. Equity– Risk Premium ($R_M - R_f$)

Equity risk premium is a key component in many pricing models[5] and it can be defined as the compensation risk for the expected return on any investment. It is the difference between the market risk and the risk-free rate. The market risk reflects the expected returns on all risky investments as a whole.

According to Damodaran (2005), the equity risk premium is what investors see in an economy/market and what price they should attach to that risk. Equity premium risk is the main responsible in how investors allocate wealth and in which type of securities they invest.

The equity risk premium is determined by several macroeconomic, volatility and behavioral factors. Damodaran (2005) mentioned some, such as **risk aversion** – if investors become more risk averse, the equity premium will increase -, **economic risk** – general concerns about the overall economy, **information** – the quality and quantity of information available to investors may affect their investment decisions and their confidence level on it, **liquidity** – illiquidity assets demand a higher premium, **catastrophic risk** – the risk of a drop in economy output or a default by the government, **behavioral irrational component** – investors do not always behave rationally.

Copeland, T. et al (2000) presents three essential pointers to estimate equity risk premium:

- Measuring and extrapolating historical returns;
- Regression analysis to link current market variables to project the expected market risk premium;
- Using reverse engineering to assess the market's cost of capital using DFC valuation.

4. Adjusted Present Value (APV)

One alternative to the Weighted Average Cost of Capital (WACC) is the Adjusted Present Value (APV), introduced by Myers (1974), which is considered a better tool, since it "always works when WACC does not" (Luerhman, 1997).

The main advantages of APV over WACC are its flexibility and transparence, since it allows managers to segregate and analyse separately the different components of value.

The fundamental idea behind APV is "value additivity" (Luerhman, 1997), following the propositions of Modigliani & Miller, and it can be explained in three steps. In the first step, it

[5] Capital Asset Pricing Model (CAPM), Arbitrage Pricing Model (APM), Multi-Factor Model, Proxy Models (Damodaran, 2005).

values the project as if the firm was an all-equity firm, using the DCF valuation to assess the present value.

$$V_U = \sum_{i=1}^{n} \frac{FCFF_i}{(1+R_U)^i} + \frac{\left[\frac{FCFF_{n+1}}{(R_u - g)}\right]}{(1+R_U)^n}$$

The second step, it evaluates the financing side effect by adding them to the firm's unlevered value, such as interest tax shields, cost of financial distress, subsidies, hedges and issue costs.

In the literature is discussed that tax shields should be discounted at an appropriate risk-adjusted rate, however there is no agreement on how risky tax shields are. Accordingly with Luerhman (1997), the average firms' cost of debt is commonly used with an upward adjustment. However, Copeland, T. el al (2000) defends that interest tax shields should also be discounted by cost of equity unlevered rate, since firms will manage its debt-to-value ratio to a target level - making debt grow with the business - so the value of interest tax shield will track the risk of operating assets.

$$PV_{ITS} = \sum_{i=1}^{n} \frac{D_i \times R_D \times T_C}{(1+R_D)^i} + \frac{D_i \times R_D \times T_C}{\frac{R_D - g}{(1+R_D)^n}}$$

The third step is to evaluate expected bankruptcy costs given the firms' level of debt.

$$PV_{EBC} = Probability\ of\ Default \times PV\ of\ BC$$

This estimate is considered the most challenging in the APV approach, since the probability of default and bankruptcy costs cannot be estimated directly. To estimate the probability of default it is necessary to estimate a bond rating for each level of debt, and estimate their probability of default separately.The bankruptcy cost is a statistical probability that needs to take into account the firms' characteristics and the firms' level of debt (Damodaran, 2002).

Finally, the Enterprise Value is given by:

$$Enterprise\ Value = Firms' Value\ Unlevered + PV\ (ITS) - PV\ (EBC)$$

This "additivity" characteristic allows to understand by segregating all business operations components, as well as interest tax shields and bankruptcy costs, where and how the value is being created.

5. Relative Valuation

Goedhart et al (2005), Damadoran (2005), Copeland, T. el al (2000), defended that a careful analysis comparing a firm's multiples with its peers can lead to a more accurate valuation, since some errors in estimating firms' value by using DFC approach are very common, especially in computing firms' return on invested capital (ROIC), growth rate and its weighted average cost of capital.

The value is estimated by multiplying the ratio or multiple from the comparable firm by the performance measure of the firm being evaluated (Kaplan et al., 1996).

Relative valuation is based in two components. First, to value assets in relative value, prices have to be standardized by using multiples of earnings, book values or sales. Second, the peers must be comparable firms taking into account risk, growth, cash flows, as well as returns on invested capital and capital structures (Goedhart et al, 2005; Damodaran, 2005).

Goedhart et al. (2005) defends the use of forward-looking multiples for a more accurate valuation, which means a multiple that can forecast profits. Goedhart also defends the use of enterprise-value multiples instead of equity-value multiples since they are less affected by the capital structure they are not vulnerable to manipulation.

Kaplan et al. (1996), also defends the use of EBITDA, EBIT, net income and revenue to perform the valuation.

The disadvantage of this approach is that comparable firms are very difficult to find, since it is very difficult to match return on invested capital and growth expectations (Goedhart et al, 2005). The lack of assumptions in this approach can lead to a biased analysis, since this method is vulnerable to manipulation, such as the P/E ratio that can be artificially increased by swapping debt for equity (Goedhart et al., 2005). At last, it is important to use multiples in a consistent manner to avoid the creation of misleading valuations.

6. Cross-Border Valuation

Cross-border investments are a prominent internationalization strategy that is responsible for a significant impact in economy's value creation, since in the last decades. Cross-border trends and growth factors are mentioned later[6] in this thesis.

This topic will focus on the most common approaches to evaluate cross-border investments and the major issues that commonly affect such valuations.

[6] Cross-Border Trends Section

In a general perspective, the basic considerations for a cross-border investment should be the same as for a domestic acquisition; nevertheless in a cross-border there are more risk dimensions that must be taken into account and because of that valuation metrics must be adjusted.

6.1. Relative Valuation

In a cross-border transaction, the use of multiples is also a complementary approach and must follow the same consistence in the valuation process like in as the domestic transactions. Nevertheless, according to Zenner el al., (2008), the main problem is that in many countries there is a scarcity of comparable firms or transactions per country and industry.

6.2. Discounted Cash Flows Method

This approach is more flexible to adjust and, at the same time, more challenge, due to the difficulties in estimating future cash flows and the discounting rate in cross-borders (Zenner, M. et al., 2008). In the literature there are two different methods to apply the DFC approach (Kester, W., et al., 1995), however both paths require an appropriate adjusted-discount rate:

- Method A: Discounting Foreign-Currency Cash Flows:
  - This method involves converting the Net Present Value to the Home Currency at the spot exchange rate. The cash-flows are discounted at foreign-currency rate;
- Method B: Discounting Foreign-Currency Cash Flows converted to Home Currency:
  - This method involves the conversion of foreign currency amounts into home currency and the subsequent discounting of the converted cash flows at the home-currency discount rate;

Although both methods should not differ in terms of value, Zenner, M., et al., (2008) defends the use of both methods to validate assumptions.

To adjust the discount rate in a cross-border acquisition several risk dimensions must be taken into account. The approach followed in this thesis to measure the discount rate is the CAPM as already was mentioned, which reflects the non-diversified risk surrounding the investment, as well as the tax advantages associated by the use of debt, as well as the equity risk premium expected. However, there are others dimensions such as country/industry risk, exchange rate

risk, political risk (especially in developing market firms) and liquidity risk (Bodnar, et al., 2003).

According with Kester, W. et al., (1995), it is not very consensual how the discount rate should be adjusted, since adding additional risk premium in the discount rate can introduce errors into the analysis. Also, according to the same author, the assumptions must be very clear about what type of non-diversifiable risks the cross-borders' beta are not correctly capturing and then adding a premium to the discount rate.

Beta's choice must account to how much the acquirer's stockholders are exposed in the markets, if they are global fully-diversified investors or local investors more vulnerable to a specific market.

Kraft Foods is an American firm and Cadbury is an English firm. To merge both cash-flows in the valuation process it was followed Method A.

7. Types of Acquisitions

In the literature, Mergers and Acquisitions' (M&A) terminology can be quite confusing, since many research terms, such as "merger", "acquisition" and "takeover", can be used interchangeably due to the meanings' similarity between them (Ghauri& Buckley, 2003; Cartwright & Schoenberg, 2006; Brealy, Myers & Marcus, 2001; Sugiarto, 2000).

Defined as a set of different transactions, acquisitions can be categorized based upon the acquirer's nature and what happens to the **acquired firm (target firm)** after the acquisition process (Damodaran, 2002).

There are four different recognized possibilities for a firm to be acquired by another firm: a merger, a consolidation, a tender offer and an acquisition of assets.

A **merger** is usually a friendly deal and enjoys the cooperation of firms [7](Loughran&Vijh, 1997). It represents the combination of two firms into one where the acquiring firm assumes all assets and liabilities of the bidding firm that ceases to exist, since it becomes part of the acquiring firm, and its preceding shareholders receive cash and/or securities in the acquiring firm. In a **consolidation**, the process is similar, except it results in a new firm composed by both acquiring and acquired firms, each one with a percentage of the ownership (Damodaran, 2002).

[7] For the merger to happen both parts must agree, at least 50% of the shareholders of the acquiring and the target firm (Damodaran, 2002).

A **tender offer** occurs when the acquiring firm commits itself publicly to buy the outstanding stock of the target firm at a specific price. The target firm tends to exist as long as there are minorities of stockholders who refuse the tender. Usually, **tender offers** can turn into a hostile takeover or into a **merger** (Damodaran, 2002).

The last possibility is one firm **acquiring the assets** of another firm, as a formal investment, and the firm whose assets were purchased continues in activity.

Another form of acquisition is when the firm is acquired by its own management – **management buyouts** – or by outside investors – **leveraged buyouts**, through a tender offer. After this transaction, the acquired firm can cease to exist as a publicly traded firm and become a private firm (Damodaran, 2002).

Traditionally, there are three categories of mergers (Buckley & Ghauri, 2003):

- Horizontal – between firms in the same industry;
- Vertical – between firms in the value chain linkage;
- Conglomerate – between firms in unrelated business.

7.1. What is behind M&A's Process?

There are much of literature that justify that the fundamental reasons for the existence of M&A's processes is the argument that they will create synergy.

Synergy is the additional value that is generated by combining two firms, creating opportunities that would not been available to these firms operating independently (Damodaran, 2005). Nevertheless, during the process of evaluating the synergies it is important to highlight the concept value of control that should not be confused with synergy. The **value of control** is the incremental value that an acquirer believes can be created by running a target firm more efficiently (Damodaran, 2005). The incremental value is created by the target itself and not by the combination with another firm.

Accordingly with Damodaran (2005), synergies must be influenced by one of four inputs into the valuation process: higher cash flows from existing assets, higher expected growth rates, a longer growth period or a lower cost of capital.

There are two considered sources of synergies: operating synergies and financial synergies.

Operating synergies (Increasing Revenues / Decreasing Costs) allows firms to increase their operating income from existing assets, mainly through economies of scale (enabling the combined firms to be more cost-efficient and profitable), economies of scope (functional strengths that can be

transferable across businesses), greater price power and higher growth in markets that can lead to higher margins and growth rates.

Financial synergies (higher cash flows / lower cost of capital) are possible when the combined firms have different opportunities available, such as a firm with cash slack and with limited projects opportunities and a firm with higher-return project but no cash available. Another possibility is when debt capacity increases[8], since the combined firms become more stable and predictable, reducing default risk, due to less variable cash flows, what allows them to borrowing more. There are several financial synergies derived from tax benefits, cash flows can increase due to higher tax deductions that sheltered income, also the acquirer can take advantage of tax laws to write up the Target Company's asset, resulting in higher tax savings from depreciation. There are other financial synergies although mentioned as dubious in the literature, such as diversification and accretive acquisitions. A diversification strategy is known by providing the lowest exposure to risk for any given level of expected return through the acquisitions of imperfect correlated assets[9]. However it seems difficult to prove value creation relates directly to M&A's[10], since the market reacts negatively to the announcement of diversifying acquisitions (Damodaran, 2002) and because diversifying could result in a reverse synergy due to the lack of expertise related to the business.

To evaluate synergies is used a DCF framework that follows the same procedures, first analyzing the companies separately (Status Quo Valuation) and afterwards analyzing both firms together with no synergy and with synergy, with the difference between those last two showing the synergy value.

Based on assumptions and forecasts, synergies are difficult to measure not just in value but in time. It is not just relevant to know how much is the synergy value but also when they will start affecting cash flows; the longer it takes to show up, the less it values.

So to avoid a "synergy trap", this means, to pay a high premium for a firm that will not create the expected synergy, Sirower&Sahni (2006) suggests an "earnings" model for the target that through a combination of cost reductions and revenue enhancements would justify a given premium that can be used as a benchmark for any deals.

The author defines that one unit of the target's offer premium is the product of the premium (%P) and equity market value of the target firm, meaning in order to earn one unit of premium offered of the target, the target's after-tax earnings (E_T) must increase by %P.

$$\%P \times E_T = \%P \times (R \times \pi) \times (1 - T)$$

[8]This argument assumes that both the acquiring firm and the target were at their optimal debt capacities prior to the merger. The merger reduces the overall risk in the combined firm and increased the optimal debt capacity (Damodaran, 2002).
[9]Bodie, Z., Kane, A., and Marcus, A.J. (2008) *Essentials of Investments* (7th edition), Boston: McGraw-Hill Irwin.

[10]Bruner, R.F. (2004) "Where M&A Pays and Where It Strays: A Survey of the Research", *Journal of Applied Corporate Finance,* 16(4), pp. 63-76.

Where R is the revenue, π the pretax profit margin and T the affective tax rate.

This represents that for each percentile unit of offering premium over the target's pre-announcement market value, the target must generate the same percentile unit increase in pretax profit margin.

This increase must be delivered by pre-tax synergies, which can be created not only by revenue enhancement but by cost reduction as well.

$$\% \, SynC = \frac{\%P \times (R \times \pi)}{R \times (1 - \pi)}$$

After achieving the pre-tax synergies, Sirower&Sahni (2006) also suggests to plot graphically the solutions in a MTP[11] line to best analyse the business combination of cost savings and revenues enhancements. This graphic is illustrated in section 20.3 of this dissertation where the MTP Line's importance is straightforward: deals below the line should be avoided.

7.2. Is M&A a loser's game?

Accordingly to Bruner (2004), there is a "conventional wisdom" that M&A is a loser's game, "only about 20% of all mergers really succeed (…)" , an idea also present in Ghauri& Buckley (2003).

Wealth gains in M&A trigger some disagreement between researchers, in part due to differences in how returns are computed what generates incomparable results and a lack of feasible metrics to analyse the value creation in M&A. Also, some of those studies are focused on accounting measures, such as net income, ROE, ROA and EPS, leverage and liquidity and are structured to matched-sample comparisons in which acquirers' performance are set against peers (non-acquirers) of similar size, in the same industry (Bruner, 2004).

Ghauri& Buckley (2003), defend that the assumption of profitability in a M&A is erroneous, based on the argument that if the market price fully reflects the future profit stream of the acquired assets, then there is no scope for profit from acquisitions.

However, accordingly with Loughran&Vijh (1997), there are three patterns established in the literature:

- Target shareholders earn significantly positive abnormal returns from all acquisitions;
- Acquiring shareholders earn little or no abnormal returns from tender offers;
- Acquiring shareholders earn negative abnormal returns from mergers.

[11] Meet the Premium

Nevertheless, the authors conclude that the target shareholders that hold on to the acquirers' stock received as payment find their gains diluted over time. As already was mentioned, there is a relationship between post-acquisition returns of acquirer's stock and the mode of acquisition, as well as the form of payment (Loughran&Vijh, 1997):

- On average, the acquirers earn less excess returns from mergers than from tender offers;
- On average, stock acquirers earn less excess returns than cash acquirers;
- On average, stock mergers earns significantly negative returns;
- On average, Cash tender offers earn significantly positive returns.

Although Sirower&Sahni (2006) show results that meet the patterns mentioned above, it states that the stock market reacts negatively to a M&A announcement, which reflects the investors' skepticism about the ability of the acquirer to maintain the original values of both firms and also the achievement of synergies justifying the premium paid.

To mitigate part of the skepticism, Sirower&Sahni (2006), created a simple measure to assess synergy risk very similar to the VAR concept, where with one number it is possible to show how much of the acquiring company's value is at risk if no post-acquisition synergies are realized.

$$SVAR = \frac{Target's\ Premium\ Paid}{Acquiring's\ Market\ Value}$$

M&A clearly pays for the shareholder target and the combined shareholders' generates positive abnormal returns, meaning that there is a value creation in the economy (Bruner, 2004). However, it is important to highlight not only the importance of valuation knowledge, but also the firms' strategy and post-merger management ability.

7.3. Methods of Payment: How to choose?

It is possible to finance an M&A through cash, stock, a mix of cash and stock, or through an "earn out" contract[12] (Zenner et al., 2008). However, literature shows that the terms of the transaction, such as form of payment, have a significant influence on M&A profitability for the buyer (Bruner, 2004).

[12] An agreement that commits the acquirer of paying higher payments with the target performs better in the future.

According to Travlos (1984), there are three main arguments that explain why each method of payment reflects in different valuation effects on the bidding firm's common stock prices.

The first argument is based on a world of asymmetric information[13]; the method of payment may signal information to the market, assuming that if the acquirer firm possesses information about the intrinsic value of their firm, which is not reflected in the pre-acquisition stock price, they will try to finance the acquisition in the best suitable way for shareholders. Following Myers &Majluf (1984), managers will prefer a cash offer if they believe they are undervalued, while a common stock exchange offer will be preferred if they believe they are overvalued. Therefore, based on the extant literature the returns to the acquirer firm will be always higher in cash offers than in common stock exchange offers.[14]

The second argument is based on the fact that cash and stock offers have different tax implications. Due to this difference the acquirer firm must pay a higher value in case of a cash offer than in case of a stock offer, in part due to the additional tax. Since cash offers generate tax obligations for the target firms' stockholders but allow the acquiring firm to raise the depreciation basis of acquired assets to their market value, common stock offers are, in general, tax-free acquisitions, so that any capital gains realized by the target firms' stockholder are deferred until the stock is sold, but the depreciation basis of the acquired assets remains the same (Travlos, 1987).

The last argument is related to the debt capacity, as mentioned earlier the combined firms can have less variable cash flows, reducing default risk, increasing the debt capacity. The benefit from increasing debt capacity accrues to the merging firms' bondholders at the stockholders' expense. Thus, a common stock exchange offer leads to a wealth transfer from stockholders to bondholders, implying a fall in the stock price.

8. Cross-Border Trends

Cross-border has expanded as developed-market firms searched for growth opportunities in emerging markets and it is considered a common form of investment, in the last decades. However, in the last few years, the reverse situation appears to be the new catalyst to new cross-borders investments - developing-market firms started looking for new markets overseas. This new paradigm is hand in hand with financial crises that reduced domestic competition in

[13] Assumes that one partner has access to private information that is not known by the other partner.
[14] Loughran&Vijh (1997); Bruner (2004); Zenner et al. (2008); Travlos (1987)

developed-market firms and weakened the developed countries currencies, especially U.S. dollar.

Zenner, M. et al., (2008) considered some factors responsible for cross-borders M&A's growth, divided into long-term and short-term drivers. In the long-term drivers, there are three main factors: **globalization -** the soaring necessity to meet growth expectations took firms to seek for new markets in foreign countries; **diversification–** for developed-market firms a way of conquer new markets, for developing-market firms a way to reduce the exposure to sovereign risk; **deregulation** – the elimination of some nationalistic and protectionist forces in many countries allowed the entering of foreign countries into domestic markets (for example: creation of European Union). In the short-term drivers, there are four factors: **high relative equity valuations** – companies tend to be acquirers when their stock prices are high, meaning prospects of growth and profits. In the last few years, developing-market firms are benefiting from higher equity evaluations comparing with developed-market firms; **major currency shifts –** emerging-market currencies have appreciated in relation to developed-markets currencies, which turned developed-market firms more appealing and accessible; **sovereign wealth funds –** the main objective of those funds is to generate a future income and not to be exposed to the sovereign risk of its own country, so that the income is invested into long-term investments, such as acquisitions of illiquid foreign assets; **reduced competition** – due to the reduced liquidity in the debt markets, mainly in developed–markets, this made the public firms reluctant on investing in a long-term where future is so uncertain; for private firms this scenario is even more drastic, since private firms are very dependent on leverage markets. On the other hand, developing-market firms have access to more liquidity and leveraged markets, which increased their acquisition power.

Between the years 2003 – 2006, cross-border acquisitions accounted for less than 30% of all total acquisitions and in 2007 that percentage rose to 40%. Also, for a period between 2001 – 2007, acquirers from developing-market firms[15] increased by 1.4% and acquirers from the U.S. decreased by 2.1% (Zenner, M. et al., 2008).

9. Industry Overview

This section is divided in four parts. The first part features a Food & Beverage Industry analysis, focused especially on the Food Packaged Industry, where the Confectionery Industry belongs; the second part shows a Kraft Foods' and Cadbury's cash flow analysis; the third part is focused on the strategies behind Cadbury's acquisition and, at last, the fourth part portraits the M&A activity on Food & Beverage Industry in the last few years.

[15]Brazil, Russia, India, China and Mexico

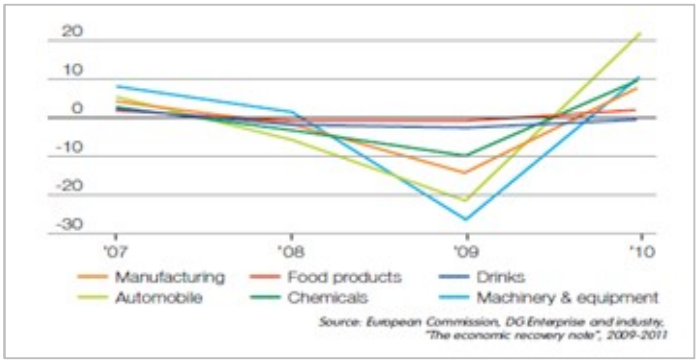
9.1. Food & Beverage Industry

Food & Beverage (F&B) Industry involves the food industry from farming, food production, packaging and distribution, retail and catering; and beverage industry which is composed by soft drinks (non-alcoholic), beers, spirits and wines (alcoholic). Thereby, the food's value chain is possible to divide into three categories[16]:

- **Farming:** production and collection of raw agricultural commodities such as rice, wheat and corn;
- **Processing:** transformation of raw food commodities into forms that can be easily distributed and sold to consumers;
- **Distribution:** finished or near-finished food products are delivered to consumers.

As a non-cyclical industry, the Food & Beverage Industry presents certain stability during economic downturns, due to the fact that food products are essential to life and health of the consumers. Looking at Figure 1 despite the decline in consuming spending, the Food & Beverage Industry behaves almost uniquely in the economy, which gives this industry a resilient character. In Europe, while the manufacturing industry decreased by -7.9% between the first quarter of 2008 and the third quarter of 2011, food companies registered a growth of 1.3% during the same period.

Figure 1 - Food & Beverage Industry Performance 2007-2010



Looking at S&P 500 and GTCF Food & Beverage Index[17] (Figure 2) this last one always beats the market, even in bear moments as the downturn in 2008. Once again, the resilient character persists.

[16] IMAP's Food & Beverage Industry Global Report 2010
[17] Reflects data from food and beverage industry participants that are broadly categorized as food processors, food distributors, food retailers and beverage companies

Figure 2 - GTCF Index Vs S&P 500 (2006-2011)

9.2. Market Growth Trends

Historically, F&B Industry presents a consistent growth wherein 2001-2011 had a CAGR of 5.2%[18]. In 2008, global F&B Industry registered revenues of $5.7 trillion and it is expected[19] to grow at a CAGR (2008-2014) of 3.5% with estimated revenues of more than $7 trillion by 2014. According to Goldman Sachs, long-term F&B industry estimates are possible, since it is closely tied to income growth. Hereafter, estimates [20] point for a CAGR (2011-2020) of 6.6% driven by a geography mix due to emerging markets exponential growth. Also, it is expected[4] that North America market continues to grow at 3%, Western Europe market at 2%, emerging markets at 10.8%, especially China (14.4%) and India (21%), Eastern Europe market at 9%, LatAm market at 9.3% and Middle East and Africa markets at 10.4%.

Food industry is responsible for 56% of F&B industry total revenues. In 2008 is expected to generate earnings of $3.2 trillion at a CAGR (2008-2013) of 4.6% and revenues are expected to increase to $4 trillion by 2013.[21]

Packaged Food Industry has grew at a CAGR (2001-2008) of 3.1%[22] and is expected to grow at a CAGR (2010-2015) of 2.8% [23], valuing over $1.8 trillion in 2008.

Confectionery industry is the fourth largest segment in Package Food with retail sales over $150 billion, in 2008. Confectionery market is growing steadily at 5% CAGR (2003-2008), where 60% of total sales by value are coming from developed markets that are growing at 3% CAGR (2003-2008), while emerging markets are growing at a 10% CAGR (2003-2008).

[18] Goldman Sachs Investment research, October 23, 2012
[19] IMAP's Food & Beverage Industry Global Report 2010
[20] Goldman Sachs Investment research, October 23, 2012
[21] IMAP's Food & Beverage Industry Global Report 2010
[22] Euromonitor International
[23] Rexam – consumer packaging report 2011/2012

9.3. Market Drivers

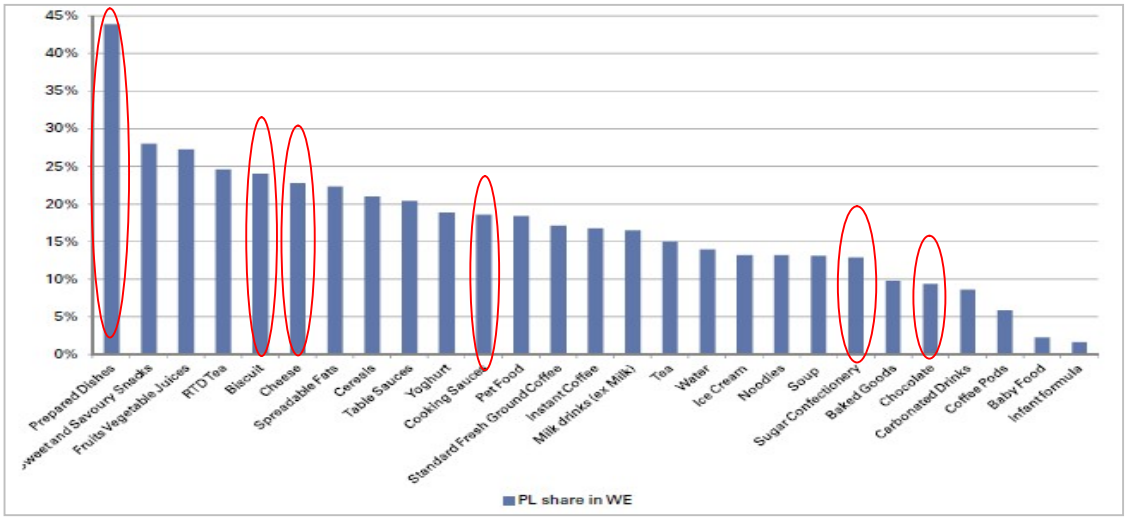
Food industry is highly competitive; players not only compete on price, but also in quality, innovation, brand recognition and loyalty, where the top-10 firms have a market share of 15% of total sales. Costumers have a lot of bargaining power, due to the quantity of products and substitutes in the market, whereas firms must reduce prices to maintain its market share and to answer to competitors and, at the same time, costumer's preferences.

Food industry is highly correlated with **population growth** and with **consumer spending**. Developed countries are expected to stay stagnant, with North America's population expecting to grow by 0.8% and Western Europe by 0.3%[24] in the next years, while developing countries are expected to grow. By 2050, global population is projected to be 9 billion[25], with developing countries accounting for 85% of participation. To feed the additional 2 billion people it is necessary that global food production increases by 70%. Also, in developed countries **consumer preferences are expected to shift** toward high quality and nutritional products, due to a more health consciousness. Moreover, due to the **declining in consumer spending** in developed countries pre-packed and home-cook foods products are going to be more appealing. This shifting in consumer preferences allows firms penetration into new niches as diet food, where in Europe is expected to grow at a CAGR of 3.4% (2008-2014) and in US of 4.1%, organic food and frozen food, with an expected CAGR of 3.1% by 2013. On the other hand, developing countries are facing a rising in income levels, which allows the population to acquire more and better product. For firms in food industry this represents an opportunity to gain market share and increase profits by flooding emerging markets with different products. It is forecasted that over the next decade the middle class consumers will double, with over 80% of the increase coming from emerging markets. [26]

In developed countries due to the declining in consumer spending, most of the retailers started internally manufacturing products marked as their house brands, which are less expensive. Initially considered low-quality products, **private label** products improved their quality driving a shift in consumer decision-making, competing against large multinational brands. The graphic shows private label share market in Western Europe in many food categories.

[24] Goldman Sachs Investment research , October 23, 2012
[25] IMAP's Food & Beverage Industry Global Report 2010
[26] Goldman Sachs Investment research, January 25, 2012

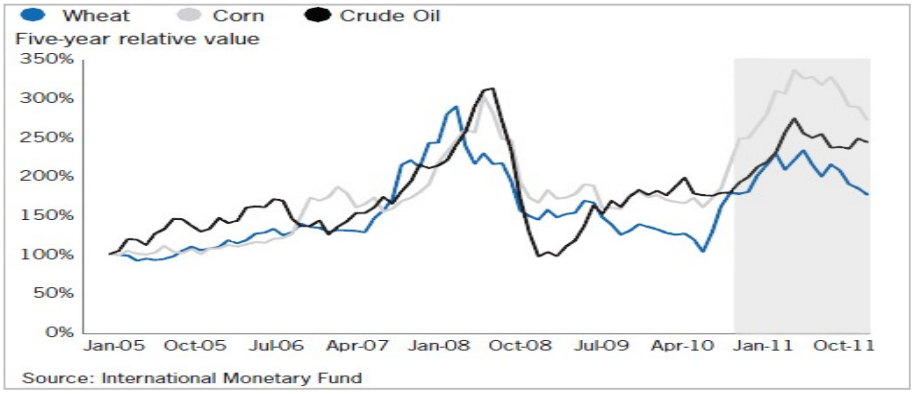
Figure 3 - Private Label in Western Europe



As it is possible to observe, in Western Europe, the Private Label share in Prepared Dishes is almost 45%. In Biscuit and Cheese is around 25%. Less than 20% are Cooking Sauces and Sugar confectionery. The least affected seem to be the chocolate confectionery with only less than 10% of Private Label.

However, this industry is **highly vulnerable to commodities prices**[27], as raw materials affect the firm's stable profit growth.

Figure 4 - Commodities' Performance 2005-2011



Commodities prices are extremely volatile due to global competition for resources, currency fluctuation, weather conditions and consumer demand. Political concerns can also influence commodities prices, such as sovereign risk and agriculture programs. In the middle of 2008, prices rose drastically due to severe weather conditions, a strong supply necessity and a weaker demand (especially from emerging markets). Since 2006, commodities prices are climbing, increasing the raw materials' input costs of food industry's firms. Also, higher oil prices

[27] Dairy, coffee, cocoa, wheat, corn products, soybean, vegetable oils, nuts, meat products and sugar.

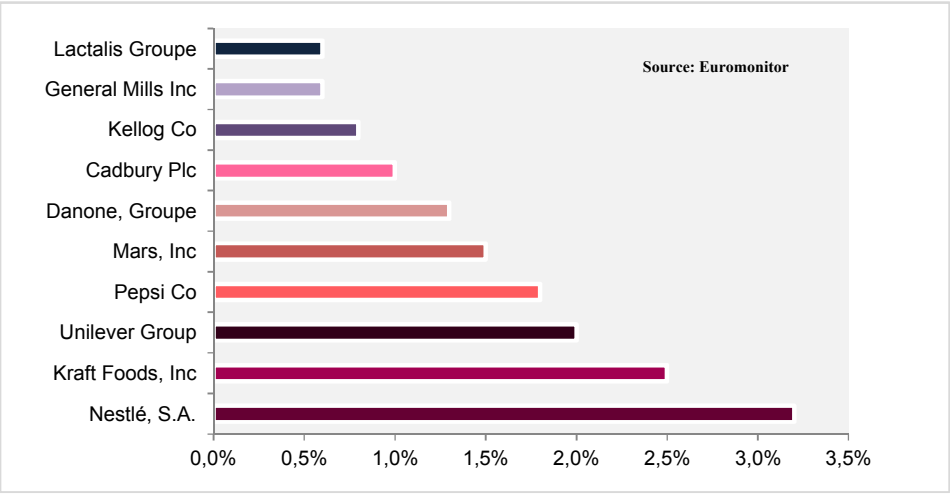
increase the transportation costs making the distribution and supply of food products more expensive than usual. These results in a decrease of profit margin for F&B industry firms, since firms are forced to reduce prices and at the same time face higher input, distribution and supply costs. Also, F&B industry firms are not only susceptible to commodities prices but also to plastic, glass and cardboard prices.

At last, innovation is the key factor for success in the Food & Beverage Industry, as a way of conquering higher market share and profits maximization. To be able to do that, firms must answer to consumer's preferences - that are dictated by demands shifts affected by economic changes in consumers' lifestyle - by investing in Research & Development, Marketing and Distribution channels.

9.4. Food & Beverage Market Share

Food & Beverage is a very competitive industry where the top ten packaged food firms only account for 15% of market share of total revenues, where each firm contributes fewer than 3.3%. In 2009, Nestlé, S.A. headed the F&B Industry with a market share of 3.2 %, followed by Kraft Foods Inc, the world's second largest firm with 2.5%. Cadbury had a small market share of 1%.

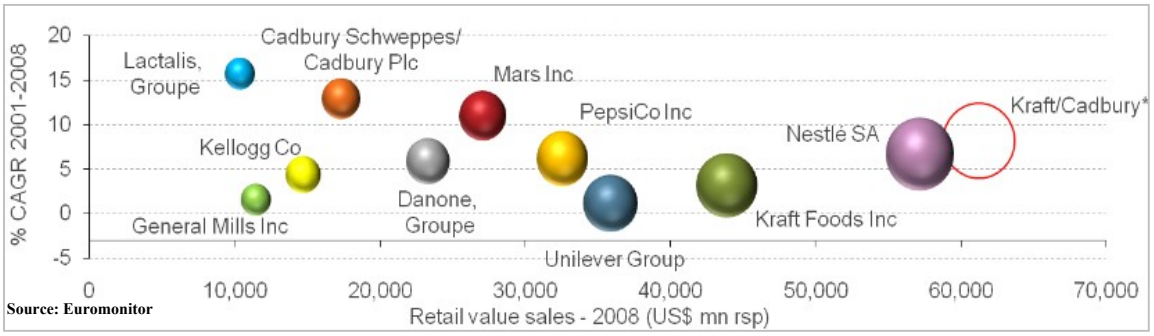
Figure 5 - Top 10 F&B Industry Market Share 2008 %



Cadbury's acquisition by Kraft Foods (Figure 6) will change the overall package food firm competitive landscape. Kraft Foods Inc will take the leading position with a market share of 3.5% of total revenues and the gap between competitors will be more widespread. However, to maintain the leading position, Kraft must increase its growth to distance itself from Nestlé, since Kraft will absorb Cadbury's growth. Firms with lower market share, such as Lactalis Groupe

and Mars will probably conquer better market share, since they have a higher growth performance, due to aggressive acquisition strategies.

Figure 6 - Kraft Foods and Cadbury's Market Share 2001-2008

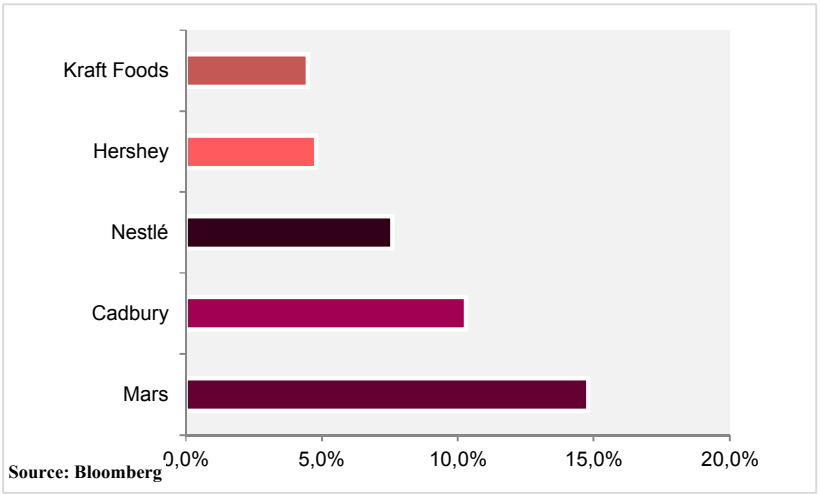


Source: Euromonitor

9.5. Confectionery Industry Market Share

Confectionery Industry is very fragmented (Figure 7), in which the top 5 confectionery industry firms have a market share of 42%, in 2009. The largest confectionery firm is Mars-Wrigley with a market share of 14.8% and the second largest is Cadbury with a market share of 10.3%. After Cadbury's acquisition, Kraft Foods will dispute the leadership position with Mars-Wrigley.

Figure 7 - Market Share 2009



Source: Bloomberg

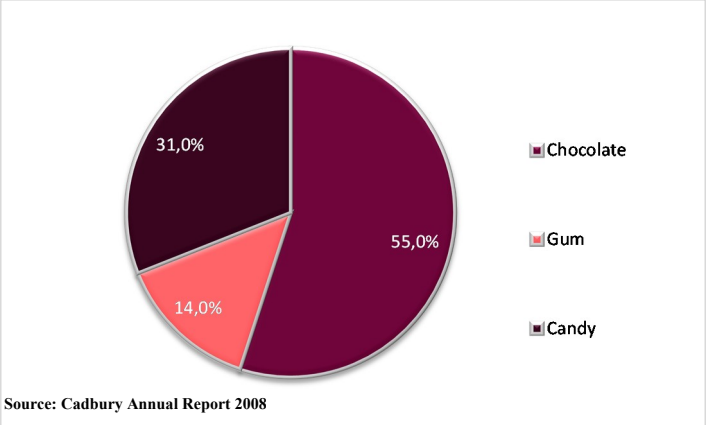
9.6. Confectionery Market Share by Consumer Segment

Cadbury is the fourth largest chocolate confectionery firm in the world with a market share of 7.5%. Kraft Foods appears in third place with a market share of 8.3%, in 2008. (Appendix 1)

In Gum confectionery, Cadbury appears as the second largest firm with a market share of 28.9%. Mars-Wrigley is leading this segment with a market share of 34.9%. In Candy confectionery, Cadbury is leading the market with a market share of 7.2%. Mars-Wrigley appears in third with a market share of 4.9%. (Appendix 2; Appendix 3; Appendix 4)

Confectionery market is quite fragmented where the top 5 confectionery firms have 42% of total market share.

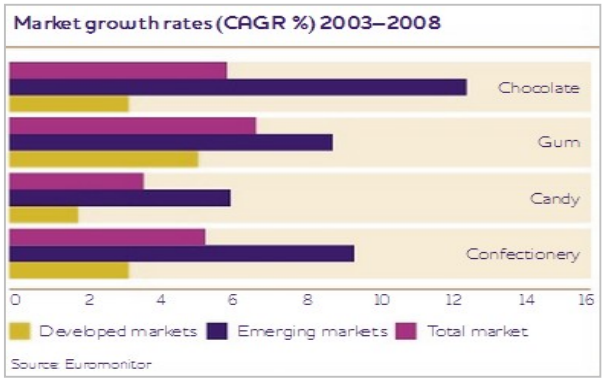
Figure 8- Global Confectionery Market



Source: Cadbury Annual Report 2008

As it is possible to observe (Figure 8 and 9), chocolate represents the biggest segment with 55% share in retail sales and has been growing at 6% CAGR (2003-2008) whereas the top 5 firms account with 50% of global confectionery sales, followed by Candy which is considered the most fragmented segment with 31% of total confectionery sales and growing at a CAGR (2003-2008) of 4%. The top 5 players only account with 25% of global confectionery sales in candy. Gum is the faster and most consolidated segment growing at 7% CAGR (2003-2008), accounting for 14% of total market share, where the two stronger players (Cadbury and Wringley) account with 60% of the global market. In emerging markets the growth rates are higher with chocolate growing at a CAGR (2003-2008) of more than 12%, gum at 9% and candy at 6%. The overall confectionery market is increasing at 5%.

Figure 9 - Market Growth Rate (2003-2008)



9.7. Food & Beverage Industry Costs

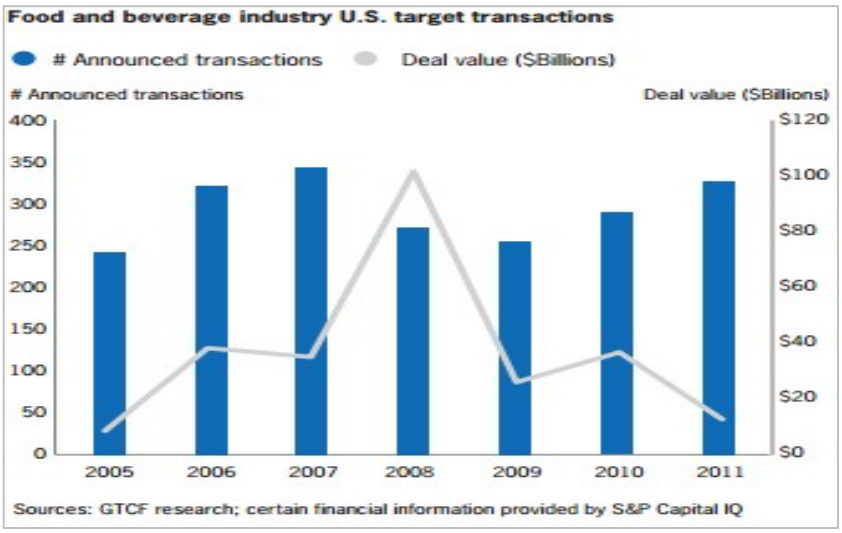
The main costs that affect this industry are related to energy (natural gas), raw materials (commodities price), manufacturing costs (especially labor), transportation (oil prices) and a complex and growing customer demand based on brand loyalty and quality product expectations that need constant improvement in the value chain, especially in innovation, marketing and distribution channels.

9.8. Food & Beverage Industry M&A Activity

In 2009, M&A activity in Food & Beverage industry suffered a decline due to the economy downturn. Comparing with the previous year, the industry saw a decrease in 73.1% in transaction value and also a 37% decline in the number of transactions[28] . In 2011 was registered a weight improve of 13% in the number of transactions comparing with 2010; however the aggregate value appears to decline. In the U.S. it is possible to analyse that scenario, as the country where most deals were made each year; it is possible to observe a retraction not only in the number of transactions occurred, but also in the value of those transactions since 2005. In the period of 2008-2009 it is noticeable the decline in the value of transactions, as well as in the number of transactions. By 2010 and 2011, the number of transactions increased, however the value stayed as low as in 2007. The period of 2008-2011 was less competitive in terms of acquisitions, due to the lack of liquidity in the economy, where only private equity groups with strong balance sheets and financial slack had the opportunity to take advantage of undervalued firms to strengthen their competitive positions, as well as improving their value chain with vertical acquisitions.

[28] IMAP –Food and Beverage Industry Global Report - 2010

Figure 10 - F&B Industry M&A Transactions 2005-2011



10. About Kraft Foods, Inc

10.1. General

Kraft Foods is an American public firm, listed on NASDQ (NASDAQ: KTF), operating on the Food & Beverage Industry. In 2009, Kraft Foods was the world's second largest food products manufacturer and packager firm with operations in more than 70 countries, 97.000 employees worldwide and selling for almost 160 countries. Its products are dispersed into five consumer sectors:

- **Snacks**: primarily biscuits, salted snacks and chocolate confectionery;
- **Beverages**: primarily coffee, packaged juice drinks and powdered beverages;
- **Cheese**: primarily natural, processed and cream cheese;
- **Grocery**: primarily spoonable and pourable dressings, condiments and desserts;
- **Convenient Meals**: primarily processed meals, frozen pizza, packaged dinners and lunch combinations.

Kraft Foods is geographically segmented in North America, Canada, Europe and Developing Countries, such as Brazil, Russia, China and other regions of Southeast Asia. Kraft Foods started focusing on emerging markets as a strategy to grow its operations, market share and profitability, since emerging markets face growing population and rising income levels followed by a shift in demand for more expensive products.

In 2009, Kraft Foods presented Net Revenues of $ 40.39 billion, 3.6% less than the previous year, an Operating Income of $5.52 billion, 43.7% more than in 2008 and Net Earnings of $3.03 billion, 4.7% more compared with the previous year.

10.2. History

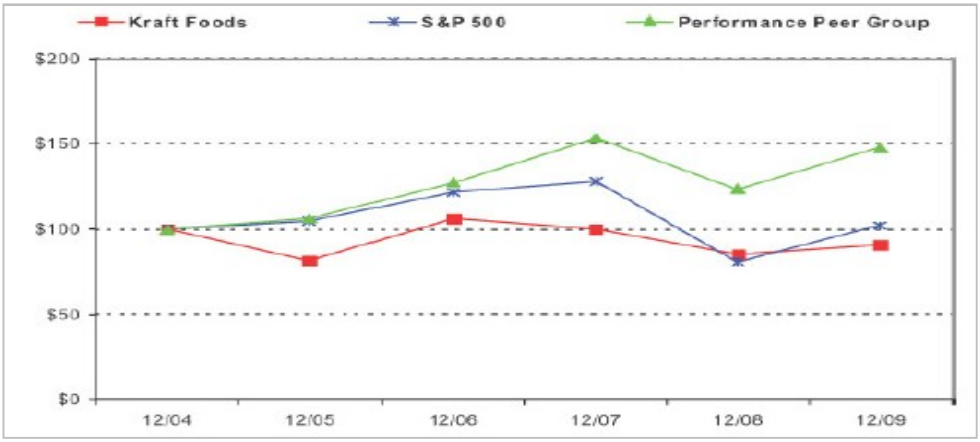
Although Kraft Foods, Inc was rebranded in 1995, its foundations go back more than a century of history. Kraft Food, Inc was born from the merger of three completely different firms: Kraft, General Foods and Oscar Mayer. Kraft started in 1903 and was in the cheese business. General Foods, started in 1895 under the name of PostCereal Company in the cereals business, responsible for one of the first ready-to-eat cold cereals, as well as corn flakes products. In 1981, with the intention of entering in a new completely different product category General Foods acquired Oscar Mayer & Co, founded in 1883 and a leader in the processed meats. Later, General Foods were acquired by Philip Morris Company, Inc that previously had acquired Kraft, Inc as a subsidiary too. In 1989, the two subsidiaries, General Foods and Kraft, were combined and formed a wholly owned subsidiary Kraft General Foods and, in 1995, was rebranded to Kraft Foods, Inc. In 2001, Philip Morris Company, Inc did a initial public offer to Kraft Foods, Inc. In 2007, Altria Group, Inc (new Philip Morris Company, Inc name) completed the separation by spinning off its remaining interest in Kraft Foods, Inc..

Due to Cadbury's integration Kraft Foods suffered a transformation in terms of geographic market coverage, so in October of 2012, Kraft Foods Inc was split into Kraft Foods Group, responsible for North America Grocery Business, and Mondelez International, Inc, responsible for global business in emerging markets.

10.3. Performance

This performance comparison of 5 years shows that Kraft Foods seems to be underperforming comparing with S&P 500 and a peer group. The peer group has a great performance beating the market after 2004. The peer group is composed by Cadbury plc, Campbell Soup Company, The Clorox Company, The Coca-Cola Company, Colgate-Palmolive Company, ConAgra Foods, Diageo plc, General Mills, Inc, Danone, H.J. Heinz Company, Hershey Foods Corporation, Kellogg Company, Nestlé S.A., PepsiCo Inc, The Procter & Gamble Company, Sara Lee Corporation and Unilever N.V. and reflects all Kraft Foods consumer sectors.

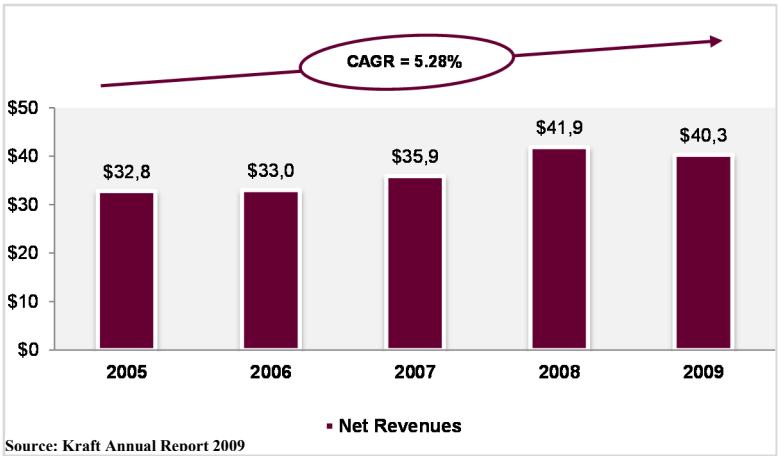
Figure 11 - Kraft Foods Performance 2004-2009



10.4. Net Revenues

With a market share of 2.5% of total revenues in Food & Beverage Industry, in 2009, Kraft Foods had net revenues of $40. 38 billion, less 3.7% compared with the $ 41.93 billion had in 2008, and a CAGR (2005-2009) of 5.28 %. The decrease in net revenues is explained by volume decline in almost every segment, expect U.S. Beverage and U.S. Convenient Meals, influence by the discontinuation of less profitable product line, as a strategy of walking away from unprofitable volumes. Unfavorable foreign currency also decreases net revenues by $1.897 million, due to the strength of the U.S. dollar against foreign currencies[29]. The decline is also explained by the weakening consumption trends, mainly in developed countries.

Figure 12 - Kraft Foods Net Revenues



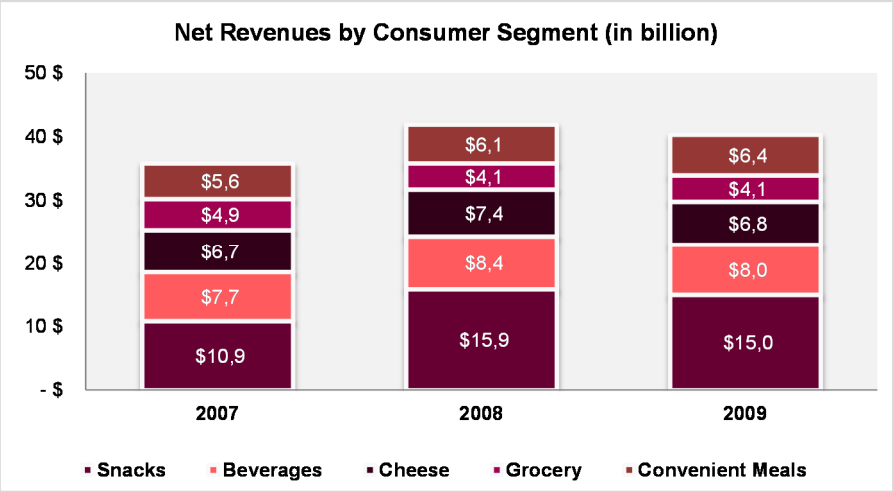
Source: Kraft Annual Report 2009

[29] Euro, Russian Ruble, Canadian dollar, Ukrainian hryvnia, British pound, Brazilian and Polish zloty.

10.5. Net Revenues by Consumer Segment

In consumer segment Snacks is the largest segment in 2007-2009 period. In 2009, Snacks weighted about 37% of total net revenues, followed by beverages with 20%. The smaller segment in the period is Grocery weighting 10% of total net revenue.

Figure 13 - Net Revenues by Consumer Segment



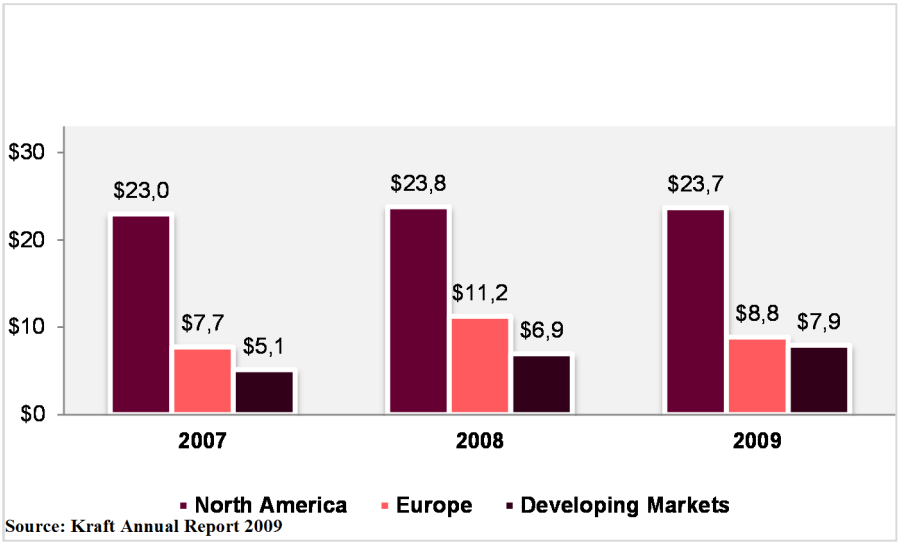
Source: Kraft Annual Report 2009

Excepting Grocery, from 2007 to 2008, all sectors have grown, especially Snacks with a growth rate of 44.5%, followed by Cheese with 11.3%. Grocery decreased by 16.1% in the same period. From 2008-2009, excepting Convenience Meals, every sector had decreased, such as Cheese by 8.6% and Snacks by 5%. Convenient Meals increased by 5.6%. The CAGR (2007-2009) for all sectors are 11.2%, 1.2%, 0.6%, -6.2% and 5.2%, respectively.

10.6. Net Revenues by Geographic Segment

North America is the largest market of Kraft Foods, responsible for 58.6% of total net revenues, in 2009, followed by Europe (21.7%) and Emerging Markets (19.7%). Despite the fact that U.S. market is the most important one is, at the same time, the one with smaller growth. CAGR (2007-2009) are 1.4%, 6.9% and 24.1%, respectively. It is possible to analyse the importance of U.S. as a stable and mature market; however developing markets are the key factor to net revenues' increment.

Figure 14 - Net Revenues by Geographic Segment

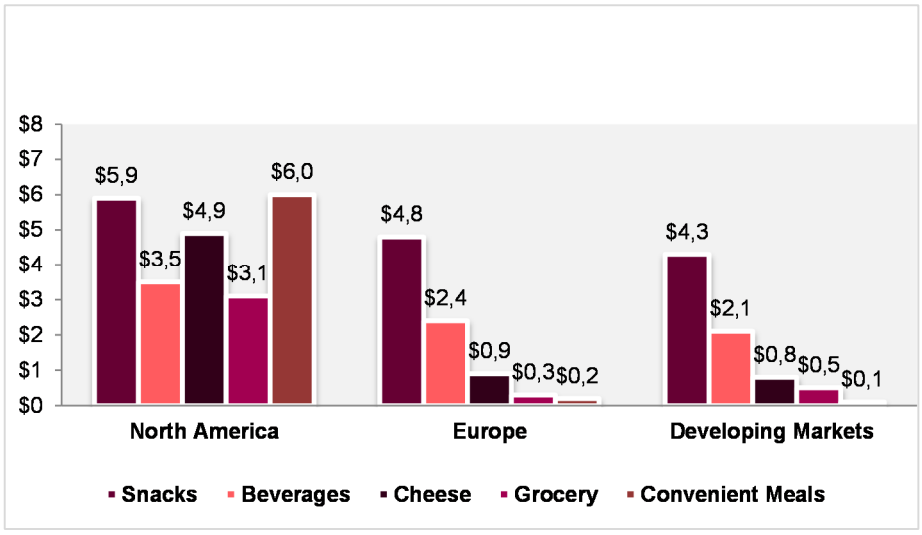


Source: Kraft Annual Report 2009

10.7. Net Revenues by Consumer & Geographic Segment

In North America the largest consumer segment are Snacks, Cheese and Conveninet Meals. In Europe and Developing Markets consumer segments in total net revenues are very similar. It is notable that the largest consumer segments are Snacks, Beverages and Cheese where Convenient Meals appears as the smaller consumer segment.

Figure 15 - Net Revenues by Consumer and Geographic Segment

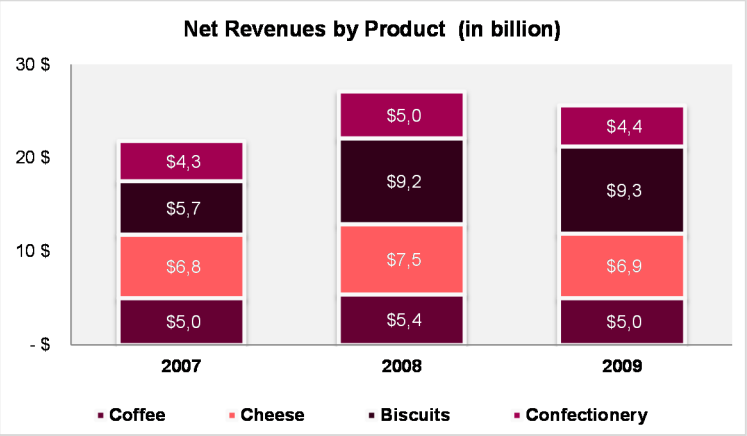


Source: Kraft Annual Report

10.8. Products

These products are the ones that who's sales represent 10% or more of total net revenues. The products that most contributes for revenues' growth are biscuits with a CAGR (2007-2009) of 27.7%, followed by confectionery and cheese with 1.2% and 0.7%, respectively.

Figure 16 - Net Revenues by Product

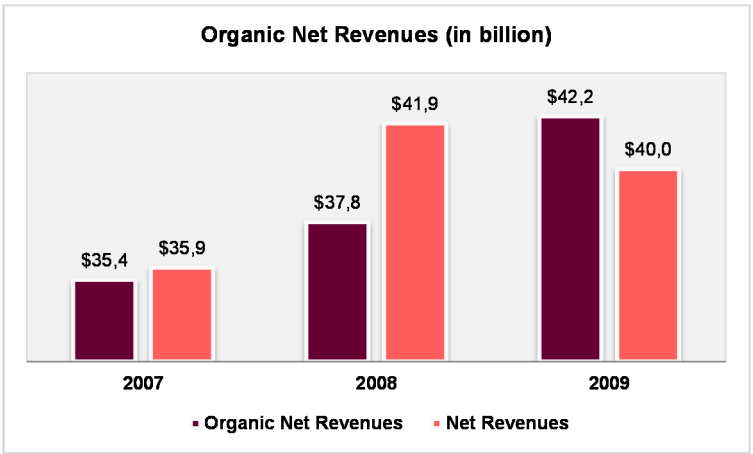


Source: Kraft Annual Report 2009

10.9. Organic Net Revenues

Net revenues include the impact of acquisitions, divestitures and foreign currency fluctuations, what camouflages the real value created by the ongoing activities. To better understand and evaluate the firm's real performance, as well as to make operational and strategic decisions, organic net revenues better reflect business' performance. Despite the decrease in net revenues, in 2009, organic net revenues present a continuous growth with a CAGR (2007-2009) of 9.1%. Organic Net Revenues exceeded Net Revenues, in 2009, due to high costs with unfavorable foreign currency.

Figure 17 - Organic Net Revenues

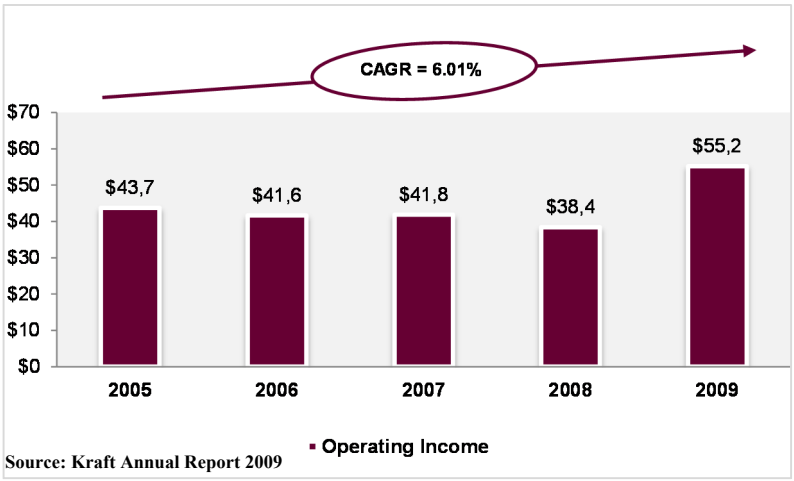


Source: Kraft Annual Report 2009

10.10. Operating Income

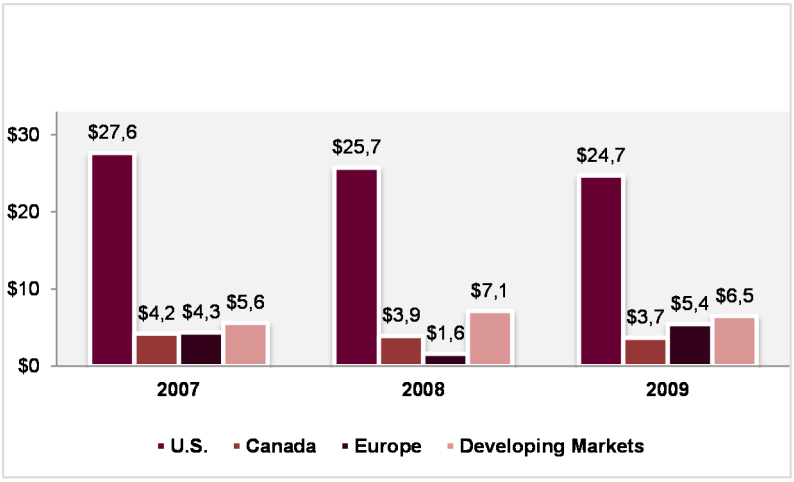
Kraft Foods presents in 2009 an operating income (Figure 18) of $5.5 billion, more 43.7% than 2008. This largely improvement is due to cost of sales and exit costs reduction following the Restructuring Program started in 2008. In geographic segment, (Figure 19) North America has the major stake of operating income in 2007-2009. In 2009, North America operating income has a weight 66.1% in total operating with a CAGR (2007-2009) of 10.8%. Europe and Developing Markets has CAGR of 31% and 26.1%, respectively. In consumer segment (Figure 20), the sectors that most contribute for operating income in US Kraft Foods were Convenient Meals, Grocery and Snacks, with a CAGR of 26.3%, 17.1% and 21.4%, respectively.

Figure 18 - Operating Income



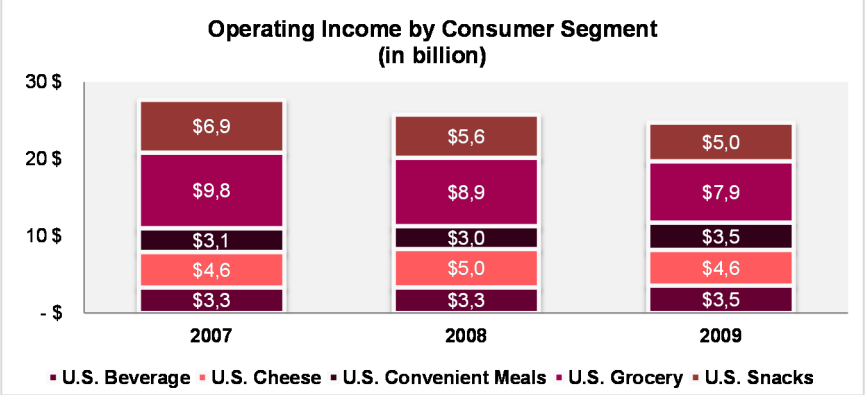
Source: Kraft Annual Report 2009

Figure 19 - Operating Income by Geographic Segment



Source: Kraft Annual Report 2009

Figure 20 - Operating Income by Consumer Segment

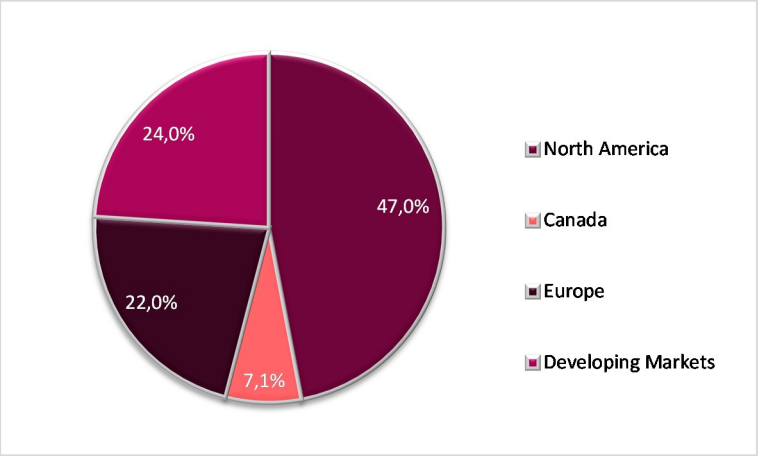


Source: Kraft Annual Report 2009

10.11. Capital Expenditures (CAPEX)

Funded with cash provided by operating activities, CAPEX was $1.3 billion in 2009, minus $0.1 billion over the previous year. With a CAGR of 3.2% , since 2005, CAPEX is mainly used in the modernization process of manufacturing facilities that Kraft Food holds around the world[30] , also is used to support new products and productivity initiatives. Observing CAPEX allocation by geographic segment in 2009, North America receives the largest share of CAPEX, almost 50% ($625 million) of total CAPEX, followed by Developing Markets using 24% ($319 million), Europe retaining 22% ($292 million) and at last Canada using only 7% ($94 million). In 2008, CAPEX was $1.37 billion, more 3% than 2009 and more 9.8% than 2007 ($1.24 billion).

Figure 21 - CAPEX by Geographic Segment



[30] In 2009, Kraft Foods, Inc had 159 manufacturing and processing facilities worldwide. In North America they had 54 facilitiesand the remaining was dispersed in 44 countries.

10.12. Operating Costs

Operating costs are composed by General& Administrative (G&A), Research & Development (R&D) and Marketing costs. Since 2007, G&A increases every year with a CAGR of 11% and is responsible for 77% of operating costs, in 2009. Marketing is the second highest cost with a CAGR of 6%, remaining stable at 18%, in 2007 and 2008, but increasing 1% in 2009. Also, R&D costs increased since 2007, remaining stable in the last two years at 6%, with a CAGR of 4%. (Appendix 5)

11. About Cadbury Plc

11.1. General

Cadbury is a British firm and the world's second largest confectionery firm after Mars – Wrigley (merged in 2008) by revenue. Operating in more than 60 countries with over 45.000 employees Cadbury is global in 20 of the worlds' top 50 confectionery markets.

Cadbury is divided into three consumer sectors and its largest brands are:

- Chocolate (brand: Dairy Milk);
- Gum (brand: Trident);
- Candy (brand: Halls).

Cadbury is dispersed in many countries especially in emerging markets, such as Argentina, Brazil, Egypt, India, Mexico, Russia, South Africa, Thailand, Turkey and Venezuela, with a CAGR (2003-2005) of 12% and 11% overall market share.

In 2009, Cadbury presented revenues of £5.98 billion, 11% more than in the previous years and earnings of £510 million, 39% more than the previous year.

11.2. History

Cadbury was founded in 1824 by John Cadbury and started as a little shop where tea and cocoa were sold. In 1969, merged with Schweppes and become Cadbury Schweppes plc in two business streams: beverage and confectionery. In 2003, after acquiring U.S. Adams' chewing gum business, Cadbury Schweppes becomes in the world's biggest confectionery. However, in

2008, Cadbury Schweppes plc segregates its global confectionery operations (renamed Cadbury Plc) from its U.S. beverages operations, which was renamed Dr Pepper Snapple Group Inc. This segregation process started in 1999 by selling most of its beverage businesses and finished in 2009 with the sale of Dr Pepper Snapple Group Inc.. The goal of this procedure was to enable Cadbury to focus on its core business - confectionery business - to better deliver the shareholders' value, maintaining its leadership position, as well as leveraging its position to maximize returns and growth.

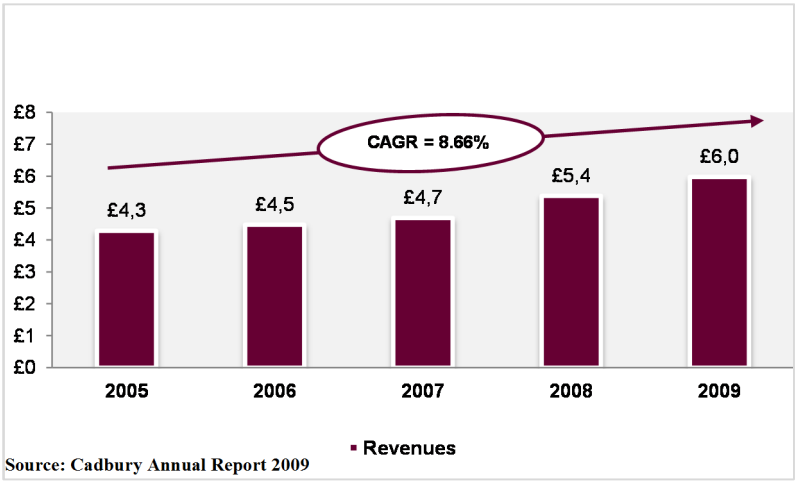
In 2010, Cadbury Plc was acquired by Kraft Foods by $18.9 billion (£11.5 billion) where it was incorporated into Kraft Foods' business operations. Listed into FTSE 100 index since 1984 (CBRY:LN) it was de-listed after the takeover.

All performance indicators presented in this thesis are only about Cadbury, Plc's business and the information displayed is limited to the years 2007 and 2008.

11.3. Revenues

In 2009, Cadbury had revenues of £5.98 billion, 11% more than in the previous years. Revenues have been growing steadily since 2005 with a CAGR (2005-2009) of 8.7%. This growth is due to the Vision into Action (VIA) program, introduced in 2007, that has as goal of an annual increase in organic revenues between 4%-6%. In 2008, the organic revenues growth on the chocolate segment was 6%, on Gum was 10% and on candy was 6%. On average, organic revenues grew about 7%, 1% more than predicted.

Figure 22 – Cadbury's Net Revenues



Source: Cadbury Annual Report 2009

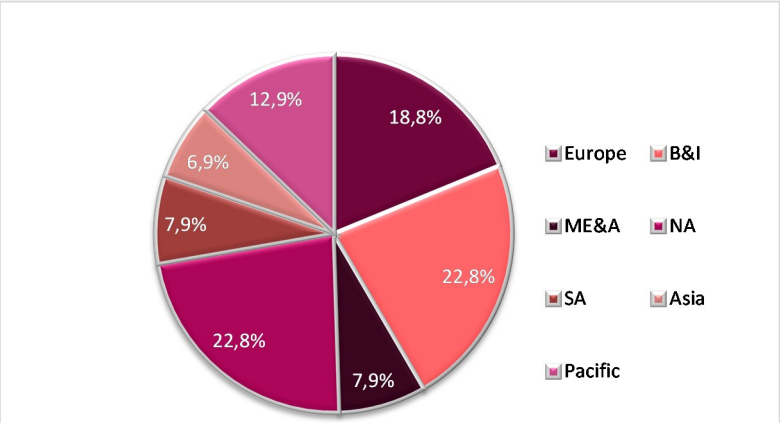
11.4. Revenues by Consumer Segment

By consumer segment chocolate sales correspond to 46% of total revenues, gum sales to 33% and Candy to 21%. (Appendix 6)

11.5. Revenues by Geographic Segmentation

Cadbury is present in more than 60 countries and has leadership positions in more than 20 of the world's top 50 confectionery markets. With a strong presence in emerging markets, such as India and Brazil, Cadbury accounts with a CAGR (2003-2008) of 12%.

Figure 23 – Net Revenues by Geographic Segmentation (%)



Source: Cadbury Annual Report 2009

Britain and Ireland (B&I) represent 23% (£1.366 m) of total revenues and is one of the biggest Cadbury's operations units. In Britain, chocolate business accounts to 30% of market share, not beating the 42% market share in Ireland. Also candy has good positions in both countries with a market share of 26% and 37%, respectively.

Middle East and Africa (M&A[31]) only represents 8% (£ 454 m) of total revenues, however with leading positions in the confectionery market. In South Africa, Cadbury has 27% of market share, followed by 38% in Egypt and Nigeria with more than 50% of market share. **BIMA** holds a CAGR (2006-2009) of 6.3%.

Europe represents one of the biggest slices of 19% (£1.117m) of total revenues with a CAGR (2006-2009) of 11.2%. Cadbury has a significant gum and candy market share in almost all

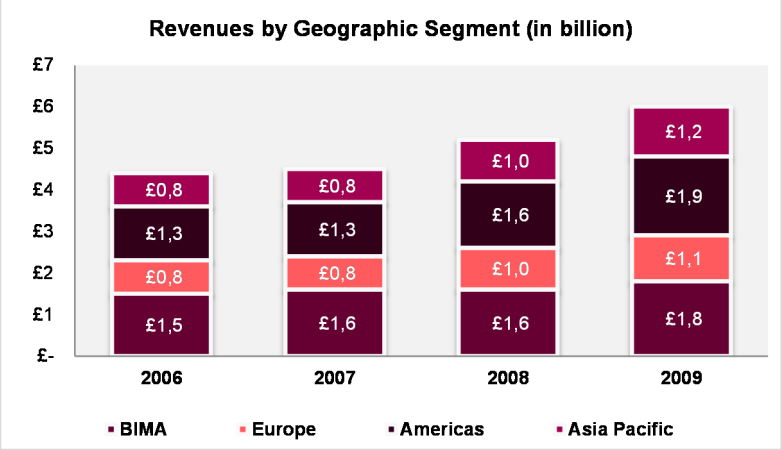
[31] Middle East and Africa

Western Europe, Scandinavia, Turkey and Russia. In Western Europe, France is the biggest market where candy and gum market shares account to 43% and 17%, respectively. Turkey is the second most important where both candy and gum market share accounts with more them 50% of market share. For chocolate, Poland represents the best market with 18% of market share.

To **North America** belong 23% (£ 1.364 m) of total revenues. Considered the world's largest confectionery market[32], Cadbury secured 14% of market share for chocolate, 34% of market share for gum and 55% of market share for candy. **South America** accounts for 8% (£ 462 m) of total revenue and a 20% market share. In Brazil, the seventh largest confectionery market in the world, Cadbury detains 75% of the market share in gum, against 55% in Argentina. Also, in Argentina candy holds a market share of 24%. **Americas** has a CAGR (2006-2009) of 13.5%.

Asia holds 7% (£ 425 m) of total revenue. India is the biggest operation that Cadbury has in Asia, followed by Thailand (59% market share in gum and 22% in candy). China is considered a strong potential market where Cadbury is seeking to grow. **Pacific** is responsible for 13% (£779 m) of total revenues. Australia is one of the most important markets with a market share of 30%, New Zealand is a small market where Cadbury is leader with 41% of market share, followed by Japan where candy accounts only with 5% of market share. Asia and Pacific are responsible for a CAGR (2006-2009) of 14.5%.

Figure 24 - Revenues by Geographic Segment (bn)



Source: Cadbury Annual Report 2009

[32] Cadbury Annual Report 2008

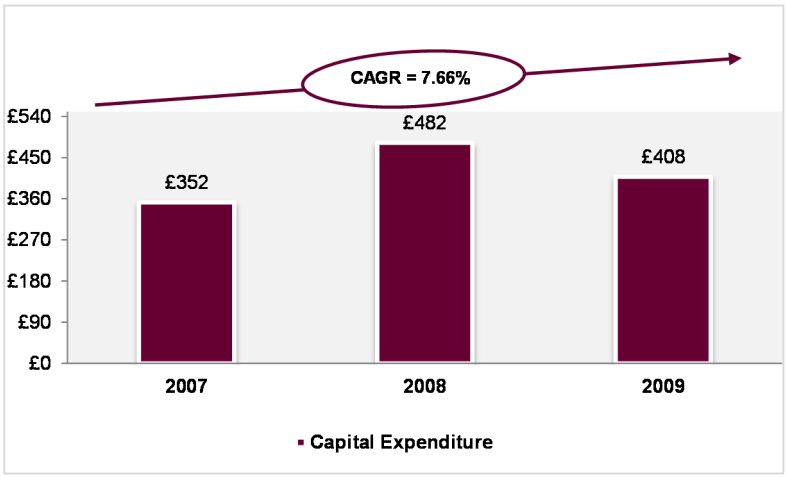
11.6. Operating Costs

The biggest slice of operating costs belongs to Cost of Sales - this involves ingredients, labor, utility and depreciation costs – with 60%, (£2.870 million) 12% more than in the previous year (£ 2.870 million), followed by Administration Expenses with 21% (£ 1.110million) 1% more than in 2008 (£ 1.098 million). Administration Expenses includes cost of information technology, back office functions and Research and Development (R&D) costs. In 2008, R&D costs were £69 million 16.9% more than in the previous year (£59 million). Marketing is responsible for 12% of operating costs with £629million 8% more than in the previous year (£ 584 million). Distribution costs are the smallest slice in operating costs only contributing with 5% (£ 262 million) 6% more than in 2008 (£ 247 million). (Appendix 7)

11.7. Capital Expenditure

Capital Expenditure in 2008 and in 2007 was used to invest in production capacity and in facilities, particularly in the UK chocolate production and in gum capacity in Europe. From 2007 to 2008, the use of Capital Expenditure increased by 36.9%, funded by internal earnings.

Figure 25 - CAPEX



Source: Cadbury Annual Report 2009

12. Emerging Markets

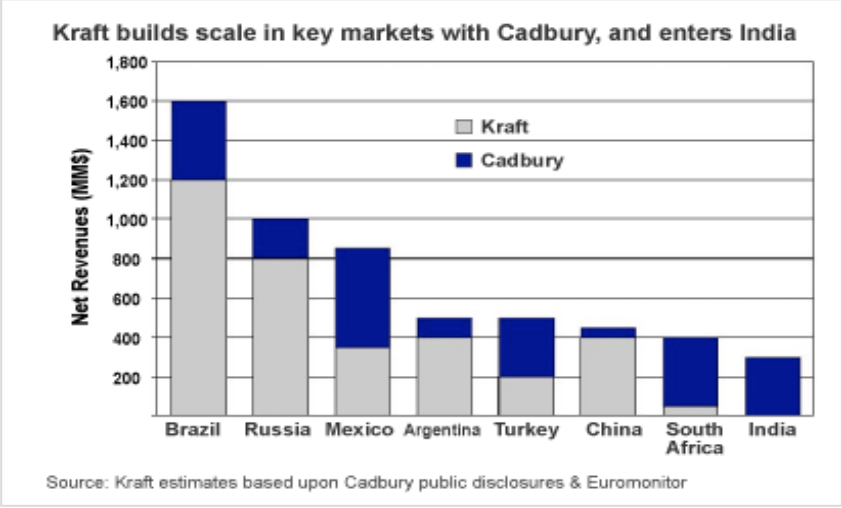
As it was previously analysed emerging markets have a weight of only 20% in Kraft's total revenues and its CAGR (2007-2009) is the highest of Kraft's geographic segmentation with 24.1%, where for Cadbury emerging markets provides 34% of total revenues. For Kraft Foods to increase its share market and also its profits maximization, it must leverage its position in emerging markets.

By acquiring Cadbury, Kraft Foods will be able to use Cadbury's brands and distribution networks across many emerging markets increasing not only Cadbury's market share but, at the same time, Kraft Foods' diverse portfolio brands; not only by penetrating into new markets but also in new consumer segments, such as powder concentrates soft drink.

Kraft Foods is already a global leader in powder concentrates soft drinks with its brand Tang. However, it is unable to penetrate in certain emerging markets, such as India, where Cadbury's brands are already well established, with five factories producing confectionery items. The figure shows an estimation done by Kraft Foods where is possible to observe the benefits of acquiring Cadbury by entering into new emerging markets, such as Mexico, Turkey, South Africa and India. For Cadbury, markets such as Brazil and China have been difficult to gain market share and visibility; with this acquisition Cadbury also will benefit by increasing its market share on those markets.

It seems that the access to emerging markets is the key factor for Kraft Foods interest in Cadbury, where levering Cadbury's name enables Kraft Foods to conquer new markets, strengthening in other markets where Kraft Foods is already established, while also enabling an increase in the market share of its own brands and maximizing profits.

Figure 26 - Market Access



13. Kraft Foods' Forecasted Cash Flow

Cash flows are going to be forecasted until 2015 and after that period the firm will grow at a rate of 2.5%. Inflation after 2015 is forecasted to be 2%[33] and U.S. real market growth is estimated to be 2.5%, according to the industry growth expectations, 2.5% seems to be more accurate.

[33] Congress Budget Office – The Bugdet and Economic Outlook: Fiscal Years 2012-2022

To perform Kraft Foods' valuation, it is necessary to compute the FCFF and for that it must be considered the EBIT[34], Depreciation, Capital Expenditure and Working Capital. The assumptions behind those drivers are going to be explained in their respective sections.

13.1. Revenues

In the Kraft Foods' annual report, it is possible to observe that the information presented is reported in five consumer segments: Snacks, Beverages, Cheese, Grocery and Convenient Meals. Each of these consumer segments not only has different growth rates, as it has different future growth trends. For that reason, revenues are going to be forecasted individually according to each consumer segment. Also, the annual report highlights the importance of the three main geographical markets: North America, Europe and Developing Markets. Each market consumer segment is expected to have different trends, as well as growth rates. In this way, revenues are going to be analysed by geographic market and by its consumer segments.

The most significant consumer segments are snacks and convenient meals. The other consumer segments are quite residual. Also, the lack of information about revenues' estimations makes assumptions difficult to analyse. While it is perceived by the report that Kraft Foods is more focused on increasing its market share in emerging markets, in some of these markets Kraft Foods has difficulties to enter, due to the lack of distribution channels. The assumptions will assume a conservative character based on economic perceptions and consumption information. (Appendix 8 and 9)

In an overall perspective, Kraft Foods' revenues are going to grow at a CAGR (2010-2015) of 2%, according with projections[35] of an economy recovery from global financial crisis and economy recession, an increasing in household income and a slow population growth in developed countries against developing countries, despite the increased competition with private labels. At least, the U.S. dollar is expected to depreciate over the next decade benefiting trade competition in exportations.

13.1.1. North America Market

The North American market is responsible for more than 50% of total revenues and is the most stable and mature market presenting a continued growth with a CAGR (2010-2015) of 1%.

[34] Earnings Before Interest and Taxes
[35] USDA Agricultural Projections to 2019

Although U.S. population is expected[36] to decrease by 0.24%, the median household income is forecasted to grow (2010-2015) 1.98% and it is assumed a slight recession recovery from 2010. Also, retail food prices, as U.S. economy recovers, are expected[37] to rise.

Convenient Meals is the consumer segment that presents the highest and continued growth with a CAGR of 2%, because this consumer segment usually tends to increase in economic recession periods, since is a more economical way of preparing meals. However, despite recession periods, the pace of life in most developed countries is speeding up and householders turn to Convenient Meals to save some time and effort. Snacks is the most mature consumer segment with a CAGR (2010-2015) of 1.6%, although suffering a downturn in 2009, since snacks are considered superfluous products, they are expected to register a continued increase allied to a slight economy recovery and an increase of a healthiest conscience that looks for healthy or low fat snacks. Following Snacks are Grocery, Beverages and Cheese with a CAGR (2010-2015) of 0.5%, 0.3% and -0.1%, respectively. Grocery and Cheese are segments that tend to increase with the increase of Convenient Meals and household income.

13.1.2. European Market

The European market is responsible for 20% of total revenues and despite being a conquered market it has the potential to gain more market share in total revenues. It is expected[38] that by 2015, the European population will decrease by 0.11% and the household income will increase by less than 1.9%[39].

In 2009, every consumer segment decreased in revenues and due to the persistence of economic recession, this scenario is forecasted also for 2010. In 2011, it is possible to observe a slight growth in all consumer segments what turns to be more significant from 2013 ahead assuming a slight economic recovery.

In the European Market the most significant consumer segments in terms of total revenues are Snacks and Beverages. Similar to the North American Market, and for the same reasons, Convenient Meals and Snacks are the fastest growing consumer segments both with a CAGR (2010-2015) of 2.6% .Grocery and Cheese also faced an increase associated with the Convenient Meals consume. European Market's total revenues will grow at a CAGR (2010-2015) of 1.4%, less than the realized period with a CAGR (2007-2009) of 11.9%.

[36] Esri forecasts for 2010 and 2015.
[37] USDA Agricultural Projections to 2019.
[38] OECD-FAO Agricultural Outlook 2006-2015
[39] USDA Agricultural Projections to 2019

13.1.3. Developing Markets

With the same weight in total revenues as the European Market, Developing Markets are the market with higher growth capacity with a CAGR (2010-2015) of 4.6%, representing Kraft Foods' solution to increase its market share in total revenues. Population growth in developing countries, in opposition to developed countries, is galloping. By 2050 is expected[40] that the global population increases from 6.8 billion (data from 2010) to 9 billion, where developing countries are accounted with 85% of it. Income level is expected[41] to grow 7% in developing countries, after the global economic recession, against 2% in developed countries. This rise in income level shifts the demand for different products, such as meat and dairy products. In this stage, developing markets are looking for products' diversification, instead of products' differentiation.

It is important to highlight that the increase in income levels and the demand for new and imported products are not the only drivers for revenues growth in developing markets, the lower competition level, mainly in terms of private label, constitutes another driver. The consumer segment with the most significant improvement was assumed to be Snacks with a CAGR (2010-2015) of 5.1%, due to the rise of income level those products are considered less superfluous. After Snacks, but with a smaller impact in total revenues, is Convenient Meals with a CAGR (2010-2015) of 8.8%, followed by Beverages, Grocery and Cheese with a CAGR (2010-2015) of 5.5%, 2.6% and 1%, respectively.

13.2. EBITDA

Even though Revenues were analysed by being divided into geographic and consumer segments, due to the lack of information EBITDA and EBITDA Margin are going to be analysed by their total consolidated value.

During the realized period Cost of Sales margin was reduced from 66% and 67%, in 2007 and 2008, respectively, to similar values of 2005 at 64% in 2009. Since commodities are expected[42] to increase in 2010 and then remain stable, Cost of Sales will increase to 65% and be stable during the forecasted period. Also, the Restructuring Plan put into action during the period of 2007 and 2009 by Kraft Foods, allowed a reduction in Cost of Sales since it makes production capacity more efficient.

[40] IMAP –Food and Beverage Industry Global Report - 2010
[41] IMAP –Food and Beverage Industry Global Report - 2010
[42] USDA Agricultural Projections to 2019

Operating costs are going to increase by a CAGR (2010-2015) of 3%, due to Kraft Foods' need of investing more in advertisement, mainly in developing markets, as well as in R&D, to develop new products and flavors to enlarge its range of products to stay ahead the of competition by satisfying the most demanding needs on developed markets. Also, G&A costs are going to increase due to the necessity of business expansion, mainly in developing markets.

From 2005 to 2009, EBITDA has been gradually increasing, despite the downturn in Revenues in 2009. EBITDA margin has not been stable in the last five years, decreasing from 14% to 13% and 12% in 2007 and 2008, respectively, but recovering to 14% again in 2009.

For the forecasted period EBITDA will decrease by a CAGR (2010-2015) of -1% and EBITDA margin will decrease to 12% and 11% in 2003. This decrease is related to the small increase in revenues and the increase in operating costs.

Also, it was considered that the firm is going to have asset impairment and exit costs. To forecast this rubric an average of previous values was used and applied in the future. At the same, gains/losses on net divestures were also considered in the forecast, since it makes part of the firm strategy to buy and sell business activities. To forecast this rubric, an average value based on its previous values was considered

In conclusion, EBITDA's decrease from 2011 to 2015 was due to a small revenues' increase, stabilization in Cost of Sales, due to higher but more stable commodities' prices and a firms' Restructuring Plan that resulted in a more efficient production capacity.

13.3. Amortization and Depreciation

There is no information in Kraft Food's report that makes it possible to get a percentage of amortization to forecast depreciations. However, looking at the past value, it is possible to observe a pattern in previous tangible assets amortizations. Following that pattern, amortization is going to be forecasted as 7.8% of total tangible assets.

It is said in the report that is forecasted that the intangible assets' amortization is going to be of $15 million dollars for the next years.

This way of computing depreciation does not take into account capital expenditure. So it assumes that capital expenditure takes place randomly during the year.

13.4. Capital Expenditure

Capital Expenditure (CAPEX) is important in this industry to modernize facilities and support initiatives in developing new products or to create a more efficient productivity. From 2005 to 2009, CAPEX has growing at a CAGR of 3% and according to Kraft Foods' report, it is expected that 2010 CAPEX values stay in line with the past year. It was already mentioned that Kraft Foods is planning to increase product's innovation, as well as expand business mainly in developing markets and for that is necessary to improve the production capacity. According to this information, and since nothing more about CAPEX is mentioned in the report, it was assumed that the CAPEX in 2010-2015 will continue to grow at a CAGR of 3%.

13.5. Net Working Capital

Working Capital is a measure of operating liquidity, meaning Kraft Foods' efficiency and health in a short-term period. Since in the Kraft Foods' report there was no information about Working Capital computation, was computed by the following formula:

$$Working\ Capital = Inventory + Receivables\ Account - Payables\ Accounts$$

To compute the Working Capital some information from Kraft Food's Balance was considered. A positive working capital means that the company is able to support all its short-term commitments, while a negative working capital means that the company failed with its short-term commitments. (Appendix 10)

To forecast the inventory, the past inventory turnover ratio was analysed, which is found by dividing the inventory by the total revenues. It the last years, inventory turnover ratio stabilized into 9% and it was assumed to remain like that in the future. Receivables account and Payables account were forecasted based on their previous growth rates, since it is difficult to analyse any trend when divided by COGS[43]. Although this is not the best way to forecast these rubrics, no other information was available to make assumptions.

Analysing the Receivables and Payables turnover it is possible to analyse that on average, from 2005 to 2009, Kraft Foods takes 44 days to receive from its clients and 32 days to pay to its suppliers, meaning that Kraft Foods pays first than receives.

In conclusion, Net Working Capital is very important to compute cash-flows. A negative net working capital (more current liabilities than current assets) represents free cash in the firm. Any variation in Net Working Capital will directly affect Enterprise Value.

[43] Cost of Goods Sold

13.6. Average Weighted Cost of Capital (WACC)

According to the literature, to compute the Enterprise Value through the FCFF[44] approach it is needed to discount at WACC rate. To compute the WACC it is necessary to follow CAPM formulas to compute the cost of equity (Appendix 11).

$$WACC = R_E \times \frac{E}{V} + R_d \frac{D}{V} \times (1 - T_c)$$

$$R_E = R_f + \beta_L (R_M - R_f)$$

According to Damodaran's Website, equity risk premium $(R_M - R_f)$for the U.S. market is 4.5% (Aaa Moody's rating) with a default probability of 0 basis point, meaning that it is assumed that the total equity risk-premium is 4.5%.

To estimate a firm's beta is better to use an industry-derived unlevered beta and re-levered according to firm's capital structure, instead of using an industry-derived levered beta[45].

$$\beta_L = \beta_U [1 + (1 - T_C) \times \frac{D}{E}]$$

According to Damodaran's Website, a global unlevered beta for Food Processing Industry is 0.54 and the re-levered beta is 0.74. To compute a risk-free rate, according to the literature[46], a 2009 U.S. 10 year Treasury bond of 3.84% is going to be use. Since the U.S Federal statutory rate is 35% and the average of Kraft Foods' effective tax rate from 2005 to 2009 is 29.35%, the same corporate tax rate of 31.5% (used by J.P. Morgan[47]) was assumed to perform computations.

To compute cost of debt, one possibility is to compute the average cost of debt of which debt rubric, but that information is not possible to find; or by looking at the ratio of interest expenses by Net Debt, but since the interest rate fluctuates from 3.06% to 7.55% it is also difficult to find a trend. Other possibility is to use Kraft Foods' credit rating, find the probability of default and add the risk-free rate. In the report is said that, according to Moody's, credit rating is Baa2, representing a default spread of 2.0% (Damodaran's Website). This way, the cost of debt is going to be 5.84% (3.84% + 2.0%).

[44] Free Cash Flow to the Firm
[45] Copeland, T. et al (2000)
[46] Copeland, T. et al (2000)
[47] J.P. Morgan Europe Equity Research 18 September 2009

Finally, it is important to define the Kraft Foods' capital structure and to highlight the importance of this capital structure in market values. Also Debt should be considered without Cash and Cash Equivalents. The target D/E ratio should be of 55%.

In this way it is possible to compute the WACC. Cost of equity levered is 7.19% and the cost of equity unlevered – necessary to compute Enterprise Value through APV approach - is 6.27%. The Average Weighted cost of capital is 6.05%.

The Enterprise Value (EV) using DFC approach is $ 62.12 billion. (Appendix 12)

13.7. Adjusted Present Value (APV)

According to the literature, to compute the Enterprise Value using the APV approach requires the analysis of the independently unlevered Enterprise Value and then adding the financial side effect taking into account costs of financial distress.

To compute unlevered Enterprise Value is needed to discount FCFF at the unlevered cost of equity of 6.27%. To analyse the financial side effects, it is necessary to compute the present value of interest tax shield (PVITS) and, for that, the assumption of corporate tax rate, the target capital structure, Net debt and the cost of debt are needed.

The last part is composed by costs of financial distress. The default of probability for a company with a firm rated Baa2 is 2.00% and the cost of financial distress for this industry is assumed to be 50%, meaning that in case of distress Kraft Foods will lose 50% of its total assets.

Following this approach, the Enterprise Value is $ 66.12 billion. (Appendix 13)

14. Relative Valuation

To perform a careful analysis it was performed a peer group valuation to understand if the valuation estimated by the DFC approach conforms a certain range of comparative firms, since the DFC approach can lead to some errors in estimating firms' value because it is based on assumptions.

According to Goedhart et al. (2005), forward-looking multiples were used and to compute the range only enterprise-value multiples were focused.

The peer group was chosen according to the peer group used by Kraft Foods in its 2009 report that was mentioned in Kraft Foods, Inc Performance, in the previous section. However, not all firms were taken into account because its capital structures, risk and growth were not

comparable. Also, some of the chosen firms are quite dubious if they should be considered comparable or not, but since Kraft Foods has many different consumer segments it was necessary to have all of them represented in the peer group.

Table 2 - Kraft Foods Multiples

Bloomberg Multiples -2010

Company	Country	Market Cap (in Billions of dollar)	P/E	P/Book	EV/Sales	EV/EBITDA
Campbell's Soup	US	12,06	15,81	13,03	1,90	10,70
Hershey	US	10,7	18,49	11,86	2,06	11,64
Hj Heinz	US	14,54	16,23	7,69	1,78	11,65
Kellogg	US	20,29	16,52	8,93	1,98	12,41
General Mills	US	23,38	15,29	4,33	2,01	11,10
Pepsico	US	103,86	15,6	4,92	2,12	11,51
Nestlé	SW	190,94	21,06	2,88	2,08	11,72
Coca-Cola	US	150,74	18,85	4,86	4,65	16,49
Unilever	US	87,51	15,43	4,52	1,64	9,54
Danone	FR	38,1	15,42	2,43	2,11	11,23
Colgate-Palmolive	US	39,78	16,61	14,87	2,75	11,09
PG	US	170,55	16,34	2,85	2,52	10,41
Cadbury	UK	12,69	29,26	2,54	3,22	23,85
Average	**-**	**67,32**	**17,76**	**6,59**	**2,37**	**12,56**

The indicators were collected from Bloomberg for the 2010 analysis; however indicators for Kraft Foods and Cadbury were taken from its current valuation. There were four different multiples computed: Price-to Earnings ratio (P/E), Price to Book ratio (P/B), Enterprise-Value to Sales (EV/Sales) and Enterprise-Value to EBITDA (EV/EBITDA)

The first multiple P/E is considered one of the most important multiples, since it shows the investors' expectations of how much they are willing to pay. Kraft Foods' P/E is trading at a reasonable fair value but the lowest comparing with its peers. Looking at P/B ratio, Kraft Foods has a lower ratio compared with its peers, meaning that the stock could be undervalued and no growth expectations are taking into account by investors.

The next multiples are enterprise-value multiples what have the advantage of not being easily manipulated as equity multiples are.

Kraft Foods' EV/Sales is higher compared with the average peer group probably due to higher margins, and EV/EBITDA is higher as well, compared with the average peer group.

To better analyse the peer group, multiples were divided into minimum (min), average and maximum (max). As it is possible to observe in the graphics the range given by EV/EBITDA is

that the Enterprise-Value should be between 47.33 billion and 118.32 billion and using EV/Sales, the Enterprise-Value should be between 66.88 billion and 189.63 billion.

Figure 27 - EV to EBITDA

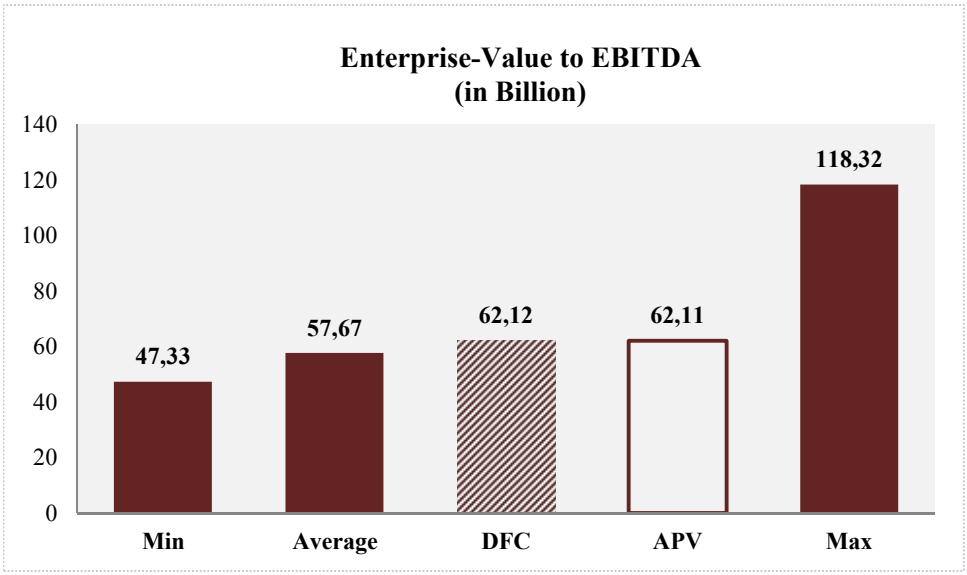
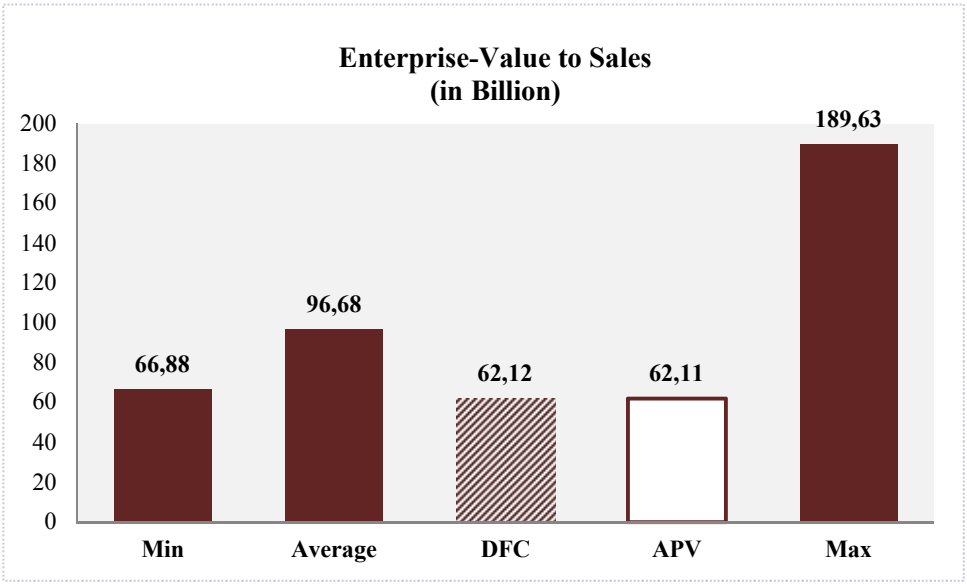


Figure 28 - EV to Sales



In conclusion, it is important to highlight that multiples should give a range or a rough idea of what the Enterprise-Value should be and must not be taken as the main valuation process, since comparable firms are very difficult to find, because there are no two similar firms - they always differ in growth expectations or return on invested capital. Also, the way ratios are computed can lead to bias analysis. For example, the P/E ratio is vulnerable to changes in capital structure and one ratio does not have all the information necessary to analyse a firm.

As was already mentioned, this peer group can have some limitations. Kraft Foods is not a company with only one consumer segment and to perform a complete peer group was used firms that have as business activity only one of Kraft Foods' consumer segment. Their dimensions could be different, as well as their margins.

15. Sensitivity Analysis

The previous estimations are very conservative, as already was mentioned. To perform a better valuation it is important to analyse a possible deviation from the previous assumptions to understand the impact in the Enterprise Value.

Kraft Foods is performing in a high competitive market. Despite the fact of being the worlds' second largest firm its growth expectations are very low comparing with its competitors. It should be interesting to observe the variation of a more and less conservative growth expectations in the valuation process.

This sensitivity analysis makes it possible to measure the impact of different assumptions in the valuation process. The first sensitivity analysis considers a variations in revenues, cost of sales and operating costs, which derived in two different case scenarios: bear case scenario and bull case scenario.

The bear case scenario considers revenues 1% lower for each forecasted year, where the cost of sales and operating costs are 1% higher for each forecasted year. The opposite scenario, the bull case, considers revenues 1% higher for each forecasted year, where the cost of sales and operating costs are 1% lower for each forecasted year. (Appendix 14 and 15)

Table 3 - Kraft Foods Scenarios

	Bear Case	Base Case	Bull Case
DCF	59,84	62,12	89,15
Target Price	29,33	30,86	49,10

* In billions of Dollar (expect Target Price)

The bear case results in an Enterprise Value by the DFC approach of $ 59.84 billion and a target price of $ 29.33, where the bull case shows an Enterprise Value by the DFC approach of $89.15 billion and a target price of $49.10. This shows how much the Enterprise Value is sensible to different variations in assumptions, especially in the Bull Case, where the revenues increase by 1% and COGS and operating costs decrease by 1% each.

The second sensitivity analysis is related to a variation in WACC and growth rate using the Base Case. By using a range of WACC and terminal growth rate, it is possible to see the impact on the target price.

Table 4 - Kraft Foods Sensitivity Analysis

Price Target		Growth Rate				
		2,20%	2,35%	2,50%	2,65%	2,80%
WACC	5,90%	$29,11	$30,45	$31,90	$33,48	$35,22
	6,05%	$27,62	$28,84	$30,86	$31,59	$33,16
	6,20%	$26,32	$27,44	$28,66	$29,97	$31,40

Looking at the table is possible to observe that by varying the WACC and the terminal growth rate, the target price suffers a variation between $ 26.32 and $35.22. The price-target for Kraft Foods according to the base case valuation is $ 30.86.

To conclude this sensitivity analysis, it is possible to infer that Kraft Foods may be undervalued; since its share price of $26.78 at 9th November of 2009 is inferior to the target-price of all cases scenarios. Also, in the Growth Rate –WACC sensitivity analysis the majority of the price targets are set above the share price.

16. Cadbury's Forecasted Cash Flow

Cash flows are going to be forecasted until 2015 and after that period Cadbury will grow at terminal growth rate of 2.50%, despite real GDP are expected[48] to grow at 2.4% and Inflation at 2%, after 2015. It is believed that this is a quite optimistic growth rate in an instable global financial scenario.

The assumptions for Cadbury's FCFF and reasons behind them are going to be presented in their respective sections. (Appendix 16 and 17)

16.1. Revenues

In Cadbury's report, revenues are presented in four geographical segments: BIMA[49], Europe, Americas[50] and Pacific-Asia. Each of these geographical segments has different growth rates, as well as different future trends, for that reason revenues are going to be presented by geographical segment.

[48] National Institute of Economic and Social Research
[49] Britain, Ireland, Middle East and Africa
[50] North and South America

Due to the lack of information about revenues perspectives the assumptions are going to be done according to economic conditions and consumption perceptions, and they are going to have a conservative character.

In an overall perspective, Cadbury's revenues are going to increase at a CAGR (2010-2015) of 5%, according to an economy recovery after 2012 for Europe and based on a Cadbury focused in emerging markets. Cadbury benefits of a great image and distribution channels in many of its emerging markets, allowing it to increase its revenues, which balances with the economic recession in North America and Europe, where chocolates, gums and candies are products whose consumption tends to decline. Countries like Asia, India, Indonesia, and Mexico - where Cadbury has operations and it is market leader in many segments - are increasing its income in which there is a tendency to experiment new products.

However, despite the economic situation in Europe and North America, consumption perceptions point for an increase in Cadbury revenues, since obesity problems and an increase of a health consciousness made sugar-free products grow in popularity. In addition, recent studies defend the health benefits of dark chocolate and new chocolate's applications as a source of nutrition and energy makes Cadbury products desired by the market.

16.1.1. BIMA

BIMA is considered a stable with a propensity to grow market where about 30% of total revenues come from, where U.K. represents the majority of revenues. U.K. and Ireland represents a more mature market, while Middle East and Africa are growing. The U.K. market is proving to be resilient in the economic downturn where demand is forecasted[51] to continue to grow. In Middle East and Africa, Cadbury has a leading position, despite those revenues accounting for less than 8% of total revenues. Revenues are going to increase at a CAGR (2010-2015) of 5%, less than CAGR (2007-2010) of 7%, due to a strong representation in U.K. and Ireland, allied to an income increase in Africa and Middle East.

16.1.2. Europe

Europe represents about 20% of total revenues and is considered a growing market. Since 2007 this market is growing at a CAGR (2007-2009) of 13% and is going to continue to grow at a CAGR (2010-2015) of 4%. Many European countries are passing through an economy

[51] Mintel

recession, which does not encourage the consumption of confectionery products. However, Cadbury has conquered North Europe where economic recession is not strongly felt and traditionally those countries are more chocolate consumers.

16.1.3. Americas

Americas represents about 30% of total revenues and is a growing market with a CAGR (2007-2009) of 15% and is going to continue to grow at a CAGR (2010-2015) of 7%. Cadbury has business in Brazil, Argentina, Venezuela, Colombia and Peru, all amongst the world's 50 largest markets, where it has a strong market position in almost all of those countries.

16.1.4. Pacific-Asia

Pacific-Asia accounts for about 20% of total revenues and is the most growing market with a CAGR (2007-2009) of 18% and is going to continue to grow at a CAGR (2010-2015) of 4%. China's rapidly increasing live standards is increasing chocolate consumption, as well as gum and candy year to year, and is expected to stay this way for the next years. Also, a great variety of confectionery products is being demanded and local firms lose advantage to foreign firms, since they cannot compete in terms of innovation, research and development and raw materials' quality. China is also a country with lower competition where only the main confectionery players have access to that market, meaning that each player have a considerable market share.

16.2. EBITDA

Even though Revenues were analysed by being divided geographically, due to the lack of information EBITDA and EBITDA Margin is going to be analysed by its total consolidated value.

During the realized period, the Cost of Sales margin was 53% during 2007-2008 and increased to 54% in 2009. Since commodities prices, mainly cocoa beans' are very volatile, influenced by a ranged of factors and expected[52] to slightly increase in the next years, it is assumed that the cost of sales margin of 54% will be maintained until 2015.

[52] Commodity Briefing

Operating costs had been increasing with a CAGR (2007-2009) of 7% and are going to continue increasing by a CAGR (2010-2015) of 8%. Distribution, Marketing and Administration have a CAGR (2007-2009) of 4%, 14% and 5%, respectively and for the forecasted period those costs are going to increase to 5%, 13% and 6%, respectively. Cadbury needs to improve its distribution channels, mainly in developing markets such as Middle East, Africa, Pacific and Asia, as well as invest in Marketing to continue to promote its products not only in the developed countries, but also in developing countries where the market is more concentrate due to few players.

From 2007 to 2009, EBITDA had a prominent increase due to an increase in revenues, despite the increase in cost of sales and operating costs. The reduction in restructuration costs in 2009 also contributed for that increase. Regarding the forecasted period, EBITDA will suffer a downturn until 2015. This is due to maintenance of 54% of cost of sales margin, as well as the 1% increase in Distribution, Marketing and Administration costs. The forecasted EBITDA margin will decrease from 11% in 2010 to 7% in 2015, where in 2007-2009 increased from 6% to 14%.

In conclusion, the EBITDA decrease from 2010-2015 is due to a small revenues increase and increase in operating costs, as well as a maintenance of a cost of sales margin at a 54%.

16.3. Amortization and Depreciation

In Cadbury's report, it is possible to observe the range of depreciation percentage for all rubrics of tangible assets. However, in the report it is not possible to see the value of each rubric of tangible assets, since only two rubrics are displayed. Looking at amortizations from the realized period and dividing by tangible assets it is impossible to see a pattern. To try to forecast depreciations and to be close to the percentage put in place, an average (16%) of depreciation percentage range was computed and applied to tangible assets. Intangible assets amortization was assumed to be similar to past values, since it was possible to see a pattern. This method to compute depreciations does not take into account capital expenditure - so it is assumed that capital expenditure takes place randomly during the year.

16.4. Capital Expenditure

Capital Expenditure (CAPEX) in this industry is important in terms of modernizing facilities and structures, to support development of new products and to create a more efficient production.

However, there is a lack of information about Cadbury's CAPEX, since in the report very few is said about it, only that the values are supposed to stay in line with 2009 values.

Regarding that information the forecasted values were very close to the 2009 values. It is known that Cadbury has intentions to continue to invest in production capacity improvement, as well as in the expansion business, mainly in developing markets.

16.5. Net Working Capital

Working Capital is a measure of operating liquidity, meaning Cadbury's efficiency and health in a short-term period. The Working Capital was computed by the following formula:

$$Working\ Capital = Inventory + Receivables\ Account - Payables\ Accounts$$

To forecast inventory the past inventory turnover ratio was analysed, which is found by dividing the inventory by the total revenues. It the last years, inventory turnover ratio stabilized into 13% and it was assumed to remain like that in the future, until 2013 where after that the inventory turnover ratio will stay at 12%. (Appendix 18)

Receivables account and Payables account were forecasted based on their past turnover ratio, since it is difficult to analyse any trend when divided by COGS[53]. .

Analyzing the Receivables and Payables turnover it is possible to analyse that on average, from 2005 to 2009, Cadbury takes 75 days to receive from its clients and 111 days to pay to its suppliers, meaning that Cadbury receives first than it pays.

In conclusion, Net Working Capital is very important to compute cash-flows. A negative net working capital (more current liabilities than current assets) represents free cash in the firm. Any variation in Net Working Capital will directly affect Enterprise Value.

[53] Cost of Goods Sold

16.6. Average Weighted Cost of Capital (WACC)

As already as mentioned, to follow the FCFF[54] approach it is needed to discount at WACC rate. To compute the WACC, it is necessary to follow CAPM formulas to compute the cost of equity.

$$WACC = R_E \times \frac{E}{V} + R_d \frac{D}{V} \times (1 - T_c)$$

$$R_E = R_f + \beta_L (R_M - R_f)$$

According to Damodaran's Website, equity risk premium $(R_M - R_f)$ for the U.K. market is 4.5% (Aaa Moody's rating) with a default probability of 0 basis point, meaning that it is assumed that the total equity risk-premium is 4.5%. Also, as already mentioned, to estimate a firm's beta is better to use an industry-derived unlevered beta and re-levered according to firm's capital structure, instead of using an industry-derived levered beta[55]. (Appendix 19)

$$\beta_L = \beta_U [1 + (1 - T_C) \times \frac{D}{E}]$$

According to Bloomberg, Cadbury's unlevered beta is 0.61 and the re-levered beta is 0.84. To compute a risk-free rate, according to the literature[56], a 2009 U.K. 10 year Gilt of 4.10% is going to be used. To estimate the corporate tax rate an approximation to the tax in practice was used, despite being a difficult task. In the U.K. there are different corporate taxes consonant the level of profits. Although Cadbury's benefits from many different tax benefits that are not constant from year to year, so it as assumed that the corporate tax will be 28%, according to the JP Morgan report[57].

As already mentioned, to compute the cost of debt, one possibility is to compute the average cost of debt of each debt rubric, but that information is not possible to find; looking at the ratio of interest expenses by Net Debt, it is also difficult to find any trend, since the interest rate fluctuates from 2.51% to 9.72%. Other possibility is to use Cadbury's credit rating, find the probability of default and add the risk-free rate. In the report is said that, according to Moody's, credit rating is Baa2, representing a default spread of 2.0% (Damodaran's Website). This way, the cost of debt is going to be 6.10% (4.1% + 2.0%).

Finally, is important to define the Cadbury's capital structure and to highlight the importance of this capital structure in market values. The target D/E ratio should of 53%.

[54] Free Cash Flow to the Firm
[55] Copeland, T. et al (2000)
[56] Copeland, T. et al (2000)
[57] J.P. Morgan Europe Equity Research 9 November 2009

In this way it is possible to compute the WACC. The cost of equity levered is 7.89% and cost of equity unlevered – necessary to compute Enterprise Value through APV approach – is 6.85%. The Average Weighted cost of capital is 6.73%.

The Enterprise Value (EV) using DFC approach, already mentioned in the literature, is £8.50 billion ($ 14.20 billion). (Appendix 20)

16.7. Adjusted Present Value (APV)

As already mentioned, according to the literature, to compute The Enterprise Value using the APV approach requires the independent analysis of Enterprise Value unlevered and then adding the financial side effect taking into account costs of financial distress.

To compute the Enterprise Value unlevered, the FCFF needs to be discounted from the cost of equity unlevered of 6.85%. To analyse the financial side effects, it is necessary to compute the present value of interest tax shield (PVITS) and, for that, the assumption of corporate tax rate, the target capital structure (53%), Net debt and the cost of debt (6.10%) are needed.

The last part is composed by costs of financial distress. The default of probability for a company with a firm rated Baa2 is 2.00% and the cost of financial distress for this industry is assumed to be 50%, meaning that in case of distress, Cadbury will lose 50% of its total assets.

Following this approach, the Enterprise Value is £ 8.50 billion ($ 14.20 billion). (Appendix 21)

17. Relative Valuation

The peer group was chosen according to the most relevant firms in the confectionery industry. However, certain firms chosen are more diversified in terms of consumer segments than Cadbury, but they were chosen because its capital structures, risk and growth are quite comparable.

The indicators were collected from the Bloomberg for 2010 analysis; however indicators for Kraft Foods and Cadbury were taken from its current valuation.

There were computed four different multiples Price-to Earnings ratio (P/E), Price to Book ratio (P/B), Enterprise-Value to Sales (EV/Sales) and Enterprise-Value to EBITDA (EV/EBITDA).

Table 5 - Cadbury's Multiples

Bloomberg Multiples -2010

Company	Country	Market Cap (in Billions of dollar)	P/E	P/Book	EV/Sales	EV/EBITDA
Hershey	US	10,70	18,49	11,86	2,06	11,64
Kellog	US	20,29	16,52	8,93	1,98	12,41
General Mills	US	23,38	15,29	4,33	2,01	11,10
Nestlé	SW	190,94	21,06	2,88	2,08	11,72
Unilever	UK	87,51	15,43	4,52	1,64	9,54
Kraft Foods	US	40,17	14,11	1,74	1,86	15,31
Average		**-**	**16,82**	**5,71**	**1,94**	**11,95**

The first multiple P/E is considered one of the most important multiples, since it shows the investors' expectations of how much they are willing to pay. Kraft Foods' P/E is trading at a reasonable fair value but the lowest comparing with its peers. Looking at P/B ratio, Kraft Foods has a lower ratio compared with its peers, meaning that the stock could be undervalued and no growth expectations are taking into account by investors.

The next multiples are enterprise-value multiples what have the advantage of not being easily manipulated as equity multiples are.

To better analyse the peer group, multiples were divided into minimum (min), average and maximum (max). As is possible to observe in the graphics the range given by EV/EBITDA is that Enterprise-Value should be between £ 6.72 billion and £10.79 billion and using EV/Sales, Enterprise-Value should be between £ 10.10 billion and £ 12.81billion.

In EV/EBITDA Cadbury's valuation seems to be above the average of its peers, but inside the range. In turn, in EV/Sales Cadbury's valuation is underperformed comparing with its peers.

As already mentioned, it is important to highlight that multiples should give a range or a rough idea of what the Enterprise-Value should be and must not be taken as the main valuation process, since comparable firms are very difficult to find, because there are no two similar firms as said before.

Figure 29 - Cadbury's EV to EBITDA

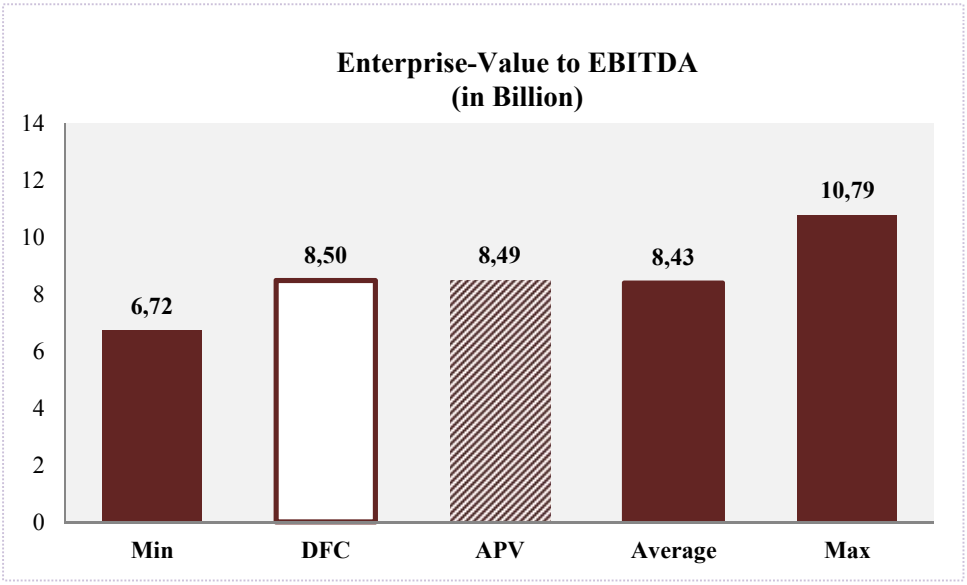
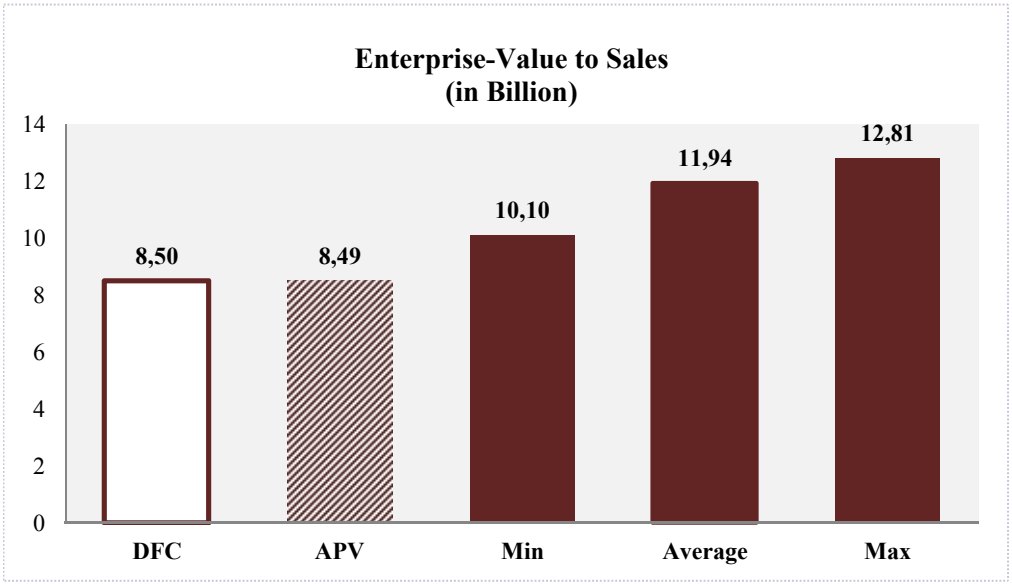


Figure 30 - Cadbury's EV to Sales



18. Sensitivity Analysis

Cadbury's assumptions also follow a conservative approach and to perform a better valuation it is important to analyses a possible deviation from the previous assumptions to understand the impact in the Enterprise Value.

Cadbury is performing in a competitive market having good growth perceptions mainly in developing markets, with leading positions in many countries.

This sensitivity analysis allows makes it possible to measure the impact of different assumptions in the valuation process. The first sensitivity analysis considers a variation in revenues, cost of sales and operating costs, which derived in two different case scenarios: bear case scenario and bull case scenario.

The bear case scenario considers revenues 1% lower for each forecasted year, where the cost of sales and operating costs are 1% higher for each forecasted year. The opposite scenario, the bull case, considers revenues 1% higher for each forecasted year, where the cost of sales and operating costs are 1% lower for each forecasted year. (Appendix 22 and 23)

Table 6 - Cadbury's Scenarios

	Bear Case	Base Case	Bull Case
DCF	£ 5 637	£ 8 495	£ 10 696
Target Price	£ 3,12	£ 5,21	£ 6,82

*In billions of Pounds (expect Target Price)

The bear case results in an Enterprise Value by the DFC approach of £ 5.64 billion and a target price of £3.12, where the bull case shows an Enterprise Value by the DFC approach of £10.70 billion and a target price of £6.82. This shows how much the Enterprise Value is sensible to different variations in assumptions.

The second sensitivity analysis is related to a variation in WACC and growth rate using the Base Case. By using a range of WACC and terminal growth rate, it is possible to see the impact on the target price.

Table 7 - Cadbury's Sensitivity Analysis

Price Target		Growth Rate				
		2,20%	2,35%	2,50%	2,65%	2,80%
WACC	6,45%	£ 5,14	£ 7,07	£ 5,49	£ 5,69	£ 5,90
	6,73%	£ 4,79	£ 4,94	**£ 5,09**	£ 5,26	£ 5,45
	6,75%	£ 4,76	£ 4,91	£ 5,07	£ 5,23	£ 5,41

Looking at the table is possible to observe that by varying WACC and the terminal growth rate, the target price suffers a variation between £ 4.76 and £5.90.

To conclude this sensitivity analysis, it is possible to infer that Cadbury is overvalued since its share price at 9th November of 2009 is higher than any price-target projected in case scenarios. The sensitivity analysis also illustrates that since there are no target prices higher than £7.58.

19. Kraft Foods & Cadbury Merged Valuation

In the previous section, Kraft Foods and Cadbury were valued independently according to the procedures related with the first step of the valuation process.

According to Damodaran (2005), to value a merger between two entities, first it is necessary to evaluate both entities separately (Status Quo Valuation) under its own assumptions and, after that, in a second stage, it is necessary to combine both enterprises values to have access to a merger valuation without synergies that should be equal to the sum of the two entities.

To compute a valuation with synergies some assumptions regarding operational and financial synergies must be done. Basically, a new model is created where the benefits – mainly in form of cost savings and revenues-enhancement- of having the two firms together are explored.

The difference between the merged valuation with synergies and the merged valuation without synergies represents the value of synergies, which is the additional value generated by combining two firms that it would not be created if the firms were operated independently (Damodaran, 2005).

In this section, the second and third stages are going to be modeled and its respective assumptions are going to be explained.

19.1. Merged Valuation without Synergies

In this section no synergies were considered. The model assumes the individual assumptions of each firm – Kraft Foods and Cadbury - and it is equal to sum of each part.

It is important to highlight that this is a cross-border merger where Kraft Foods is an American firm and Cadbury is an English firm, in which its statements are expressed in dollar and pounds, respectively. Since the acquisition is bidden by Kraft Foods it is assumed that the deal is going to be done in dollars. Cadbury's cash flows were estimated and discounted according to Cadbury's discounted rate and the Net Present Value of its valuation was converted to US Dollar at the spot exchange rate of 1.6719 (GBP/USD) from 9th November of 2009, following Method A as presented in section 6.2 of this dissertation.

The Income Statement and the Free Cash Flow (Appendix 24 and 25) of the combined firm were estimated as the direct sum of Kraft Foods ($ 62.12 billion) and Cadbury ($ 14.20 billion) independent valuation.

The total value of the merged valuation without synergies using WACC is $ 76.32 billion.

19.2. Merged Valuation with Synergies

By merging both firms a creation of a certain number of opportunities that would not be generated independently are expected. Both Kraft Foods and Cadbury operate in the Food Industry and share the same consumer segment of confectionery, so it is possible to analyse some functional strength that can be transferred and shared across both firms.

These firms compete in a global highly competitive market, where not only price matters for consumers, but also product's diversity, quality and innovation.

To be able to deliver those characteristics to consumers, a cyclical process of managing input costs to improve brand equity is necessary, to invest in R&D and to drive progress in every geographic region setting solid objectives to explore sales opportunities and reinvest to maintain future growth.

To obtain that it is important to achieve a certain operating income margin to release funding for efficiency-improvement projects.

Merging with another firm can allow the creation of operational and financial synergies. Operating synergies are those synergies that allow firms to increase their operating income from existing assets and/or increase growth.[58] There are two types of operational synergies: revenue-enhancing and cost-related. Revenue-enhancing synergies are quite difficult to measure, since it is not possible to evaluate with precision how much sales are going to increase in a certain period of time. In that way it turns out to be easier to quantify cost-related synergies, such as economies of scale and overlapping of operational activities, and build it in valuation models.

Financial synergies are related to the impact on the cost of capital of the merger entity or in a form of higher cash flows. The combined firms should have a cost of capital lower than separately, also if its cash flows are not perfectly correlated, it reduces its volatility and it should reduce bankruptcy risk. In addition, there are also financial synergies in tax benefits and cash slack, as mentioned in the Literature Section, but those are not going to be deeply focused.

Despite this merger being made in 2010, Kraft Foods' intentions for Cadbury started in the beginning of 2009 and most equity analysts started their estimations immediately, updating them as the quarterly results of both firms were published during that year. For a matter of simplicity and since the annual results of 2009 for both firms are already released, it is assumed that synergies started in 2010 due to the potential cost savings resulting from the regional overlap in the operational activities.

[58] Damodaran (2005)

19.2.1. Revenue-enhancing Synergies

As already mentioned, it is difficult to quantify revenue-enhancing synergies. In this valuation, revenues synergies were not explored due to the lack of information. However, the merger between Kraft Foods and Cadbury allows the potential of cross-selling for both entities. Kraft Foods will benefit from Cadbury's larger international presence and growth in emerging markets, especially in India, Mexico and South America, to spread its own products, such as powdered soft drinks, sheltered by Cadbury's brand image and distribution channels. At the same time, Cadbury will benefit from the merger by enjoying Kraft Foods' distribution channels, especially in the U.S., allowing an increase in Cadbury's market share.

So, an increase in revenues in almost every consumer segments is expected, especially in snacks (that incorporates confectionery) and beverages.

Together, Kraft Foods and Cadbury will lead market share by revenues and, at the same time, both firms will reduce theirs competition, allowing better revenues margins.

19.2.2. Cost-Related Synergies

Differently from revenues-enhancement synergies, cost-related synergies are easiest to compute and to model.

Kraft Foods estimates[59] through Cadbury's operating costs of 2008 synergies of $625 million what represents 8% of Cadbury's cost base. Kraft Foods expected to create $ 300 million in operational synergies (procurement, manufacturing, logistics, R&D and costumer services), $ 200 million in G&A savings and $125 million in marketing and selling expenses. In the same report, JP Morgan estimates that cost synergies could be $1.7 billion due to a significant regional overlap in operational activities.

I believe that JP Morgan estimates are too optimistic; on the other hand Kraft Foods' estimates appear to be more accurate. Despite following JP Morgan's relational about regional overlap I computed my own perspective of how cost synergies should be (Table 8).

As it is possible to observe my perspective about cost savings is more conservative, only exceeding Kraft Foods' estimates starting from 2014.

[59] J.P. Morgan Europe Equity Research 18 September 2009

Table 8 – Breakdown of Cost Savings

(in $ million)

Operating Expenses	Synergy in 2010		Synergy in 2011		Synergy in 2012		Synergy in 2013		Synergy in 2014		Synergy in 2015	
Distribution	144	18%	150	18%	156	17%	164	17%	172	17%	181	16%
R&D	50	6%	48	6%	50	6%	53	5%	56	5%	59	5%
Marketing	165	21%	185	22%	209	23%	238	25%	266	26%	298	27%
G&A	434	55%	456	54%	483	54%	512	53%	543	52%	570	51%
Total	**793**	**100%**	**839**	**100%**	**898**	**100%**	**967**	**100%**	**1037**	**100%**	**1108**	**100%**

In terms of product the overlap is minimal, not only chocolate is the only product in common between Kraft Foods and Cadbury, the markets where both are located with the same product are minimal too, just in Western Europe. According to JP Morgan[60] only 12% of Kraft Foods' total sales in 2008 ($ 5.3 billion) are respected to confectionery.

However, in terms of regional levels the overlap is significant in distribution, R&D, Marketing and G&A.

Cadbury's G&A could be partially absorbed by Kraft Foods own G&A in some regions during the five years and after this period be totally absorbed. For Europe (EU) and North America (NA), I assumed, based on the presence of Kraft Foods and Cadbury in those countries, a cost saving of 30% in each year and after 2015 a cost saving of almost 50%. For other regions (L/A, EE, Asia and ME&A) it was assumed a cost saving of 15% in each year and after 2015 a cost saving of almost 100%.

Table 9 - G&A Cost Savings

($ million)	2010E	2011E	2012E	2013E	2014E	2015E
G&A Cadbury Pre-Merger	1 930	2 027	2 148	2 277	2 414	2 534
Assuming 50% belongs to EU and NA *	965	1 013	1 074	1 139	1 207	1 267
Cost Savings of 30%	290	304	322	342	362	380
Other Regions	965	1 013	1 074	1 139	1 207	1 267
Cost Savings of 15%	145	152	161	171	181	190
Total Saving	**434**	**456**	**483**	**512**	**543**	**570**
G&A Cadbury Pro-Merger	1 496	1 571	1 665	1 765	1 871	1 964

* Based on JP Morgan estimates

Distribution costs is the cost area where less cost savings are expected, since Kraft Foods is a giant in the food industry with several consumer segments, other than confectionery, and with hundreds of different brands. It is difficult to believe that Kraft Foods could be easily filled with Cadbury's products. For NA, Asia, L/A and EE it was assumed a cost saving of 40% in each year and after 2015 a cost saving of almost 50%. For Europe and ME&A a cost saving of 20% and 10%, respectively, in each year and after 2015 a cost saving of more than 50% for both.

[60] J.P. Morgan Europe Equity Research 18 September 2009

Table 10 - Distribution Cost Savings

($ million)	2010E	2011E	2012E	2013E	2014E	2015E
Distribution Cadbury Pre-Merger	451	469	488	512	538	565
Assuming 30% Belongs to NA and Asia*	135	141	146	154	161	169
Cost Savings of 40%	54	56	59	61	65	68
Assuming 30% Belongs to EU*	135	141	146	154	161	169
Cost Savings of 20%	27	28	29	31	32	34
Assuming 25% Belongs to L/A and EE	113	117	122	128	135	141
Cost Savings of 50%	56	59	61	64	67	71
Assuming 15% Belongs to ME&A	68	70	73	77	81	85
Cost Savings of 10%	7	7	7	8	8	8
Total Saving	**144**	**150**	**156**	**164**	**172**	**181**

Cadbury's "marketing" costs, that are mainly selling expenses, in some regions can be absorbed by Kraft Foods sales force, especially in NA, L/A, EE and Asia where Kraft Foods presence is meaningful. In Europe and ME&A, the cost savings are inferior, since Kraft Foods' sales force in those regions is not quite strong. It is assumed for NA, L/A, EE and Asia a cost saving of 20% in each year and after 2015 a cost saving of almost 80%. For Europe and ME&A, a cost saving of 20% and 10%, respectively, in each year and after 2015 the same base cost saving it is going to be maintained.

Table 11 - Marketing Cost Savings

($ million)	2010E	2011E	2012E	2013E	2014E	2015E
Marketing Cadbury Pre-Merger	1.178	1.319	1.491	1.699	1.903	2.132
Assuming 60% Belongs to NA, L/A, EE and China	589	660	745	850	952	1.066
Cost Savings of 20%	118	132	149	170	190	213
Assuming 30% Belongs to EU	353	396	447	510	571	639
Cost Savings of 10%	35	40	45	51	57	64
Assuming 10% Belongs to ME&A	118	132	149	170	190	213
Cost Savings of 10%	12	13	15	17	19	21
Total Saving	**165**	**185**	**209**	**238**	**266**	**298**

As mentioned, the only common product between both firms is chocolate, and the impact that confectionery has in Kraft Foods' total sales is almost residual comparing with its other consumer segments. In this way, it was assumed only a cost saving of 10% in R&D in each year, since little expertise should be shared between both firms.

Table 12 - R&D Cost Savings

($ million)	2010E	2011E	2012E	2013E	2014E	2015E
R&D Kraft Foods Pre-Merger	498	477	496	526	557	585
Cost Savings of 10%	50	48	50	53	56	59

Due to the lack of information about Kraft Foods' and Cadbury's input costs, since the values are presented as cost of sales, no estimate of synergy was made. However, it is important to

highlight that this scenario of synergies is very conservative and does not account for revenues-enhancements synergies and synergies in input costs.

19.2.3. Financial Synergies and Capital Structure

By merging both entities there are changes in the capital structure. According to Damodaran (2005), the unlevered beta of the new merged firm (0.55) is computed through a weighting formula of Kraft Foods' and Cadbury's unlevered betas. Then, according to the formulas mentioned in section 3.5, it is possible to find the beta levered (0.93). Assuming that the merged firm risk free is 3.84% % (US 10 year Treasury Bond) and the total risk premium of 4.50%, the new firm's cost of equity unlevered and levered is 6.33% and 8.01%, respectively.

Regarding to the cost of debt by merging both entities, it is assumed that the debt capacity increased, since the cash flows become less volatile. As Damodaran's website suggests, with an interest coverage ratio of 4, the respective cost of debt for the new entity is 6.02% with a credit rating of Baa2 and a default probability of 2.00%, where the new entity's cost of capital is 6.08%.

Also, it is assumed that the new entity will write up the assets by U.S. Tax Laws of 31.50% where it could take more advantages from interest tax shields.

Table 13 - Merged Firm Capital Structure

	Kraft	Cadbury	Merged
Cost of Capital	6,21%	6,33%	6,08%
Cost of Equity (L)	7,35%	7,62%	8,01%
Cost of Equity (U)	6,27%	6,85%	6,33%
Cost of Debt	5,84%	6,10%	6,02%
Default Spread	2,00%	2,00%	2,00%
Credit Rating	Baa2	Baa2	Baa2
Beta (L)	0,74	0,84	0,93
Beta (U)	0,54	0,61	0,55
Risk-Free	3,84%	4,10%	3,84%
Total Risk Premium	4,50%	4,50%	4,50%
Taxes	31,50%	28,00%	31,50%

To finance the acquisition of Cadbury, in 2010, Kraft Foods increased its debt by $15.86 billion which was reflected on an interest coverage ratio of 4. Due to financial synergies from the

merger, the new firm maintained the same credit rating of Baa2 with a cost of debt of 6.02%, lower than Cadbury's cost of debt.

19.3. Value of Synergy

The total value of synergies estimated for the merger between Kraft Foods and Cadbury is $4.26 billion. This value represents 25% of Cadbury's market value as of 9th November of 2009.

As it already was mentioned, costs-related synergies are more reliable to be computed. In this valuation, it was estimated that cost-related synergies accounts for more than 50% of total synergies. These cost savings are expected through regional overlapping in operational activities, such as Marketing, R&D, Distribution and G&A.

Revenue-enhancement synergies were not explored in this valuation. However, both Kraft Foods and Cadbury will benefit from the merger, since it will be possible to enter in new and already existent markets by taking advantage on both brand image and sales force.

Financial synergies were estimated due to a new debt capacity by the merger of the two entities. It is estimated that the new entity will maintain the credit rating at Baa2. However the merged firm will have a debt increase of $15.90 billion reflecting an interest coverage ratio of 4 that represents a cost of debt for 6.02%. Also, tax benefits will be created by writing the new assets with a higher tax, benefiting of higher interest tax shields.

20. Acquisition

This dissertation's section will consider a more strategic part of the deal. It is going to be discussed and presented the procedures related with synergies' value analysis that determine the acquisition's offer for Cadbury. The acquisition's offer and the premium offer are going to be determined. Also some tools for measuring the risk of acquisition – SVAR - and to help in the decision making of the acquiring firm – Meet-the-Premium Line – are going to be presented, as already were mentioned in literature section.

It is important to highlight, that in reality Cadbury's acquisition by Kraft Foods occurred in February of 2010, however this valuation process is independent from what happened in reality. For this dissertation only public available information about Kraft Food and Cadbury were used. No detailed information about the deal after it was realized was used. This means that the results in this valuation are not comparable to the real deal occurred in 2010.

All the information presented in this section will continue to follow the same valuation process pattern in this dissertation.

To briefly summarize, Kraft Foods was the world's second largest manufacturer and packager food products and Cadbury was the world's second largest confectionery firm, with a market capitalization of $ 39.69 billion and £ 10.35 billion ($ 17.31billion), respectively.

Each standalone valuations – the net present value of expected future cash flows – estimate that Kraft Foods and Cadbury's Enterprise Values are $ 62.12 billion and £ 8.50 billion ($ 14.20 billion). Combined without synergies both firms values $ 75.86 billion. With synergies the combined firms value $76.32 billion using the WACC approach and $76.31 billion using the APV approach, generating synergies of $4.26 billion and $4.27 billion, respectively.

20.1. Acquisition Offer

To calculate how the synergies benefit should be distributed among both firms, it is important to understand how each firm's skills and capabilities contribute for the creation of synergies; however it is not simple to replicate in a model the impact of each firm in the total synergies value. Most synergies will be created in Kraft Foods' side due to its sales force and G&A functions.

To compute the acquisition offer it is important to find a metric that allows the distribution of the impact in total synergies value by each firm. A weighted division of total synergies value

based on Enterprise Value it is the best approach to reflect both skills and capabilities contributed by each firm.

Cadbury's Enterprise Value represents 18% of the Enterprise Value of the merger entity without synergies. Following the criteria already mentioned, Cadbury shall receive 18% of the value of total synergies. In this way, Kraft Foods shall give to Cadbury an additional $632 million.

Cadbury's market value at 9th of November of 2009 was $ 17.31 billion and Cadbury's valuation identifies an equity value of $ 5.89 billion. With the percentage of synergies belonging to Cadbury (19%), the new equity value is $ 6.68 billion (13% upside potential of the old equity). To summarize, according to Cadbury's market capitalization at 9th of November of 2009, the total premium offer is 39% (in relation to the new equity value) and the real premium offer is 21%.

Table 14 – Acquisition Offer

($ million)

Synergy	4 264
% Cadbury MV	25%
% paid to Cadbury	19%
Synergy Premium	793
Cadbury Market Cap	17 311
Cadbury Equity	5 888
Cadbury Equity + Synergy	6 682
Cadbury Market Cap + Synergy	18 105
Cadbury EV + Synergy	14 996
Total Premium Offered	39%
Real Premium Offered	21%
SVAR	27%

20.2. Shareholder's Value at Risk

According to Sirower & Sahni (2006), there is a method of measuring synergy risk during the acquiring process. That method is inspired on the VAR concept where it shows how much of the acquirer firm's value is at risk if no post-acquisition synergies are realized according to what was assumed in the valuation process.

$$SVAR = \frac{Target's\ Premium\ Paid}{Acquiring's\ Market\ Value}$$

The total premium offered is $10.63 billion and Kraft Foods' market value is $ 39.69 billion resulting in a SVAR of 27%.

20.3. Synergies to Meet the Premium

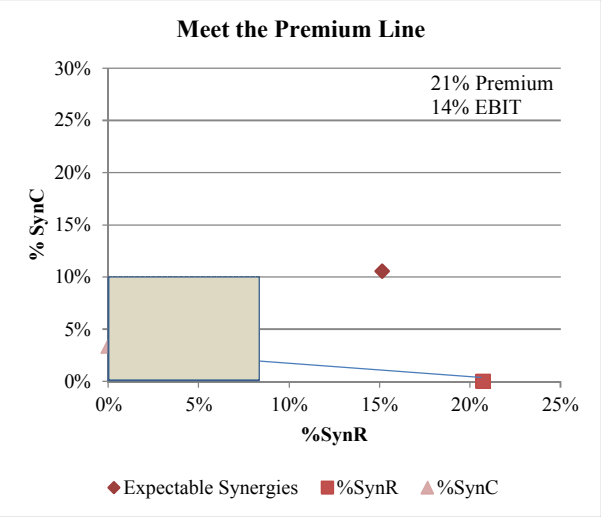
As already mentioned in the literature section synergies are difficult to measure and, to avoid paying a high premium for a firm that will not create the expected synergy, Sirower & Sahni (2006), suggested a model that represents graphically the cost reductions (cost-synergies) and revenues (revenues-enhancement synergies) that justify a given premium.

$$\%SynC = \frac{\Pi}{1-\Pi} \times (\%P - \%SynR)$$

According to the formula above, if there were only cost-synergies (revenues – enhancement synergies are equal to zero), costs would have to be 3.37%, to justify the real acquisition premium (21%). On the other hand, if there were only revenues-enhancement synergies (cost-synergies are equal to zero) they should have to be 21%.

Those values give us the coordinates for the Meet-the-Premium Line.

Figure 31 - Meet-the-Premium Line



To compute the expectable synergies to evaluate if there is enough synergy mix to justify the premium offered, it was assumed the existence of revenues-enhancement with a CAGR (2010-2015) of 2% and that %SynR is equal to the percentage average of the additional value in revenues enhancement synergies from the merger by Cadbury's revenues from 2010 to 2015, discounted by Cadbury's WACC. The same process was made for computing %SynC. (Appendix 29)

At last, the "plausible box"- that is a hypothetical range that provides supporting evidence, as a "sanity check tool" given different combinations of costs and revenues synergies – was set at 10%.

According to the graphic, the synergy mix of cost and revenue synergies is sufficient enough compensate the premium paid (the expectable synergies are above the line). However, the combination of required synergies may not be probable, according to the "plausible box", meaning that is important to review the determinants of the synergy mix

As it is possible to observe in the Capabilities/Market Access Matrix (Sirower& Sahnim, 2006), with the merger of Kraft Foods and Cadbury, Kraft Foods is the firm that is going to benefit more in terms of value creation by synergies, as already was mentioned.

In general terms, Snacks*[61], Cheese, Grocery and Convenient Meals are consumer segments that will not change in terms of capabilities, since their R&D, product design, product portfolio, cost structure and supply chain will maintain as before. Of course, it is important to highlight that those consumer segments will also benefit from synergies, but no considerable changes are expected from capabilities. In case of Market Access, those consumer segments will benefit from the merger, since they will have better sales force, third-party relationships, brand, channel power and new geographies. The impact of the access to new geographies is the most significant improvement and it is the strategy behind Kraft Foods real interest in Cadbury, as it was already mentioned in Section 12, and it is possible to observe in the Geographies Matrix (Figure 36).

Figure 32 - Capabilities / Market Access Matrix

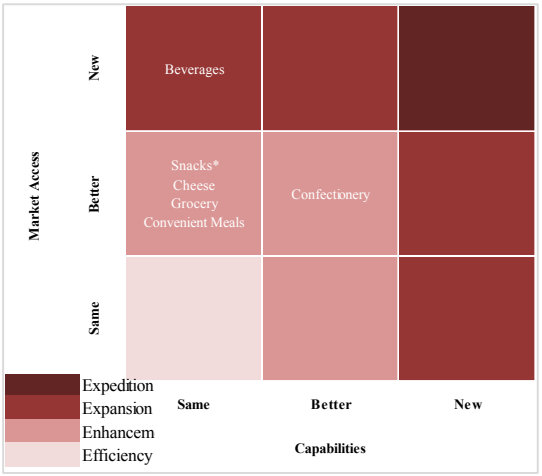
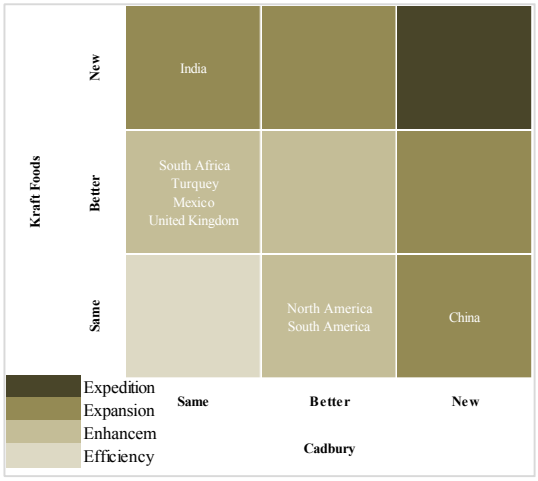


Figure 33 - Geographies Matrix



20.4. Mode of Acquisition

According to the literature[62], an acquisition can take several forms resulting in different outcomes.

In this case, it is suggested to Kraft Foods acquires Cadbury through a tender offer, where Kraft Foods commits itself publicly to buy Cadbury's outstanding shares at a specific price.

[61] * Snacks in this case do not include confectionery.
[62] Damodaran (2002)

Since both firms belong to the same industry, this acquisition is considered a horizontal merger. Both firms benefit if the acquisition is friendly, in terms of acculturation process, and for that Kraft Foods' proposal offer for Cadbury, should be higher enough to send a friendly message to Cadbury's board.

20.5. Method of Payment

Literature indicates that is possible to finance a M&A through cash, stock or a mix of cash and stock, however the finance type have a significant influence in M&A profitability, since it sends different messages to the market, because the market tend to understand the method of payment as how much confidence the acquirer has in the deal. In this case, Kraft Foods should finance the acquisition in a way that sends to the markets a confidence signal and at the same a friendly signal to Cadbury to avoid a hostile takeover.

Presently, Kraft Foods is undervalued, meaning that issuing new shares to finance the acquisition will result in a dilution (the issuing price will devalue comparing with the fair value). Because of this, Kraft Foods will avoid to pay with stock.

To pass a confidence level to the deal, Kraft Foods should finance the deal with cash or with a mix of cash and stock, according to the merger's capital structure.

20.6. Kraft Foods' Offer Details

Kraft Foods is going to pay 21% of premium over Cadbury's Enterprise Value and pretends to pay primarily in cash. Cadbury's acquisition price of $ 18.10 billion corresponds to an offer of $13.25 (£7.93) per share.

This acquisition is going to be paid with cash and debt more specifically with 88% of Debt and 12% with cash. This value of cash amounts to $2.2 billion and corresponds to an emission of almost 90 million new shares – conversion rate corresponds to Kraft Foods' price target ($30.39 per share). The value of debt corresponds to $15.90 billion.

21. Conclusion

Despite Food & Beverage Industry being a non-cyclical industry, it is a highly competitive one, where players compete for price, quality, innovation, brand recognition and loyalty. Due to the bargaining power of costumers, Food market players suffer high pressure to reduce its prices, to maintain market-share, as well as efficiency and at the same time, satisfy the costumers' expectations and preferences.

Also, due to the economic instability that is plaguing developed countries consumer spending is declining. At the same time, in developing countries, the income level is increasing making those countries highly attractive for Food market players as a key to gaining market-share and to increase profits, since developed countries are stagnant.

In this context, Kraft Foods believe that acquiring Cadbury, a firm that has market-share in more than 60 countries with a CAGR (2003-2005) in emerging markets of 12% , it is a profitable strategy to have access to new markets taking advantage of Cadbury's capabilities and distribution channels. Also, Kraft Foods pretends to benefit from Cadbury's brand recognition into its products.

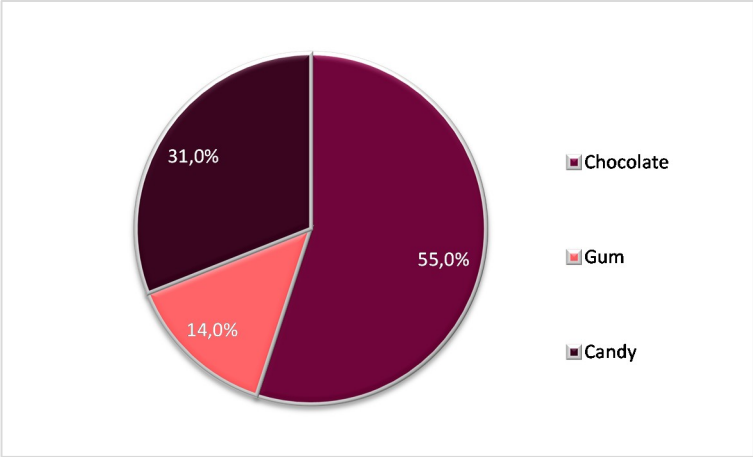
Together, Kraft Foods and Cadbury will become the largest manufacturer and packager food products in the world. Benefiting from economies of scale, Kraft Foods will be more efficient and better price competitive than its competitors. Kraft Foods' beverage consumer segment will increase in market share and in profits through Cadbury's connection with India, where Kraft Foods finally will be able to sell its own drink products. This merger will generate synergies in costs, revenues and also financial synergies.

Cost synergies are the most reliable source of synergies and in this particularly case, account for 50% of the total synergies created. On the other hand, revenues-enhancement synergies are difficult to evaluate since they are very unpredictable. To compute the value of synergy no revenues-enhancement were taking into account. However, for plotting the Meet-the-Premium Line, it was assumed a revenue-enhancement with a CAGR (2010-2015) of 2%.

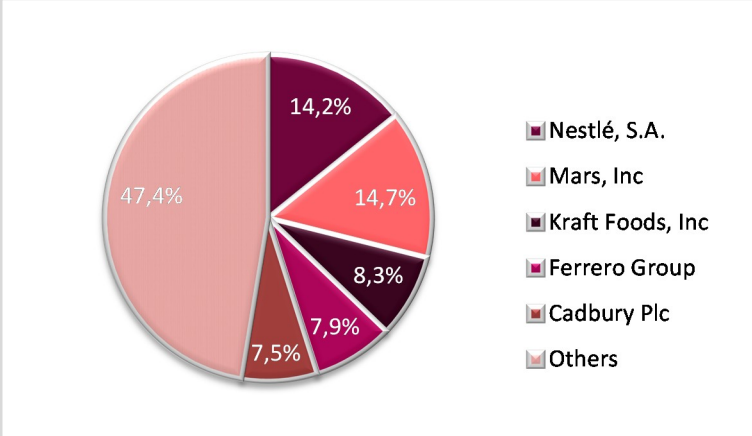
Kraft Foods should acquire Cadbury through a tender offer. The synergies are valued in $4.26 billion and Kraft Foods should pay £7.93 for each Cadbury's shares. Kraft Foods should pay 88% in Debt and 12% in Cash through an emission of almost 90 million new shares.

Appendix

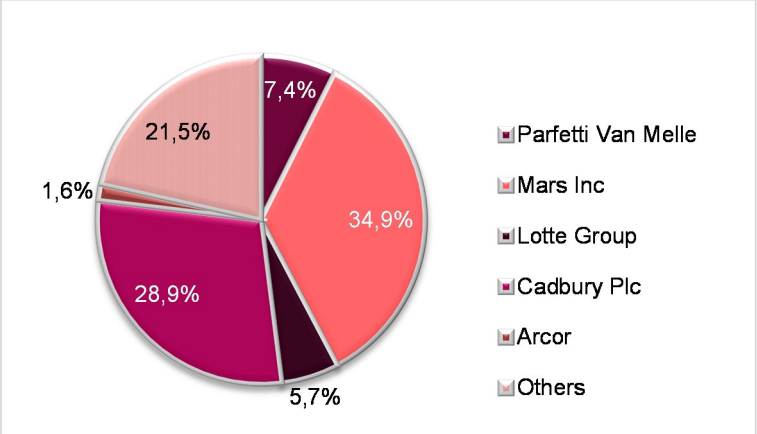
Appendix 1 - Confectionery Market Share



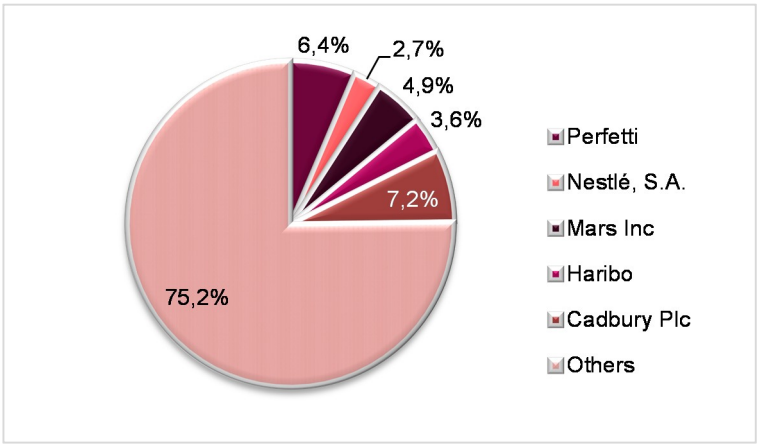
Appendix 2 - Chocolate Market Share



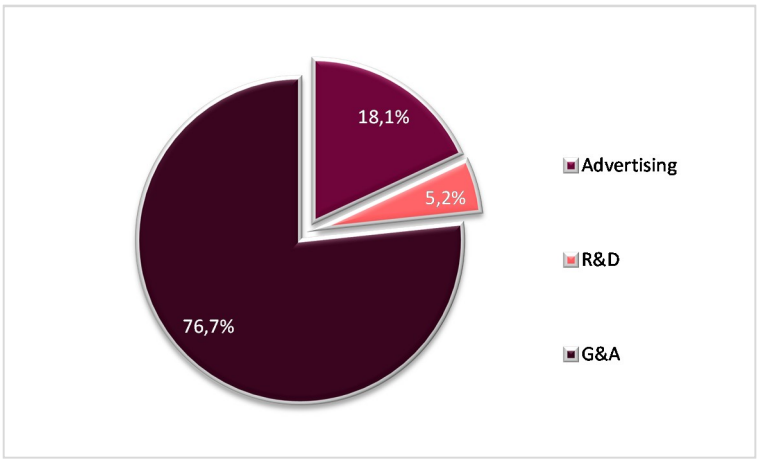
Appendix 3 - Gum Market Share



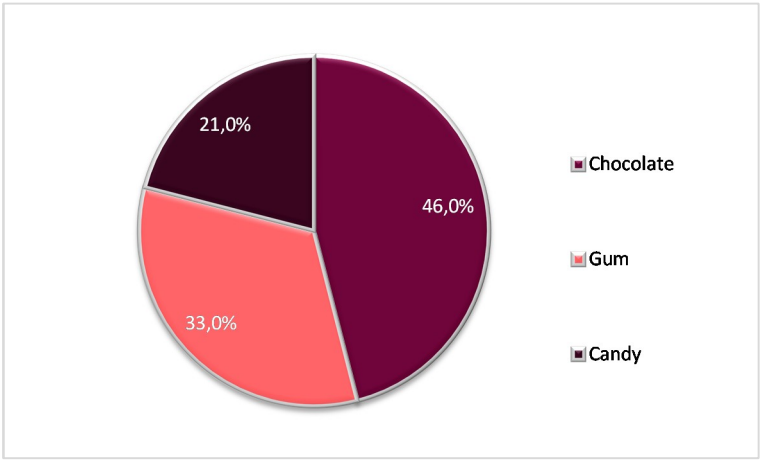
Appendix 4 - Sugar Market Share



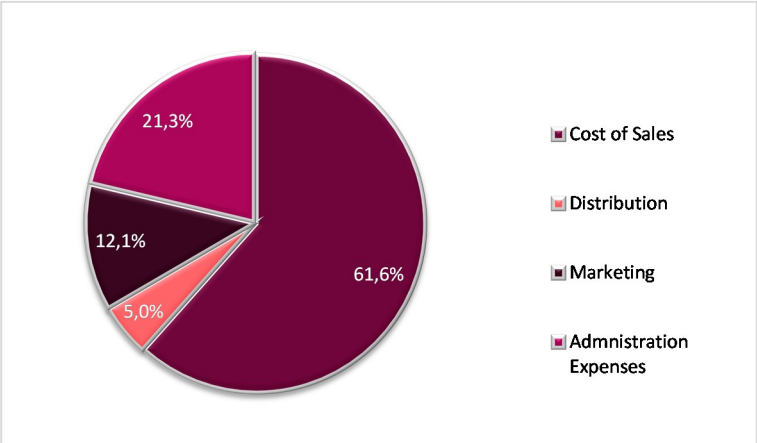
Appendix 5 - Kraft Foods' Operating Costs



Appendix 6 - Cadbury's Revenues by Consumer Segment



Appendix 7 - Cadbury's Operating Costs



Appendix 8 - Kraft Foods' Income Statement

Kraft Foods Income Statement (in million $)

	2005	2006	2007	2008	2009*	2005-2008 CAGR %	2010E	2011E	2012E	2013E	2014E	2015E	2009-2015 CAGR %
Net Revenues	**32 779**	**33 018**	**35 858**	**41 932**	**40 396**	***11,0%***	**40 781**	**41 735**	**42 241**	**43 195**	**43 680**	**44 771**	***1,9%***
North America													
Snacks			5 704	5 951	5 929	*2,0%*	5 959	6 048	6 078	6 139	6 200	6 448	*1,6%*
Beverages			3 499	3 509	3 545	*0,7%*	3 570	3 595	3 598	3 602	3 606	3 631	*0,3%*
Cheese			5 199	5 525	4 980	*-2,1%*	4 955	4 931	4 926	4 931	4 936	4 940	*-0,1%*
Grocery			3 138	3 211	3 136	*0,0%*	3 120	3 136	3 152	3 167	3 183	3 199	*0,5%*
Convenient Meals			5 336	5 760	6 072	*6,7%*	6 193	6 317	6 380	6 508	6 638	6 837	*2,0%*
Total			**22 876**	**23 956**	**23 662**	***1,7%***	**23 798**	**24 027**	**24 134**	**24 347**	**24 563**	**25 056**	***1,0%***
Europe													
Snacks			2 833	5 291	4 776	*29,8%*	4 752	4 847	4 896	4 994	5 094	5 348	*2,4%*
Beverages			2 456	2 625	2 390	*-1,4%*	2 276	2 265	2 242	2 220	2 231	2 242	*-0,3%*
Cheese			1 019	1 109	972	*-2,3%*	967	972	967	972	977	982	*0,3%*
Grocery			363	394	369	*0,8%*	362	364	365	367	369	371	*0,5%*
Convenient Meals			336	309	261	*-11,9%*	274	288	294	299	305	311	*2,6%*
Total			**7 007**	**9 728**	**8 768**	***11,9%***	**8 631**	**8 735**	**8 764**	**8 853**	**8 976**	**9 255**	***1,4%***
Developing Markets													
Snacks			2 824	4 668	4 337	*23,9%*	4 684	5 059	5 413	5 846	5 963	5 993	*5,1%*
Beverages			1 830	2 081	2 094	*7,0%*	2 199	2 419	2 419	2 612	2 612	2 873	*5,5%*
Cheese			710	828	844	*9,0%*	886	895	904	913	922	931	*1,0%*
Grocery			519	567	566	*4,4%*	583	600	606	625	643	663	*2,6%*
Convenient Meals			92	104	115	*11,8%*	123	132	141	155	170	188	*8,8%*
Total			**5 975**	**8 248**	**7 956**	***15,39%***	**8 352**	**8 973**	**9 342**	**9 996**	**10 140**	**10 460**	***4,6%***
Cost of Sales	**21 115**	**21 190**	**23 656**	**28 088**	**25 786**	**-**	**26 508**	**27 128**	**27 456**	**28 077**	**28 392**	**29 101**	**-**
% of Revenues	64%	64%	66%	67%	64%	-	65%	65%	65%	65%	65%	65%	-
Gross Profit	**11 664**	**11 828**	**12 202**	**13 844**	**14 600**	**-**	**14 273**	**14 607**	**14 784**	**15 118**	**15 288**	**15 670**	**-**
Marketing	1 314	1 396	1 471	1 639	1 648	-	1 763	1 887	1 962	2 041	2 122	2 250	-
G&A	5 436	5 434	5 674	6 725	6 983	-	7 053	7 264	7 482	7 632	7 785	8 018	-
R&D	385	419	442	498	477	-	496	526	557	585	615	645	-
Total	**7 135**	**7 249**	**7 587**	**8 862**	**9 108**	**-**	**9 312**	**9 677**	**10 002**	**10 258**	**10 522**	**10 913**	**-**
Asset Impairment and Exit Costs	479	1 062	440	1 024	-64	-	500	500	500	500	500	500	-
(Gains)/Losses on Net divestitures	-108	-117	-14	92	6	-	-50	-50	-50	-50	-50	-50	-
Amortization of Intangibles	10	7	13	23	26	-	15	15	15	15	15	15	-
Operating Income	**4 373**	**4 158**	**4 176**	**3 843**	**5 524**	**-**	**4 496**	**4 465**	**4 317**	**4 395**	**4 301**	**4 291**	***3,2%***
EBITDA	4 529	4 579	4 615	4 982	5 492	-	4 961	4 930	4 782	4 860	4 766	4 757	*-0,8%*
EBITDA Margin	14%	14%	13%	12%	14%	-	12%	12%	11%	11%	11%	11%	-
Interest and other expense, net	635	510	604	1 240	1 237	-	953	949	944	940	935	928	-
Earnings from continuing operations before income taxes	**3 738**	**3 648**	**3 572**	**2 603**	**4 287**	**-**	**3 543**	**3 516**	**3 373**	**3 455**	**3 366**	**3 364**	**-**
Provision for income taxes	1 066	816	1 080	755	1 259	-	1 116	1 107	1 062	1 088	1 060	1 060	-
Earnings from continuing operations	**2 672**	**2 832**	**2 492**	**1 848**	**3 028**	**-**	**2 427**	**2 408**	**2 310**	**2 367**	**2 306**	**2 304**	**-**

Appendix 9 - Kraft Foods' Balance Sheet

Balance Sheet (in millions $)

	2005	2006	2007	2008	2009	2010E	2011E	2012E	2013E	2014E	2015E
Assets											
Cash and Cash Equivalents	316	239	567	1 244	2 101	2 206	2 316	2 432	2 554	2 681	2 816
Receivables	3 385	3 869	5 197	4 704	5 197	5 561	5 950	6 426	7 004	7 635	8 322
Inventories, net	3 343	3 506	4 096	3 881	3 775	3 851	3 889	3 928	4 006	4 287	4 630
Deferred Income Taxes	879	387	575	804	730	730	730	730	730	730	730
Other Current Assets	230	253	302	828	651	651	651	651	651	651	651
Total Current Assets	**8 153**	**8 224**	**10 737**	**11 461**	**12 454**	**13 048**	**13 588**	**14 223**	**15 005**	**16 048**	**17 216**
Property, Pland and Equipment, net	16 598	17 357	10 778	9 917	10 693	10 907	11 125	11 236	11 349	11 462	11 577
Goodwill	24 648	25 553	31 193	27 581	28 764	29 339	29 926	30 225	30 528	30 833	31 141
Intangible Assets, net	10 516	10 177	12 200	12 926	13 429	13 698	13 972	14 111	14 252	14 395	14 539
Prepaid Pension Assets	3 617	1 168	1 648	56	115	300	300	300	300	300	300
Other Assets	877	729	1 437	1 232	1 259	1 259	1 259	1 259	1 259	1 259	1 259
Total Assets	**57 628**	**55 574**	**67 993**	**63 173**	**66 714**	**68 551**	**70 170**	**71 354**	**72 692**	**74 297**	**76 032**
Liabilities											
Short-term Borrowings	805	1 715	7 385	897	453	498	548	603	663	730	803
Current Portion of Long-term Debt	1 268	1 418	722	765	513	523	534	539	544	550	555
Accounts Payable	2 270	2 602	4 065	3 373	3 766	4 030	4 352	4 744	5 265	5 897	6 664
Accrued Marketing	1 529	1 626	1 833	1 803	2 181	2 268	2 359	2 453	2 551	2 654	2 760
Accrued Employment Costs	625	750	913	951	1 175	1 410	1 424	1 438	1 452	1 467	1 482
Other Current Liabilities	1 338	1 559	1 654	3 255	3 403	3 823	3 772	3 338	3 361	3 379	3 390
Total Current Liabilities	**7 860**	**9 699**	**16 613**	**11 044**	**11 491**	**12 588**	**13 027**	**13 156**	**13 882**	**14 725**	**15 707**
Long-term Debt	8 475	7 081	12 902	18 589	18 024	18 384	18 752	18 940	19 129	19 320	19 514
Deferred Income Taxes	6 067	3 930	4 876	4 064	4 508	4 508	4 508	4 508	4 508	4 508	4 508
Accrued Pension Costs	0	1 022	810	2 367	1 765	1 783	1 800	1 818	1 837	1 855	1 874
Accrued Postretirement health care costs	1 931	3 014	2 846	2 678	2 816	2 844	2 873	2 901	2 930	2 960	2 989
Other Liabilities	2 838	1 499	2 178	2 075	2 138	2 138	2 138	2 138	2 138	2 138	2 138
Total Liabilities	**28 035**	**27 019**	**40 698**	**40 817**	**40 742**	**42 311**	**43 180**	**43 577**	**44 584**	**45 851**	**47 242**
Equity											
Common Stock, no par value	0	0	0	0	0	0	0	0	0	0	0
Additional paid-in capital	23 835	23 626	23 445	25 563	23 611	23 611	23 611	23 611	23 611	23 611	23 611
Retained Earnings	9 453	11 128	12 209	13 440	14 636	15 000	15 750	16 538	16 868	17 206	17 550
Accumulated other comprehensive losses	-1 663	-3 069	-1 835	-5 994	-3 955	-3 955	-3 955	-3 955	-3 955	-3 955	-3 955
Treasury Stocks, at cost	-2 032	-3 130	-6 524	-8 714	-8 416	-8 416	-8 416	-8 416	-8 416	-8 416	-8 416
Total Equity	**29 593**	**28 555**	**27 295**	**22 356**	**25 972**	**26 240**	**26 990**	**27 778**	**28 108**	**28 446**	**28 790**
Total Liabilities and Equity	**57 628**	**55 574**	**67 993**	**63 173**	**66 714**	**68 551**	**70 170**	**71 354**	**72 692**	**74 297**	**76 032**

Appendix 10 - Kraft Foods Net Debt and WC

Cash and Cash Equivalents											
	2005	2006	2007	2008	2009	2010E	2011E	2012E	2013E	2014E	2015E
Long-term Debt	8 475	7 081	12 902	18 589	18 024	18 384	18 752	18 940	19 129	19 320	19 514
Short-term Debt	805	1 715	7 385	897	453	498	548	603	663	730	803
Debt	9 280	8 796	20 287	19 486	18 477	18 883	19 300	19 543	19 792	20 050	20 316
Cash and Cash Equivalents	316	239	567	1 244	2 101	2 206	2 316	2 432	2 554	2 681	2 816
Net Debt	8 964	8 557	19 720	18 242	16 376	16 677	16 984	17 110	17 239	17 368	17 501
Interest/Net Debt	7,08%	5,96%	3,06%	6,80%	7,55%	6,34%	6,34%	6,34%	6,34%	6,34%	6,34%

Working Capital											
	2005	2006	2007	2008	2009	2010E	2011E	2012E	2013E	2014E	2015E
Inventories	3 343	3 506	4 096	3 881	3 775	3 851	3 889	3 928	4 006	4 287	4 630
Trade Receivables	3 385	3 869	5 197	4 704	5 197	5 561	5 950	6 426	7 004	7 635	8 322
Trade Payables	2 270	2 602	4 065	3 373	3 766	4 030	4 352	4 744	5 265	5 897	6 664
WC	4 458	4 773	5 228	5 212	5 206	5 382	5 487	5 610	5 745	6 024	6 288
Change WC	n.a.	315	455	-16	-6	176	105	123	135	279	263

Appendix 11 - Kraft Food's Data

Cost of Equity (L)	7,19%
Cost of Equity (U)	6,27%
Cost of Debt	5,84%
Beta (L)	0,74
Beta (U)	0,54
Risk-Free	3,84%
Total Risk Premium	4,50%
Risk Premium	4,50%
Country Risk Premium	0%
Default Spread	2,00%
Credit Rating	Baa2
Taxes	31,50%

Target D/E	55%
Target D/D+E	36%
WACC	6,05%
Growth Rate	2,50%
Bear Growth Rate	2,20%
Bull Growth Rate	2,80%
CFD	50,0%
Prob. Of Default	13,3%

Market Values (2009)	
Equity	$ 39 688
Net Debt	$ 16 376
D/E	41%

Book Values (2009)	
Equity	$ 25 972
Net Debt	$ 16 376
D/E	63%

Shares*	1 482
Price	$ 26,78

* Millions

9th November of 2009

Appendix 13 - Kraft Foods' FCFF Base Case

Free Cash Flow(in millions of $)											
	2005	2006	2007	2008	2009	2010E	2011E	2012E	2013E	2014E	2015E
EBIT	4 373	4 158	4 176	3 843	5 524	4 496	4 465	4 317	4 395	4 301	4 291
(-) Income Taxes			1 366	964	1 025	1 116	1 107	1 062	1 088	1 060	1 060
(+) Amortization and Depreciation	869	884	873	963	905	866	883	891	900	909	918
(-) Change in WC	0	315	455	-16	-6	661	144	170	198	355	356
(-) Capex	1 171	1 169	1 241	1 367	1 330	1 357	1 384	1 411	1 440	1 468	1 498
FCFF	4 071	3 558	1 987	2 491	4 080	2 228	2 712	2 564	2 570	2 326	2 296

Discount Cash Flow (in millions of $)											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
FCFF	4 071	3 558	1 987	2 491	4 080	2 228	2 712	2 564	2 570	2 326	2 296
Terminal Value											66 209
Present Value @ WACC						2 228	2 557	2 280	2 154	1 839	51 059
					Base Case DFC Value	$ 62 117					

Appendix 12 - Kraft Foods' APV

Adjusted Present Value (in millions of $)											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
FCFF						2 228	2 712	2 564	2 570	2 326	2 296
Terminal Value											62 431
Present Value @ WACC						2 228	2 552	2 270	2 141	1 824	47 756
					Base Case Value	$ 58 772					

Evaluate Financing Side Effects											
Interest Tax Shield						300	299	297	296	294	292
Terminal Value											7 752
Present Value						300	281	263	247	231	5 935
					Total PV ITS	$ 7 258					

Financial Distress Costs	
Value Unlevered	58 772
PV(ITS)	7 258
PV(EBC)	3 918
Enterprise Value	62 111

Appendix 14 - Kraft Foods' Bull Case (WACC and APV)

Free Cash Flow (in millions)											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
EBIT	4 373	4 158	4 176	3 843	5 524	5 305	5 332	5 267	5 237	5 130	5 075
(-) Income Taxes			1 366	964	1 025	1 116	1 107	1 062	1 088	1 060	1 060
(+) Amortization and Depreciation	869	884	873	963	905	866	883	891	900	909	918
(-) Change in WC	0	315	455	-16	-6	661	144	170	198	355	356
(-) Capex	1 171	1 169	1 241	1 367	1 330	1 357	1 384	1 411	1 440	1 468	1 498
FCFF	**4 071**	**3 558**	**1 987**	**2 491**	**4 080**	**3 037**	**3 553**	**3 579**	**3 441**	**3 263**	**3 135**

Discount Cash Flow (in millions)											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
FCFF	4 071	3 558	1 987	2 491	4 080	3 037	3 553	3 579	3 441	3 263	3 135
Terminal Value											96 306
Present Value @ WACC						3 037	3 350	3 182	2 885	2 579	74 116
					Base Case DFC Value	**$ 89 148**					

Adjusted Present Value (in millions)											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
FCFF	4 071	3 558	1 987	2 491	4 080	3 037	3 553	3 579	3 441	3 263	3 135
Terminal Value											92 864
Present Value @ WACC						3 037	3 343	3 169	2 867	2 558	70 829
					Base Case APV	**$ 85 803**					

Evaluate Financing Side Effects											
Interest Tax Shield	165	157	363	336	301	300	299	297	296	294	292
Terminal Value											8 658
Present Value						300	281	263	247	231	6 604
					Total PV ITS	**$ 7 926**					

Financial Distress Costs	
Value Unlevered	85 803
PV(ITS)	7 926
P(D)xCFD	5 720
Enterprise Value	**$ 88 009**

Appendix 15 - Kraft Foods' Bear Case (FCFF and APV)

Free Cash Flow (in millions)											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
EBIT	4 373	4 158	4 176	3 843	5 524	4 322	4 280	4 252	4 375	4 280	4 396
(-) Income Taxes			1 366	964	1 025	1 116	1 107	1 062	1 088	1 060	1 060
(+) Amortization and Depreciation	869	884	873	963	905	866	883	891	900	909	918
(-) Change in WC	0	315	455	-16	-6	661	144	170	198	355	356
(-) Capex	1 171	1 169	1 241	1 367	1 330	1 357	1 384	1 411	1 440	1 468	1 498
FCFF	**4 071**	**3 558**	**1 987**	**2 491**	**4 080**	**2 054**	**2 527**	**2 499**	**2 549**	**2 305**	**2 400**

Discount Cash Flow (in millions)											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
FCFF	4 071	3 558	1 987	2 491	4 080	2 054	2 527	2 499	2 549	2 305	2 400
Terminal Value											63 638
Present Value @ WACC						2 054	2 383	2 222	2 137	1 822	49 220
					Base Case DFC Value	**$ 59 838**					

Adjusted Present Value (in millions)											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
FCFF	4 071	3 558	1 987	2 491	4 080	2 054	2 527	2 499	2 549	2 305	2 400
Terminal Value											58 977
Present Value @ WACC						2 054	2 378	2 213	2 124	1 807	45 285
					Base Case Value	**$ 55 860**					

Evaluate Financing Side Effects											
Interest Tax Shield	165	157	363	336	301	300	299	297	296	294	292
Terminal Value											7 181
Present Value						300	281	263	247	231	5 514
					Total PV ITS	**$ 6 836**					

Financial Distress Costs	
Value Unlever	55 860
PV (ITS)	6 836
P(D)xCFD	3 724
Enterprise Value	**$ 58 973**

Appendix 16 – Kraft Foods' Cases

(in million)	Base Case	Bear Case	Bull Case
EV WACC	$ 62 117	$ 59 838	$ 89 148
EV APV	$ 62 111	$ 58 973	$ 88 009
Net Debt	$ 16 376	$ 16 376	$ 16 376
Equity WACC	$ 45 741	$ 43 462	$ 72 772
Equity APV	$ 45 735	$ 42 597	$ 71 633

Target Price	$ 30,86	$ 29,33	$ 49,10
	$ 30,86	$ 28,74	$ 48,34

Appendix 17 - Cadbury's Income Statement

Cadbury Income Statement (million of £)	2007	2008	2009*	2007-2008 CAGR %	2010E	2011E	2012E	2013E	2014E	2015E	2010-2015 CAGR %
Revenues	**4 699**	**5 384**	**5 975**	**12,8%**	**6 160**	**6 383**	**6 698**	**7 088**	**7 502**	**7 942**	**5%**
BIMA	1 579	1 672	1 820	7,4%	1 893	1 950	2 047	2 149	2 257	2 392	5%
% Change Y/Y	-	*5,9%*	*8,9%*		*4,0%*	*3,0%*	*5,0%*	*5,0%*	*5,0%*	*6,0%*	
Europe	879	1 097	1 117	12,7%	1 128	1 162	1 208	1 269	1 332	1 399	4%
% Change Y/Y	-	*24,8%*	*1,8%*		*1,0%*	*3,0%*	*4,0%*	*5,0%*	*5,0%*	*5,0%*	
Americas	1 372	1 631	1 826	15,4%	1 899	1 994	2 114	2 262	2 420	2 613	7%
% Change Y/Y	-	*18,9%*	*12,0%*		*4,0%*	*5,0%*	*6,0%*	*7,0%*	*7,0%*	*8,0%*	
Pacific-Asia	860	1 002	1 204	18,3%	1 240	1 277	1 328	1 408	1 493	1 537	4%
% Change Y/Y	-	*16,5%*	*20,2%*		*3,0%*	*3,0%*	*4,0%*	*6,0%*	*6,0%*	*3,0%*	
Central	9	9	8	-5,7%	8	8	8	8	8	8	0%
Cost of Sales	**2 504**	**2 870**	**3 210**	**13,2%**	**3 326**	**3 447**	**3 617**	**3 828**	**4 051**	**4 289**	**5%**
% COGS margin	*53%*	*53%*	*54%*	-	*54%*	*54%*	*54%*	*54%*	*54%*	*54%*	
Gross Profit	**2 195**	**2 514**	**2 765**	**12,2%**	**2 834**	**2 936**	**3 081**	**3 261**	**3 451**	**3 653**	**5%**
Trading Costs	**1 754**	**1 933**	**2 005**	**6,9%**	**2 133**	**2 286**	**2 472**	**2 689**	**2 908**	**3 133**	**8%**
Distribution	241	247	262	4,3%	270	281	292	306	322	338	4,6%
Marketing	487	584	629	13,6%	704	789	892	1 016	1 138	1 275	12,6%
Administration	1 008	1 098	1 110	4,9%	1 154	1 212	1 285	1 362	1 444	1 516	5,6%
Amortization of definitive life acquisition intagible	5	4	4	-	4	4	4	4	4	4	-
Impairment Goodwill	13	0	0	-	0	0	0	0	0	0	-
Restructuring Costs	165	194	0	-	0	0	0	0	0	0	-
Non-Trading Itens	2	1	0	-	0	0	0	0	0	0	-
Profit from Operations	**278**	**388**	**808**	**-**	**705**	**654**	**613**	**576**	**547**	**525**	**-**
EBITDA	281	394	811	-	709	658	617	580	551	529	-
EBITDA Margin %	*6%*	*7%*	*14%*	-	*11%*	*10%*	*9%*	*8%*	*8%*	*7%*	-
Share of Results in Associates	8	10	7	-	8	8	8	8	8	8	-
Profit before Financing andTaxation (EBIT)	**286**	**398**	**815**	**-**	**713**	**662**	**621**	**584**	**555**	**533**	**-**
Investment Revenue	56	52	33	-	33	31	28	26	23	21	-
Finance Costs	-88	-50	-134	-	-90	-90	-91	-91	-92	-92	-
Profit Before Taxation	**254**	**400**	**714**	**-**	**656**	**603**	**558**	**518**	**487**	**462**	**-**
Taxation	-105	-30	-197	-	-184	-169	-156	-145	-136	-129	-
Profit from the period from continuing operations	**149**	**370**	**517**	**-**	**472**	**434**	**402**	**373**	**350**	**332**	**-**

Appendix 18 - Cadbury's Balance Sheet

Cadbury Balance Sheet (in million of £)

	2007	2008	2009	2010E	2011E	2012E	2013E	2014E	2015E
Assets									
Non-Current Assets	**8 667**	**5 990**	**5 996**	**5 946**	**5 956**	**5 966**	**5 985**	**6 005**	**6 024**
Goodwill	2 805	2 288	2 176	2 176	2 176	2 176	2 176	2 176	2 176
Acquisition of Intangibles	3 378	1 598	1 518	1 518	1 518	1 518	1 518	1 518	1 518
Software and other Intangibles	149	87	108	109	109	110	110	111	111
Property, Land and Equipment	1 904	1 761	1 859	1 868	1 878	1 887	1 906	1 925	1 944
Investment in Associates	32	28	28	28	28	28	28	28	28
Investment in Subsidiaries	0	0	0	0	0	0	0	0	0
Deferred Tax Assets	124	181	241	190	190	190	190	190	190
Retirement Benefit Assets	223	17	0	0	0	0	0	0	0
Trade and other receivables	50	26	55	55	55	55	55	55	55
Other Investments	2	2	1	2	2	2	2	2	2
Current Assets	**2 600**	**2 635**	**2 125**	**2 407**	**2 463**	**2 540**	**2 642**	**2 674**	**2 786**
Inventories	821	767	748	801	830	871	921	900	953
Short-term Investments	79	106	29	30	32	36	41	49	56
Trade and other receivables	1 197	1 067	978	1 013	1 049	1 101	1 165	1 233	1 306
Tax recoverable	41	35	42	42	42	42	42	42	42
Cash and Cash Equivalents	416	390	237	226	215	195	178	154	134
Derivative Financial Instruments	46	268	91	100	100	100	100	100	100
Assets held for sale	71	270	8	135	135	135	135	135	135
Total Assets	**11 338**	**8 895**	**8 129**	**8 353**	**8 419**	**8 505**	**8 627**	**8 679**	**8 811**
Liabilities									
Current Liabilities	**4 614**	**3 388**	**2 434**	**2 340**	**2 395**	**2 459**	**2 543**	**2 633**	**2 730**
Trade and other payables	1 701	1 551	1 577	1 519	1 574	1 651	1 748	1 850	1 958
Tax payable	197	328	226	250	250	250	250	250	250
Short-term borrowings and overdrafts	2 562	1 189	267	280	280	267	254	242	231
Short-term provisions	111	150	269	170	170	170	170	170	170
Obligations under financial leases	21	1	1	1	1	1	1	1	1
Derivative financial instruments	22	169	94	120	120	120	120	120	120
Non-Current Liabilities	**2 533**	**1 876**	**2 173**	**2 430**	**-461**	**2 309**	**-468**	**2 364**	**-386**
Trade and Other Receivables	37	61	65	246	187	125	180	180	262
Borrowings	1 120	1 194	1 349	1 416	-1 416	1 416	-1 416	1 416	-1 416
Retirement benefit obligations	143	275	504	500	500	500	500	500	500
Tax Payable	16	6	4	4	4	4	4	4	4
Deferred tax Liabilities	1 145	121	163	163	163	163	163	163	163
Long-term provisions	61	218	84	100	100	100	100	100	100
Obligations under financial leases	11	1	1	1	1	1	1	1	1
Derivative financial instruments	0	0	3	0	0	0	0	0	0
Total Liabilities	**7 165**	**5 361**	**4 607**	**-4 844**	**-4 910**	**-5 025**	**-5 290**	**-5 486**	**-5 766**
Equity									
Share Capital	264	136	137	137	137	137	137	137	137
Share Premium account	1225	38	97	97	97	97	97	97	97
Other reserves	-4	850	654	654	654	625	482	654	654
Retained Earnings	2677	2498	2614	2614	2614	2614	2614	2298	2150
Equity (Parent)	4162	3522	3502	3502	3502	3473	3330	3186	3038
Minority Interests	11	12	20	7	7	7	7	7	7
Total Equity	**4 173**	**3 534**	**3 522**	**3 509**	**3 509**	**3 480**	**3 337**	**3 193**	**3 045**
Total Liabilities and Equity	**11 338**	**8 895**	**8 129**	**8 353**	**8 419**	**8 505**	**8 627**	**8 679**	**8 811**

Appendix 19 - Cadbury's Net Debt and WC

Net Debt	2007	2008	2009	2010E	2011E	2012E	2013E	2014E	2015E
Long-term Debt	1 120	1 194	1 349	1 416	1 416	1 416	1 416	1 416	1 416
Short-term Debt	2 562	1 189	267	280	280	267	254	242	231
Debt	3 682	2 383	1 616	1 697	1 697	1 683	1 671	1 659	1 647
Cash and Cash Equivalents	416	390	237	226	215	195	178	154	134
Net Debt	3 266	1 993	1 379	1 471	1 482	1 488	1 493	1 504	1 513
Interest/Net Debt	2,69%	2,51%	9,72%	6,10%	6,10%	6,10%	6,10%	6,10%	6,10%

Working Capital	2007	2008	2009	2010E	2011E	2012E	2013E	2014E	2015E
Inventories	821	767	748	801	830	871	921	900	953
Trade Receivables	1 197	1 067	978	1 013	1 049	1 101	1 165	1 233	1 306
Trade Payables	-1 701	-1 551	-1 577	-1 519	-1 574	-1 651	-1 748	-1 850	-1 958
WC	317	283	149	295	305	320	339	284	300
Change WC	n.a.	-34	-134	146	11	15	19	-55	17

Appendix 20 - Cadbury's Data

Cost of Equity (L)	7,89%
Cost of Equity (U)	6,85%
Cost of Debt	6,10%
Beta (L)	0,84
Beta (U)	0,61
Risk-Free	4,10%
Total Risk Premium	4,50%
Risk Premium	4,50%
Country Risk Premium	0,00%
Default Spread	2,00%
Credit Rating	Baa2
Taxes	28,00%

Target D/E	53%
Target D/D+E	33%
WACC	6,73%

Growth Rate	2,50%

CFD	50,0%
Prob. Of Default	8,3%

Market Values (2009)		
Market Capitalization	£ 10 354	$ 17 311
Net Debt	£ 1 379	$ 2 306
D/E	13%	13%

Book Values (2009)		
Equity	£ 3 522	$ 5 888
Net Debt	£ 1 379	$ 2 306
D/E	39%	39%

9th November of 2009

Shares	1 366
Share Price	£ 7,58

Appendix 21 - Cadbury's FCFF

Free Cash Flow (in millions of £)									
	2007	2008	2009	2010E	53%	2012E	2013E	2014E	2015E
EBIT	286	398	815	713	662	621	584	555	533
(-) Income Taxes	105	30	197	184	169	156	145	136	129
(+) Amortization and Depreciation	295	294	294	320	322	323	327	330	333
(-) Change in WC	0	-34	-134	146	11	15	19	-55	17
(-) Capex	352	500	408	404	340	342	345	349	352
FCFF	**124**	**196**	**638**	**300**	**465**	**431**	**401**	**455**	**368**

Discount Cash Flow (in millions of £)									
	2007	2008	2009	2010	2011	2012	2013	2014	2015
FCFF	124	196	638	300	465	431	401	455	368
Terminal Value									8 911
Present Value @ WACC				300	435	378	330	351	6 700

Base Case DFC Value	**£**	**8 495**

Appendix 22 - Cadbury's APV

Adjusted Present Value (in millions of £)									
	2007	2008	2009	2010	2011	2012	2013	2014	2015
FCFF	124	196	638	300	465	431	401	455	368
Terminal Value									8 672
Present Value @ WACC				300	435	378	329	349	6 492

Base Case Value	**£**	**8 283**

Evaluate Financing Side Effects								
Interest Tax Shield			25	25	25	26	26	26
Terminal Value								595
Present Value			25	24	22	21	20	446

Total PV ITS	**£**	**557**

Financial Distress Costs	
Value Unlevered	8 283
PV(ITS)	557
PV(EBC)	345
Enterprise Value	**£ 8 495**

Appendix 23 -Cadbury's Bear Case (FCFF and APV)

Free Cash Flow (in millions of £)									
	2007	2008	2009	2010E	2011E	2012E	2013E	2014E	2015E
EBIT	286	398	815	662	611	549	487	444	462
(-) Income Taxes	105	30	197	175	160	141	122	109	113
(+) Amortization and Depreciation	290	249	318	320	322	323	327	330	333
(-) Change in WC	0	-34	-134	146	11	15	19	-55	17
(-) Capex	352	500	408	410	412	414	418	422	427
FCFF	**119**	**151**	**662**	**252**	**351**	**302**	**254**	**297**	**239**

Discount Cash Flow (in millions of £)									
	2007	2008	2009	2010	2011	2012	2013	2014	2015
FCFF	119	151	662	252	351	302	254	297	239
Terminal Value									5 788
Present Value @ WACC				252	329	265	209	229	4 352
		Base Case DFC Value		**£ 5 637**					

Adjusted Present Value (in millions of £)									
	2007	2008	2009	2010	2011	2012	2013	2014	2015
FCFF	119	151	662	252	351	302	254	297	239
Terminal Value									5 495
Present Value @ WACC				252	328	265	209	228	4 118
		Base Case Value		**£ 5 400**					

Evaluate Financing Side Effects									
Interest Tax Shield	56	34	24	25	25	25	26	26	26
Terminal Value									595
Present Value				25	24	22	21	20	446
			Total PV ITS	**£ 557**					

Financial Distress Costs	
Value Unlevered	5 400
PV (ITS)	557
PV(EBC)	225
Enterprise Value	**£ 5 732**

Appendix 24 - Cadbury's Bull Case (FCFF and APV)

Free Cash Flow (in millions of £)									
	2007	2008	2009	2010E	2011E	2012E	2013E	2014E	2015E
EBIT	286	398	815	771	734	705	664	651	684
(-) Income Taxes	105	30	197	190	179	169	156	150	157
(+) Amortization and Depreciation	290	249	318	320	322	323	327	330	333
(-) Change in WC	0	-34	-134	0	146	11	15	19	-55
(-) Capex	352	500	408	410	412	414	418	422	427
FCFF	**119**	**151**	**662**	**491**	**319**	**435**	**401**	**389**	**488**

Discount Cash Flow (in millions of £)									
	2007	2008	2009	2010	2011	2012	2013	2014	2015
FCFF	119	151	662	491	319	435	401	389	488
Terminal Value									11 830
Present Value @ WACC				491	299	381	330	300	8 895
			Base Case DFC Value	**£ 10 696**					

Adjusted Present Value (in millions of £)									
	2007	2008	2009	2010	2011	2012	2013	2014	2015
FCFF	119	151	662	491	319	435	401	389	488
Terminal Value									11 231
Present Value @ WACC				491	299	381	329	298	8 416
			Base Case APV	**£ 10 214**					

Evaluate Financing Side Effects									
Interest Tax Shield	56	34	24	25	25	25	26	26	26
Terminal Value									595
Present Value				25	24	22	21	20	446
			Total PV ITS	**£ 557**					

Financial Distress Costs	
Value Unlevered	10 214
PV (ITS)	557
PV (EBC)	425
Enterprise Value	**£ 10 346**

Appendix 25 - Cadbury's Cases

(in million)	Base Case	Bear Case	Bull Case
EV WACC	£ 8 495	£ 5 637	£ 10 696
EV APV	£ 8 495	£ 5 732	£ 10 346
Net Debt	£ 1 379	£ 1 379	£ 1 379
Equity WACC	£ 7 116	£ 4 258	£ 9 317
Equity APV	£ 7 116	£ 4 353	£ 8 967
Target Price	£ 5,21	£ 3,12	£ 6,82
	£ 5,21	£ 3,19	£ 6,56

Appendix 26 - Merger With No Synergy Income Statement

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Net Revenues	32 779	33 018	43 714	50 979	50 386	52 115	53 468	54 521	56 160	57 360	59 224
Cost of Sales	21 115	21 190	27 842	32 886	31 153	32 069	32 890	33 457	34 410	35 072	36 174
Gross Profit	11 664	11 828	15 872	18 092	19 233	20 046	20 578	21 063	21 750	22 287	23 050
Distribution	0	0	403	413	438	451	469	488	512	538	565
Marketing	1 314	1 396	2 285	2 615	2 700	2 941	3 206	3 453	3 740	4 026	4 381
G&A	5 436	5 434	7 359	8 561	8 839	8 983	9 291	9 630	9 909	10 198	10 553
R&D	385	419	442	498	477	496	526	557	585	615	645
Amortization of definitive life acquisition intangible	10	7	21	30	33	22	22	22	22	22	22
Asset Impairment and Exit Costs	478	1 062	440	1 024	-64	500	500	500	500	500	500
Impairment Goodwill	-108	-117	7	92	6	-50	-50	-50	-50	-50	-50
Restructuring Costs			263	310	0	0	0	0	0	0	0
Non-trading itens			3	2	0	0	0	0	0	0	0
Shares of Results in Associates	0	0	13	16	11	13	13	13	13	13	13
Profit Before Financing and Taxation (EBIT)	4 889	5 517	5 528	6 764	6 677	7 590	7 501	7 350	7 419	7 326	7 321
Investment Revenue	0	0	94	87	55	55	52	47	43	39	36
Finance Costs	-635	-510	-751	-1 324	-1 461	-1 184	-1 182	-1 184	-1 188	-1 189	-1 188
Profit Before Taxation (EBT)	4 254	5 007	4 871	5 528	5 272	6 460	6 371	6 213	6 274	6 176	6 168
Taxation	1 340	1 577	1 534	1 741	1 661	2 035	2 007	1 957	1 976	1 946	1 943

Appendix 27 - Merger With Synergy Income Statement

Income Statement	2010E	2011E	2012E	2013E	2014E	2015E
Net Revenues Cadbury	10 312	10 685	11 211	11 864	12 556	13 292
Net Revenues Kraft Foods	40 781	41 735	42 241	43 195	43 680	44 771
Total Net Revenues	**51 093**	**52 420**	**53 452**	**55 059**	**56 235**	**58 063**
Cost of Sales Cadbury	5 562	5 763	6 001	6 333	6 681	7 073
Cost of Sales Kraft Foods	21 206	27 128	27 456	28 077	28 392	29 101
Cost of Sales	**26 768**	**32 890**	**33 457**	**34 410**	**35 072**	**36 174**
Gross Profit	**24 326**	**19 530**	**19 994**	**20 649**	**21 163**	**21 889**
Operating Costs	**12 080**	**12 605**	**13 170**	**13 721**	**14 282**	**14 976**
Distribution	307	319	332	348	366	384
Marketing Cadbury	1 013	1 134	1 282	1 461	1 637	1 833
Marketing Kraft Foods	1 763	1 887	1 962	2 041	2 122	2 250
Marketing	2 776	3 021	3 244	3 502	3 759	4 083
G&A Cadbury	1 496	1 571	1 665	1 765	1 871	1 964
G&A Kraft Foods	7 053	7 264	7 482	7 632	7 785	8 018
G&A	8 549	8 835	9 147	9 397	9 655	9 982
R&D	448	429	446	473	502	527
Operating Income	**12 246**	**6 925**	**6 825**	**6 928**	**6 881**	**6 913**
Amortization of definitive life acquisition intangible	**33**	**22**	**22**	**22**	**22**	**22**
Asset Impairment and Exit Costs	500	500	500	500	500	500
Impairment Goodwill	-50	-50	-50	-50	-50	-50
Restructuring Costs	0	0	0	0	0	0
Non-trading itens	0	0	0	0	0	0
Shares of Results in Associates	13	13	13	13	13	13
Profit Before Financing and Taxation (EBIT)	**12 650**	**7 340**	**7 240**	**7 344**	**7 296**	**7 328**
Investment Revenue Cadbury	55	52	47	43	39	36
Investment Revenue	55	52	47	43	39	36
Finance Cost Cadbury	-150	-151	-159	-168	-174	-181
Finance Cost Kraft Foods	-1 971	-1 975	-1 985	-1 995	-2 006	-2 014
Finance Costs	-2 121	-2 126	-2 144	-2 163	-2 180	-2 195
Profit Before Taxation (EBT)	**10 584**	**5 267**	**5 143**	**5 224**	**5 155**	**5 168**
Taxation	**3 334**	**1 659**	**1 620**	**1 645**	**1 624**	**1 628**

Appendix 28 - Merger FCFF and APV

in million of $

	2010	2011	2012	2013	2014	2015
EBIT	12 650	7 340	7 240	7 344	7 296	7 328
Income Taxes	3 334	1 659	1 620	1 645	1 624	1 628
Amortization & Depreciation	33	22	22	22	22	22
Change in WC	668	616	655	696	747	759
Capex	2 032	1 952	1 983	2 017	2 051	2 086
FCFF	**6 649**	**3 135**	**3 004**	**3 008**	**2 896**	**2 877**

FCFF	**6 649**	**3 135**	**3 004**	**3 008**	**2 896**	**2 877**
Terminal Value						82 415
PV	6 649	2 956	2 670	2 520	2 287	63 501
Base Case @ WACC	**80 583**					

in million of $

APV	**6 649**	**3 135**	**3 004**	**3 008**	**2 896**	**2 877**
Terminal Value						77 070
PV	6 649	2 949	2 658	2 502	2 266	58 831
Base Case	**75 855**					
Interest Tax Shield	373	372	373	374	375	374
Terminal Value						9 783
Present Value	373	350	330	311	293	7 475
Total PV ITS	**9 132**					

Financial Distress Costs	
Value Unlevered	75 855
PV(ITS)	9 132
PV(EBC)	4 403
EV @ APV	**80 584**

Appendix 29 - Meet the Premium Line Calculations

		2010	2011	2012	2013	2014	2015
Cadbury's Revenues		6 168	6 168	6 168	6 168	6 168	6 168
M&A Revenue Synergy		1 022	1 048	1 069	1 101	1 125	1 161
% SynR		16,57%	17,00%	17,33%	17,85%	18,23%	18,83%
Discount Factor	15,14%	16,57%	15,99%	15,33%	14,85%	14,27%	13,85%
Cadbury's Costs		7 588	7 588	7 588	7 588	7 588	7 588
M&A Cost Synergy		793	839	898	967	1 037	1 108
% SynC		10,45%	11,05%	11,83%	12,74%	13,67%	14,60%
Discount Factor	10,56%	10,45%	10,39%	10,47%	10,60%	10,70%	10,74%

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