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„Hostile takeovers and takeover defence mechanisms. The case of Cadbury Plc. and Kraft Foods Inc.“

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Stefania Alexandrina Naicu-Svaiczer (Bakk.)

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1. Introduction

1.1. Research objectives

Hostile takeovers have been extensively explored during the past years due to their increased presence in global M&A activity. Considerable attention has been dedicated to the rising complexity of takeover strategies and anti-takeover defence mechanisms employed by target companies and the impact of these on shareholders’ wealth.

The purpose of this thesis is to analyse the background and bitter fight to stay independent of one of Britain’s most loved brands, Cadbury Plc., drawing upon existing theories. The thesis tries to find answers to the following questions:

- What was the rationale behind Cadbury’s takeover?
- What takeover defence mechanisms did the board of Cadbury employ and how effective were these in maximizing shareholders’ wealth?
- Did the price offered by Kraft Foods represent the fair value of Cadbury?

The paper is divided into seven main chapters. The introduction presents the research objectives and short outline of the case analysed. The second chapter provides a theoretical framework for hostile takeovers. The third chapter reviews the most commonly employed anti-takeover defence mechanisms and the implication of their use. The forth chapter is dedicated to the analysis of the background and motivation of Kraft Foods’ hostile takeover offer as well as the defence tactics applied by Cadbury Plc. Chapter five outlines the theoretical foundation for the Cadbury’s valuation conducted in chapter six, with the aim of providing an estimate of the target’s fair value. Chapter seven summarizes and concludes.
1.2. Background of Kraft Foods Inc. offer for Cadbury Plc.

On the 9th of November 2009 Kraft Foods launched its official hostile takeover offer to acquire Cadbury Plc., one of Great Britain’s most loved brands, for a total consideration of GBP 11.6bn, after its initial bid of GBP 10.2bn in September was promptly rejected by Cadbury’s board.¹ The combination with Cadbury would create a global confectionery leader, providing economies of scale to compete even more effectively in the confectionery sector.

The offer represented a cash plus stock proposal, Cadbury’s shareholders being entitled to 300 pence in cash and 0.2589 new Kraft Foods shares, for each Cadbury share. This valued Cadbury’s share at GBP 7.17, representing a premium of 29% over the company’s 90 day average share price of GBP 5.55.² The offer was seen as “derisory” by Cadbury’s CEO Roger Carr and as a consequence was rejected.³

After five months of resistance, speculation about possible rivals making a counterbid and Cadbury’s share price hitting all-time highs, Kraft Foods decided to sweeten the deal, offering GBP 8.50 for Cadbury’s shares, but changing the stock-cash ratio offered to 40% stock and 60% cash (initial offer: 60% stock and 40% cash). Cadbury’s board decided to give in and recommended the offer to its shareholders. As a consequence, the deal was sealed on the 19th of January 2010, ending the era of an “iconic and unique British company.”⁴

The loss of the 186-year-old British icon fuelled public protests and resistance from UK regulators. As a response to the public pressure generated by the transaction, the Takeover Panel decided to correct the perceived tactical instability, which favoured bidders over targets, by setting an automatic “put up or shut up” deadline during which the acquirer has to announce a fully financed bid or walk away.⁵

¹ Cadbury-Kraft takeover timeline (24.05.2011)  
² Kraft Foods Corporate/Financial News Release (09.11.2009)  
³ Cadbury boss Roger Carr blasts Kraft’s “derisory” hostile bid (15.11.2009)  
⁴ The inside story of the Cadbury takeover (12.03.2010)  
⁵ Patrone (2011)
2. Hostile takeovers

In a friendly takeover the target company’s board and management agree to the merger or acquisition by another company. The target board of directors negotiates the buyout terms with potential acquirers, agrees on the price and the offer is finally put to a shareholder vote. In contrast in a hostile takeover the acquisition of a company occurs without the consent of the target company’s board and management. The acquirer, also called a raider, either directly approaches the shareholders, making them an offer to buy enough shares to take over the target company or fights to replace management in order to get the acquisition approved.\(^6\)

2.1. Impact of hostile takeovers

The increasing sophistication of takeover defences, the threat of competing bids and regulatory changes have led to a substantial increase of returns for target shareholders.\(^7\) However, the post-announcement returns depend among other things on the attitude towards the bid. In a successful but initially hostile takeover the target shareholders receive a higher premium for their shares than in a friendly approach. “When a hostile bid is made, the target share price immediately incorporates the expectation that opposition to the bid may lead to upward revision of the offer price.”

Servaes (1991) attests on a sample of US listed companies, that target shareholders experience a return of 32% as a result of a hostile takeover, while the wealth effects for friendly bids are rather lower, amounting to 22%.\(^8\)

But what are further advantages of hostile takeovers over the friendly approach? One of the major advantages is the surprise feature of hostile takeovers. An attack without any warning impedes the target’s management from taking defence measures. Furthermore, as no negotiations are conducted, the probability of a leak and a following increase of the

\(^6\) Berk and Demarzo (2011), p. 905  
\(^7\) DePamphilis (2011), p. 36  
\(^8\) Martinova and Renneboog (2008), p. 2153
share price, which fuels speculative behaviour of arbitragers, are diminished. “The speculative increase in the target’s share price can add dramatically to the cost of the transaction.” The acquirer’s initial bid includes a premium over the target company’s current share price, expressed as a percentage of the target’s share price. Thus, an increase in the target’s share price as a result of speculation will consequently mean a higher purchase price paid by the acquirer.⁹

In light of a hostile takeover, executives face a dilemma accepting or resisting the takeover. Jensen (1988) argues that executives are driven by self-interest. This self-interest is not only limited to monetary benefits but includes also non-monetary benefits like status, power, prestige and security.¹⁰ Empirical evidence has shown that these benefits vanish after hostile takeovers, as target executives are replaced by new and more efficient teams. The high executive turnover hypothesis after hostile takeovers is supported by a study of Franks and Mayer (1996), which showed on a sample of 33 successful hostile takeovers in the UK, that 90% of the target executives have resigned after completion of the deal.¹¹

A vast body of literature has been dedicated to explain the changes in corporate control as a result of hostile bids and the disciplinary factor of these takeovers.

“When a firm’s internal mechanisms that govern management control are relatively weak, the corporate takeover market seems to act as a “court of last resort” to discipline inappropriate management behaviour.”¹²

Hence, the disciplinary feature of hostile takeovers can not only remove and replace underperforming management, but it can encourage the management of other companies to perform according to their shareholders’ interest. Furthermore hostile takeovers can contribute to the re-allocation of performing assets away from declining sectors and into value maximizing uses.¹³

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⁹ DePamphilis (2011), p. 105  
¹⁰ Irfan (2011), p. 3  
¹¹ Irfan (2011), p. 4  
¹³ Schönberg and Thornton (2006), p. 143
2.2. Hostile takeover strategies

In several hostile takeovers the acquirer initially tries to purchase less than 100% of the target company’s shares. There are two explanations for this approach. First, the acquirer might think, that it is not necessary to acquire all of the target’s outstanding shares in order to implement the changes, that would improve the company’s value. Second, some target shareholders might not agree to sell their shares at any price, fearing a takeover and the loss of their jobs.\(^{14}\)

There are several types of takeover strategies that can be deployed, among these the most important: the bear hug, the proxy contest and the hostile tender offer.

When applying the bear hug the acquirer mails a letter to the target company’s board of directors followed by a public announcement demanding a rapid decision. The target board, who is legally obliged to follow its shareholders’ best interest, is put into difficulty and can even face a lawsuit from the target company’s shareholders, if the offer represents a substantial premium to the current stock price and the board members reject the proposal. The pressure on the board rises as institutional investors and arbitragers advocate the acceptance of the offer, betting on profits resulting from the rise of the target’s share price and simultaneous fall of the attackers share price.\(^{15}\)

The second takeover strategy, the proxy contest, can take three different forms. An acquirer uses the shareholder’s proxy votes to change the board of directors or it can pursue a change in the company’s bylaws. Furthermore proxy contests can refer to certain management proposals (e.g. an acquisition). Faleyé (2004) shows that proxy contests are usually initiated by dissident shareholders in order to remove poorly performing management, to support the restructuring or the outright sale of the company or to enforce the pay-out of dividends to shareholders. As a result of the changes of terms, of how the company is being managed, proxy fights lead to positive abnormal returns to the target company’s shareholders.\(^{16}\)

\(^{14}\) Grinblatt and Titman (2002), p. 735  
\(^{15}\) Depamphilis (2011), p. 100  
\(^{16}\) DePamphilis (2011), p. 101
A hostile tender offer involves the direct approach of the target company’s shareholders and the offer to purchase their shares without the notification of the target’s board and management. The tender offer can take the form of cash, stock, debt or a combination of the three. The acquirer can also choose to make a pre-tender offer, also known as a toehold, by secretly purchasing stock in the target company at a lower price than the actual offer price.\textsuperscript{17}

Once an acquirer decides to present a tender offer to the target shareholders, it can opt for a one-tiered or a two-tiered offer. When presenting a one-tiered offer the acquirer makes the same offer to all the shareholders, facilitating a quick gain of control over the target and discouraging other potential bidders from interfering with the transaction. On the other hand during a two-tiered offer the acquirer offers to buy a certain amount of shares in the target at one price and more share at a later date at a lower price. The rationale behind this approach is to incentivize the shareholders to tender their shares at an early stage of the process to receive an attractive price. Moreover, the shares which enable the acquirer to gain a controlling interest in the target are more valuable than those purchased at a later stage during the second tier.\textsuperscript{18}

The effects on target shareholders’ wealth of proxy contests and tender offers are documented by Jensen and Ruback (1983) who find that “stockholders in companies that experience proxy contests earn statistically significant average abnormal returns of about 8 per cent” and “these returns are not substantially lower when the insurgent group loses the contest.”\textsuperscript{19} On the other hand “target firms in successful takeovers experience statistically significant abnormal stock price changes of [...] 30% in tender offers” and a 3% abnormal price loss when the takeover was unsuccessful.\textsuperscript{20}

\textsuperscript{17} DePamphilis (2011), p. 102  
\textsuperscript{18} DePamphilis (2011), p. 103  
\textsuperscript{19} Jensen and Ruback (1983), p. 6  
\textsuperscript{20} Jensen and Ruback (1983), p. 4
2.3. Hostile activity during the takeover waves

So far academic literature has defined five completed merger waves: those of the early 1900s, the 1920s, the 1960s, the 1980s and the 1990s. Studies of these waves have shown that takeovers usually coincide with periods of economic recovery, characterized by rapid credit expansion accompanied by stock market booms and are disrupted by periods of economic recession and steep declines of the stock market. Furthermore takeover activity can be triggered by regulatory changes, industrial and technological shocks but also by managers’ personal motivation. Several studies tend to differentiate between five well documented American takeover waves, three UK waves, with reliable evidence being available from the early 1960s and two European waves, starting from the beginning of the 1980s.²¹

The main feature of the first three waves was consolidation, which lead to the creation of a large number of giant companies. All three waves came to an end following a stock market crash and economic recession triggered by the First and Second World War and the oil crisis at the beginning of the 1970s.²²

The large conglomerates formed in these years proved to be inefficient by the 1980s and as a consequence companies saw the need to reorganize their businesses. New financial instruments (e.g. junk bonds), changes of antitrust policies, the deregulation of financial services as well as the increased technological progress created an optimal environment for a record number of hostile takeovers, divestitures and leveraged buyouts.²³

The fifth wave was a truly global phenomenon reflecting the increase in capital market globalization. While in the UK and US the number of hostile takeovers fell significantly in contrast to the wave of the 1980s, Continental Europe saw an increase in hostile activity. The decrease of hostile takeovers in the UK and US can be attributed to the bull market, with target shareholders being more willing to accept a takeover bid as their shares were overpriced. Martynova and Renneboog attribute the lack of hostile takeovers in the 1980s to the concentrated ownership structure of Continental European companies, which made

²¹ Martynova and Renneboog (2008), p. 2152
²² Martynova and Renneboog (2008), p. 2149
²³ Martynova and Renneboog (2008), p. 2150
the takeover of such companies even more difficult. The increased IPO activity, deregulation and privatization, tax reforms and increased disclosure requirements in the 1990s reduced the control measures and the ownership structure complexity, exposing companies in Europe to more hostility. The fifth wave ended as a consequence of the equity market collapse in 2000.\textsuperscript{24}

The gradual recovery of the economic and financial markets after the early 2000s downturn generated by the burst of the dot-com bubble, have triggered the M&A markets, which have seen a steady increase in the number of deals and in volume. Following the trend of participating in the globalized markets, cross-border acquisitions in the period 2001 until mid-2005 accounted for more than 43% of the total value of all European M&A deals and 13% of the total US deals.\textsuperscript{25}

After this period of boom the 2007 US subprime crisis brought everything to a sudden halt as economic growth lost momentum, falling stock prices and limited credit availability lead to a significant slowdown in M&A activity. As the panic provoked by the crisis began to fade away and markets were recovering, hostile takeover activity started increasing.

The austerity measures of several companies during the crisis combined with low stock prices, decreasing company valuations and low interest rates, exposed weakened companies to the raids of highly liquid corporations with a strong capital basis and efficient operations. Another reason for the surge of hostile takeover activity can be found in the abandoning of anti-takeover provisions. A study by Stendevad, Shivdasani and Kimyagarov (2009) showed that in 2002 60\% of all S&P\textsuperscript{26} 500 companies had poison pills or staggered boards included in their corporate statute, in contrast by mid2009 only 19\% of the companies applied the poison pill and 30\% the staggered board.\textsuperscript{27} Following some high-profile deals like Kraft and Cadbury, Porsche and Volkswagen, Rio Tinto and BHP Billiton political debate started dealing with the regulation of hostile takeovers, demanding more shareholder rights and increased management accountability.\textsuperscript{28}

\begin{footnotes}
\item[24] Martynova and Renneboog (2008), p. 2173
\item[26] Acronym for Standard and Poor’s
\item[27] Rauch and Wahrenburg (2011), p. 353
\item[28] Rauch and Wahrenburg (2011), p. 354
\end{footnotes}
Rauch and Wahrenburg (2011) conclude:

“Should the planned regulatory changes be implemented, markets might also experience different or previously unknown hostile takeover strategies and defences as a reaction to these changes. [...] The future of hostile takeovers will remain an exciting playing field for corporations and their advisors, as well as for researchers trying to understand the inner workings of hostile M&A transactions.”

3. Hostile takeover defence mechanisms

Companies apply defences against hostile takeovers in order to protect their independence and current business policies but also to exert pressure on hostile bidders in order to attain a higher offer. After outlining the possible motivation behind defence mechanisms, the current chapter reviews several hostile takeover defence tactics, dividing these into preventive and remedial strategies and drawing upon their effectiveness in fending off unwanted suitors as well as their impact on shareholders’ wealth. Finally, in the light of the Kraft Foods Cadbury takeover I present the limitations of the application of certain defence mechanisms for companies in the UK imposed by the City Code on Takeovers and Mergers versus their treatment under Delaware Law in the US.

3.1. Motivation behind defence mechanisms

Several theories have tried to explain why a target company’s executives might resist a takeover attempt. Two alternative views have emerged, given that a successful takeover can lead to a significant takeover premium for the target’s shareholders while representing at the same time a threat for the executives’ tenure.

The “management entrenchment” theory argues that defence mechanisms are “primarily self-serving devices” applied by target executives to protect their position by trying to fend

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29 Rauch and Wahrenburg (2011), p. 355
off a takeover approach. As the freedom of shareholders to accept a takeover without the executives’ interference is viewed as an “important element of a well-functioning system of corporate governance”, takeover defences can work against the shareholder’s best interest by “obstructing the market for corporate control.”

On the other hand Bebchuk (1982) argues that in the light of the market of corporate control, the target executives can put effort to maximize returns for their shareholders. The “shareholder interest” theory depicts that the defence mechanisms employed by executives, will raise the takeover premium and consequently maximize the price paid for the target, thereby serving the shareholder’s best interest. 31

Considering the aforementioned theories the following section analyses the most important and commonly employed anti-takeover defence strategies classifying these into two categories: preventive and remedial anti-takeover strategies.

3.2. Preventive anti-takeover strategies

Preventive defence strategies are used prior to an actual attack, when management suspects that the company might be vulnerable to a raider’s attack as a result of its low stock price, market conditions or financial tightening. Committing to defend the company against possible future takeover attacks signals that the management is willing to protect and preserve the company’s autonomy, although these measures do not necessarily have the power to block a takeover. Nonetheless they can make a takeover more costly and difficult.

Clarke and Brennan (1990) argue that “the strongest pre-bid defence is for the incumbent management team to pursue corporate strategies that will maximise shareholder value, thereby reducing the incentive for any change in control.”32

The most commonly applied preventive anti-takeover strategies and the impact of their use are discussed below.

31 Schönberg and Thornton (2006), p. 143
3.2.1. Poison pills

A poison pill is a defence mechanism by which the target shareholders are offered the right to acquire preferred stock in the company at a discount to their fair market price. The rationale behind the adoption of this strategy is “to dilute the stock so much that the attacking firm loses money on its investment.”

We can differentiate between two types of poison pills: the poison pill with flip-over rights and the flip-in poison pill. The first type gives existing shareholder the right to buy preferred stock after the acquisition of the company at a deep discount. The downside of using flip-over rights is that these are only applicable if the acquirer buys 100% of the target company. Thus, such a poison pill cannot prevent an unwelcome aggressor from gaining control over the company but it can very well block a full acquisition. In contrast, a flip-in poison pill allows stockholders to acquire additional shares in the target company at a discounted price in order to prevent a potential raider from taking control of the corporation.

3.2.2. Golden parachutes

Golden parachutes are highly attractive compensation packages, usually lump-sum payment arrangements, which are offered to senior management in case of a forced change of control as a result of a takeover bid. Thus, if a certain threshold of stock ownership in the target company is reached, the executives entitled of the golden parachute are free to end their contract and will receive the monetary compensation. Faced with a hostile takeover and with the risk of losing their jobs, executives are likely to block the offers even if the bids have a significant positive impact on shareholders’ wealth. Walkling and Long (1994) find that the probability of executives blocking a takeover bid is directly linked to the takeover’s impact on their personal wealth.

33 Pearce and Robinson (2004), p. 16
34 Pearce and Robinson (2004), p. 18
35 Rauch and Wahrenburg (2011), p. 343
Golden parachutes “are intended to help executives resist takeover attempts that endanger their jobs by aligning their wealth more closely with shareholders’ interest. Their worth is commonly based on the executive’s seniority, position, salary, and number of years of service with the firm.”  

3.2.3. Staggered board and supermajority rules

A staggered board involves the election of the board members periodically and not during the same year. The logic behind this anti-takeover measure is to thwart hostile takeover attempts by preventing a raider from electing a completely new board to facilitate the transition process after the takeover.  

Empirical studies by Bebchuk, Coates and Subramanian (2002) show that on the sample examined between 1996 and 2000, not a single hostile takeover of a company having the staggered board in its bylaws was successful. Despite of its effectiveness of fending off hostile takeover attempts, staggered boards have become disputable, with shareholder activists demanding the companies to de-stagger their boards. Not only can staggered boards serve as a management entrenchment mechanism by not allowing the change of inefficient board members after a hostile takeover, but empirical studies also report negative effects on shareholder wealth. This argument is supported by an empirical study of Bebchuk et al (2002) stating that after a hostile takeover, corporations with staggered boards show a lower increase of their stock price than corporations without (31.8% vs. 43.4%).

Another tactic to impede a raider from gaining control over a target company is to adopt supermajority rules. Thereby the control over a company is not necessarily obtained by acquiring more than 50% of its stock but is conditioned by the approval of at least two thirds and sometimes even 90% of the shareholders’ votes.

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36 Pearce and Robinson (2004), p. 19  
37 Pearce and Robinson (2004), p. 19  
38 Rauch and Wahrenburg (2011), p. 345  
3.3. Remedial anti TAKEOVER strategies

Remedial defence mechanisms are applied on or after the announcement of a takeover offer. Many companies choose not to adopt permanent defence mechanisms, in order not to signal retention to a possible takeover that could maximize shareholders’ wealth. These companies see themselves exposed to unwanted raiders and have to adopt last-minute measures to fend off undesired takeovers.\footnote{Pearce and Robinson (2004), p. 20} Although post-bid defences are able to successfully fend off takeover attempts, they can also destroy shareholder wealth. “\textit{If the economic value of the target is decreased to make it less attractive for an acquirer, target shareholders will suffer accordingly due to the decrease in share value.”}\footnote{Rauch and Wahrenburg (2011), p. 347}

The most frequently used remedial anti-takeover defence mechanisms as well as the effects of their application are highlighted below.

3.3.1. \textit{“Scorched-earth” or “Jonestown” strategies}

The role of “scorched-earth” or “Jonestown” defences is the “\textit{economic destruction of the target company through its management.” Their purpose is to make the target company as unattractive as possible to the acquirer by selling off important assets, firing employees and stripping the company of its cash. Different strategies can be deployed to reach this goal, however the most commonly applied are the sale of “crown jewels” and the “suicide pill”. One of the most radical strategies, which leads to an immediate value destruction of the company, is the sale of “crown jewels”. It involves the sale of the target company’s most profitable assets or the assets that the acquirer values most, in order to decrease the attractiveness of the company, but at the same time implicitly destroys also shareholder value. When the sale of “crown jewels” is accompanied by the firing of key employees and/or stripping the target company of its cash, the company is applying the “suicide pill”. As a result of these tactics shareholders lose not only their expected takeover premium but also their stock value before the takeover offer.\footnote{Rauch and Wahrenburg (2011), p. 347}
3.3.2. **White Knights**

When target management wants to oppose a hostile bidder becoming the majority shareholder of the company, its board can ask a third friendly company, a “white knight”, to rescue it by acquiring a majority share of stock in the target company. On the other hand the company can also ask a “white squire” to buy a block in the target’s stock instead of purchasing a majority interest, thereby blocking a possible raider from gaining control over the company.⁴³

Consequently the white knight or white squire acquires the shares on more favourable terms than those of the attacker, which doesn’t necessarily mean that it has to pay a better price, but by allowing the target’s management to remain unchanged and following the company’s corporate strategy. In order to protect itself from a possible bidding war, the white knight can demand some warranty, which can take the form of options to buy unissued stock or certain assets of the target company in the future at a fixed price.⁴⁴

3.3.3. **Greenmail**

When the aggressor is not a strategic investor, looking only to make a short-term profit, the target’s management can offer the raider to repurchase the shares of stock that it has acquired at a premium, provided that he refrains from targeting the company.

Arguments regarding the legitimacy of this defence mechanism are contradictory. Some assert that the payment of a premium leads to overvalued shares of the company and that the cash used for the share repurchase should be rather dedicated to profitable projects which increase shareholder wealth. However, others argue that financial investors’, specifically private equity companies’ primary goal is to earn short-term profits for their investors through highly leveraged transactions, putting the target company under severe financial stress as the company’s free cash flow is used to repay the debt and consequently cannot be invested in profitable projects. The investment horizon is short, usually five to six years, after which the target is divided into different entities, which are then sold

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⁴³ Pearce and Robinson (2004), p. 23  
⁴⁴ DePamphilis (2011), p. 119
separately. Nevertheless, considering the economic implication of this strategy and if long-term evolution is preferred over short-term profits, the greenmail defence can be a good tactic for shareholders to fend off financial investors.  

3.3.4. Standstill agreements

A standstill agreement represents a contract between the target company and a raider, according to which the attacker agrees not to acquire any more stock in the target for a predefined period of time in exchange for a fee paid by the target company. In order to prevent the sale to another attacker, who wouldn’t respect the agreement, the contract usually includes a stipulation according to which the target company can refuse the resale of the stock acquired by the raider to another party. A study by Gaughan (1996) asserts that entering a standstill agreement, “which often signals the cessation of the takeover attempt”, results in a value decline for the target company’s shareholders, which “negates the price boost that follows the announcement of the takeover bid.”

3.3.5. Litigation

Litigation “involves pursuing a legal injunction and restraining order” against an attacker in order to block that company from acquiring more shares until the attacker can legally prove that the injunction is unjustified. While the attacker prepares its legal defence, it buys the target company more time to develop other takeover defence strategies or to solicit more attractive offers. The target company can file a suit against the attacker for violating antitrust laws by arguing that the combined company will violate antitrust laws, for inadequate disclosure, if the attacker fails to disclose information, or fraud, if the attacker “deliberately misrepresented facts for the purpose of depriving shareholders of their rights.”

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45 Rauch and Wahrenburg (2011), p. 351
46 Pearce and Robinson (2004), p. 21
47 Pearce and Robinson (2004), p. 20
3.3.6. Capital structure changes

Another effective anti-takeover method is the restructuring of the target company’s capital. The company has four main options: leveraged recapitalization, raising additional debt, issuing additional stock or repurchasing outstanding shares.

By recapitalizing the target company is assuming substantial amounts of new debt which then in turn allocates to financing dividends for its shareholders. The equity on the target’s balance sheet is replaced by debt, reducing its borrowing capacity and making it less attractive for the aggressor. The target company can also recapitalize by buying back stock. Combined with an employee stock ownership plan (ESOP) executives can not only increase the number of stock controlled by existing shareholders or insiders but it can also effectively thwart a hostile takeover.

When the pay-out of large dividends from newly assumed debt is considered disadvantageous, the executives of the target company can simply add more debt to its balance sheet. The company can raise more debt by issuing bonds or by borrowing from external lenders and then make sure that the debt is kept on the balance sheet. This strategy is common for companies with low debt-to-asset ratios, as an aggressor could use the target’s own borrowing capacity to finance the takeover.

Another method for restructuring the company’s capital is to issue additional shares. The target maintains its debt level and the takeover becomes more costly for the raider but at the same time it dilutes shareholders’ equity. When the company doesn’t want the raider to acquire the stock on the open market, it can choose to issue new shares to a white squire or the company’s own ESOP.

The forth strategy to fend off an aggressor is for the target to repurchase its own shares on the open market. There are fewer shares available for the raider and at the same time arbitragers, who want to make profits by betting on the differences between the takeover price and the actual price and help attackers by selling them their shares, are restrained from acquiring a controlling stake in the target company. As the firm uses its own

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48 A plan devised to encourage employees to purchase stock in their company usually at a price below the market price. Source: “http://www.finance-glossary.com”

49 Pearce and Robinson (2004), p. 21
resources to repurchase outstanding shares, a cash rich company with low debt on its balance sheet can diminish the risk of being acquired. Nevertheless the strategy can also have its downside. When a target company decides it wants to repurchase shares, an aggressor will have fewer shares to acquire in order to gain a controlling stake.\(^{50}\)

Each of the four options has the ability to decrease the attractiveness of a target company. However their impact on shareholders’ wealth is inconclusive. As none of the strategies permanently change the perspectives of the target company’s competitiveness, they represent more “nuisance than barrier”.\(^{51}\)

3.4. Hostile takeover defences under US vs. UK law

The types of defence strategies and the way these may be adopted are very different under US law, namely under Delaware Law and the UK law, under The City Code on Takeovers and Mergers (the “Code”). The Delaware law states that, when a target company’s executives perceive a hostile bid as a danger for corporate policy, “the board has both the power and the duty to interpose itself between the offeror and the shareholders and, where necessary, take defensive measures that are not disproportionate to the threat.”\(^{52}\)

In contrast the Code puts the shareholders interest in the centre, especially the interests of institutional investors. Prior or during the course of a takeover bid, the company’s board “must not, without the approval of the shareholders in general meeting, take action which may result in any offer or bona fide possible offer frustrated or in shareholders being denied the opportunity to decide on its merits.”\(^{53}\) Thus, the Code not only conditions the implementation of any defence mechanism to shareholders’ approval but also assigns them the right to decide whether they accept a takeover offer or not. Furthermore shareholder approval is needed prior to the issue of new shares or the transfer of shares to a bidder.\(^{54}\)

The Code not only determines the board’s neutrality and interdicts the installing of defence

\(^{50}\) Pearce and Robinson (2004), p. 22
\(^{51}\) Pearce and Robinson (2004), p. 23
\(^{52}\) Armour, Jacobs and Milhaupt (2010), p. 26
\(^{53}\) Rule 21.1(a) of The Code on Takeovers
\(^{54}\) Aga (2010), p. 1
mechanisms without shareholders’ approval, but also demands a mandatory bid for all shares, if a bidder has acquired over 30% of the target’s voting rights.\textsuperscript{55}

Empirical studies of takeovers in both the United States and the United Kingdom have shown that in the period 1990-2005, 0.85% of all announced takeovers in the UK were hostile as a contrast to 0.5% in the US. Of these hostile bids, 43% were successful in the UK and 24% in the US\textsuperscript{56}, emphasizing that a takeover in the UK is more likely to be hostile and that the probability of the hostile takeover succeeding is higher than in the US.

Given the legal differences between the US and UK jurisdictions, prohibition of partial and two-tier offers by the Code and the central role of shareholder protection, automatically eliminates several takeover defence mechanisms for target companies in the UK, e.g. the poison pill, supermajority rights, staggered board. In consequence the most frequently used defence tactics in the UK include: (I) the sale of crown jewels, (II) the recapitalization of the target’s capital structure, requiring shareholder approval, (III) “the issuance of a class of shares or convertible securities with either limited or supervoting rights”, (IV) the issuance of shares to a friendly third party, (V) the repurchase of shares, (VI) the board’s recommendation to the shareholders not to accept the takeover offer, (VII) the finding of a white knight.\textsuperscript{57}

Moreover Schönberg and Thornton (2004) find on sample of 56 publicly traded companies in the UK between 1995 and 1999, that the most commonly used defence mechanism employed during a hostile takeover was the release of profit forecasts, followed by the release of other financial information. Another popular defence mechanism applied was the white knight, which in 80% of the cases lead to the failure of a hostile bid.\textsuperscript{58}

\textsuperscript{55} Amour, Jacobs and Milhaupt (2010), p. 26
\textsuperscript{56} Aga (2010), p. 8
\textsuperscript{57} Aga (2010), p. 9
\textsuperscript{58} Schönberg and Thornton (2004), p. 146
4. The takeover of Cadbury by Kraft Foods

The current chapter focuses on the background and the process of Cadbury’s takeover by Kraft Foods. After outlining the profiles of the target and acquiring companies and presenting the trends and challenges in the global confectionery market in 2009, I highlight the motivation behind the takeover. Subsection 4.5. *Event timeline of Cadbury’s takeover* presents the course of events in Cadbury’s five month battle in the wake of Kraft’s hostile takeover offer. Drawing upon the anti-takeover defence mechanisms highlighted in the previous chapter, subsection 4.6. *Deal announcement and Cadbury’s defence strategies* presents the measures employed by Cadbury’s management in its strive for the company’s independence and how effective these were in maximizing shareholders’ wealth.

4.1. Background of Kraft Foods Inc.

Kraft Foods Inc. has started as a small cheese business in Illinois and has developed over the course of a century into one of the world’s leading food companies. Today the company manufactures and markets packaged food products, including beverages, snacks, convenient meals, cheese and packaged grocery products, and before Cadbury’s takeover was the world’s second largest food company after Nestlé, with annual net revenues of approximately USD 42 billion. In 2009 Kraft Foods sold its products to customers in approximately 160 countries, having operations in more than 70 countries and 159 manufacturing facilities around the globe. Headquartered in Northfield, Illinois the company had approximately 97,000 employees worldwide.

As at December 31, 2009, Kraft’s portfolio included nine brands with annual net revenues exceeding USD 1 billion each and approximately 50 brands generating an annual revenue of over USD 100 million each. Some of its best known brands include: Kraft cheeses, dinners and dressings, Milka chocolates, Oreo cookies, Philadelphia cream cheese and Jacobs coffee.\(^{59}\)

\(^{59}\)Kraft Foods (2009), p. 1
The company’s businesses are managed through two units: Kraft North America and Kraft International. Kraft North America operates in six major segments: U.S. Snacks (12% of revenues), U.S. Convenient Meals (11% of revenues), U.S. Cheese (9% of revenues), U.S. Grocery (9% of revenues), U.S. Beverages (8% of revenues) and Canada & North America Foodservice (10% of revenues). Kraft International is divided into two geographic segments: European Union, representing 22% of Kraft’s total revenues and Developing Markets, 20% of total revenues.

Kraft Foods’ principal stock exchange on which its common stock is listed is the NYSE. Berkshire Hathaway a multinational conglomerate holding company owned by Warren Buffet was the largest shareholder, holding 8.8% of Kraft’s common stock.

The table below highlights Kraft Foods’ key financials for the five years prior to Cadbury’s takeover:

<table>
<thead>
<tr>
<th>Key figures (in USDm)</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>32,779</td>
<td>33,018</td>
<td>35,858</td>
<td>41,932</td>
<td>40,386</td>
</tr>
<tr>
<td>Growth (in %)</td>
<td>5.26%</td>
<td>0.73%</td>
<td>8.60%</td>
<td>16.94%</td>
<td>-3.69%</td>
</tr>
<tr>
<td>Operating income</td>
<td>4,373</td>
<td>4,158</td>
<td>4,176</td>
<td>3,843</td>
<td>5,524</td>
</tr>
<tr>
<td>Margin (in %)</td>
<td>13.3%</td>
<td>12.6%</td>
<td>11.6%</td>
<td>9.2%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Net income</td>
<td>2,639</td>
<td>3,065</td>
<td>2,724</td>
<td>2,893</td>
<td>3,028</td>
</tr>
<tr>
<td>Margin (in %)</td>
<td>8.05%</td>
<td>9.28%</td>
<td>7.60%</td>
<td>6.90%</td>
<td>7.50%</td>
</tr>
<tr>
<td>Total assets</td>
<td>57,597</td>
<td>55,548</td>
<td>68,132</td>
<td>63,173</td>
<td>66,714</td>
</tr>
</tbody>
</table>

Table 1: Overview of Kraft Foods’ historical performance

In the years prior to Cadbury’s takeover Kraft has been heavily focusing on restructuring and developing its core business. Nevertheless the company has faced troubles from 2007 and into 2009, as high inflation offset a large part of its restructuring savings and high pricing led to significant share and elasticity losses.

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60 Acronym for New York Stock Exchange
61 Berkshire Hathaway (2009), p. 14
62 Kraft Foods (2009), p.17
4.2. Background of Cadbury Plc.

Cadbury, a British company with a history of almost 200 years, started as a chocolate shop in England in 1824 and has expanded its business through organic growth and acquisitions, to become the world’s second largest confectionery company with a global market share of over 10%. Its portfolio comprised well known chocolate, candy and gum brands like Cadbury Dairy Milk, Halls and Trident. Before its takeover Cadbury employed approximately 45,000 people around the world and had operations in over 60 countries globally. Furthermore the company held leadership positions in over 20 countries of the world’s top confectionery markets. Trident, the largest gum brand in the world and a 7% growth over the last four years in the gum segment, made gum the fastest growing segment in confectionery, placing Cadbury on the second position in the global gum market. Moreover its candy brand, Halls, was the largest in the world, accounting for more than one-third of Cadbury’s candy revenues.\(^63\)

With an average growth of 12% over five years, Cadbury had the largest and most broadly spread emerging markets portfolio of all confectionery companies\(^64\), these markets accounting for over one third of the company’s revenues and 60% of its revenue growth.\(^65\)

In June 2007 Cadbury had introduced the implementation of its Vision into Action (VIA) business plan for the years 2008-2011, setting its primary goal to become “the world’s biggest and best confectionery company” and deliver superior shareholder returns. The business plan was built on three pillars which comprised the main focus and priorities of the company’s strategy:

- **Growth**: Driven by the policy “Fewer, Faster, Bigger, Better”, Cadbury’s priority was “category and geographic focus as a means of providing scale and simplicity”, focus on its biggest and strongest brands, “integrating and deriving full benefit from recent acquisitions in Turkey, Romania and Japan.”

- **Efficiency**: The cost reduction and efficiency programme targeted the company’s sales, general and administration costs as well as its supply chain across the global

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\(^{63}\) Cadbury (2008), p. 17  
\(^{64}\) Cadbury (2008), p. 3  
\(^{65}\) Cadbury (2008), p. 17
operations with the aim of improving operating profit margins [...] to mid-teens by 2011.”

- **Capabilities**: The third pillar describes Cadbury’s commitment to continue to invest “in capabilities to support our [Cadbury’s] people to deliver on our [Cadbury’s] growth and efficiency priorities.”

The business plan envisaged six financial targets to be achieved by 2011: (I) organic revenue growth of 4-6% year-over-year, (II) mid-teens profit margins, (III) overall gain of confectionery share, (IV) increased dividend growth, (V) growth in return on invested capital and (VI) an efficient balance sheet.

Despite the Vision into Action business plan, Cadbury’s shares were flagging in the market. This was caused by several factors, including the drop of asset and equity valuations on the global level, the scepticism regarding management’s ability to reach the targeted figures and a number of past events, like product recalls in the UK, accounting issues related to Cadbury’s business in Nigeria and a case of salmonella contamination.

After delivering over 70% of the expected margin improvements, a significant reduction of selling, general and administrative costs in 2008 and 2009, but also as a response to Kraft’s hostile takeover offer, Cadbury raised its organic revenue targets to 5-7% per year and operating profit margins to 16-18% by 2013.

The following table gives an overview of Cadbury’s consolidated past performance.

<table>
<thead>
<tr>
<th>Key figures (in GBPm)</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>6,432</td>
<td>7,427</td>
<td>7,971</td>
<td>5,384</td>
<td>5,975</td>
</tr>
<tr>
<td>Growth (in %)</td>
<td>6.99%</td>
<td>15.47%</td>
<td>7.32%</td>
<td>14.58%</td>
<td>10.98%</td>
</tr>
<tr>
<td>Operating income</td>
<td>1,025</td>
<td>1,073</td>
<td>1,050</td>
<td>638</td>
<td>808</td>
</tr>
<tr>
<td>Margin (in %)</td>
<td>15.94%</td>
<td>14.45%</td>
<td>13.17%</td>
<td>11.85%</td>
<td>13.52%</td>
</tr>
<tr>
<td>Net income</td>
<td>707</td>
<td>650</td>
<td>632</td>
<td>487</td>
<td>519</td>
</tr>
<tr>
<td>Margin (in %)</td>
<td>10.99%</td>
<td>8.75%</td>
<td>7.93%</td>
<td>9.05%</td>
<td>8.69%</td>
</tr>
<tr>
<td>Total assets</td>
<td>10,992</td>
<td>10,223</td>
<td>11,338</td>
<td>8,895</td>
<td>8,129</td>
</tr>
</tbody>
</table>

Table 2: Overview of Cadbury’s historical performance

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66 Cadbury (2007), p. 9
The significant drop in Cadbury’s earnings and total assets in 2008 is due to the de-merger of the company’s Americas Beverages business completed in May 2008 as part of Cadbury’s strategy to become a pure-play confectionery business. The growth in revenues for the year 2008 was calculated based on the re-presented revenues in 2007 of GBP 4,699.

4.3. The confectionery market in 2009

After the 2007/2008 food price crisis and a short recovery during the second half of 2008 due to the financial turmoil, agricultural commodity prices started soaring again in 2009, with commodities like tea, cocoa and coffee experiencing their highest trading levels for 30 years.69 Macroeconomic factors such as low interest rates, volatile oil prices and exchange rates, the increased demand for biofuels but also the increasing speculative investment activity in agricultural commodities were the drivers for the spike in commodity prices, affecting the majority of the input costs of confectionery companies.70 As major purchasers of commodities (cocoa, wheat, coffee, nuts, corn products, vegetable oils, sugar, etc.) but also of plastic, glass and other materials used for product packaging, confectionery companies are highly exposed to the price volatility of these commodities, which in turn affect revenues and profitability. As a result many food and drink companies have started applying different measures to minimize the impact of the rising commodity prices, by passing on the price increase to consumers, looking for alternative raw materials to substitute costly commodities, reducing product weight without any price adjustment or by using exchange traded derivatives for hedging purposes against price risk of commodities.71

The increase in costs and the continuing financial crisis called for diversification and consolidation in the confectionery industry. Complementary sectors, niche markets and expansion in emerging markets with huge growth potential caught the attention of large players in the confectionery business. The acquisition of Wrigley, the chewing gum company by food giant, Mars, in 2008 for a total consideration of USD 23 billion created

69 If words were food, nobody would go hungry (19.11.2009)
70 Sharing knowledge on topical issues in the food, drink and consumer goods industry (2010) 3
71 Sharing knowledge on topical issues in the food, drink and consumer goods industry (2010), p. 4
the world’s largest confectionery company. The increased competitor concentration put pressure on several players in the market seeking to improve their margins and profitability.

Furthermore retail customers of confectionery companies such as supermarkets, food distributors and warehouses have continued to consolidate their operations, producing “large, sophisticated customers with increasing buying power”, who demand lower pricing, tailored products and enhanced product promotion. On the other hand confectionery companies saw themselves faced with an increasing competition of retailer brands. As a result of the financial crisis and the economic uncertainty many customers turned their attention towards retailer brands offered at discounted prices.\footnote{Kraft Foods – Form 8-K}

The uncertain global economic outlook, the slowing growth in both developed and emerging markets, increasing unemployment which weighs heavily on consumer spending, the increased competitor concentration and high commodity prices, made confectionery players rethink their strategies and take pro-active measures to counter the faced challenges.

### 4.4. Rationale behind Cadbury’s takeover

In its official takeover offer letter dated 9\textsuperscript{th} of November 2009 Kraft Foods summarizes the reasons for the offer in accordance with its long-term strategy as follows:

“\textit{Kraft Foods believes that a combination with Cadbury would build on a global powerhouse in snacks, confectionery and quick meals, with an exceptional portfolio of leading brands around the world.”}

The combination with Cadbury brings several strategic opportunities for Kraft:

- **Market share**: The combination of the two companies would create a global confectionery leader, “\textit{with a portfolio including more than 40 confectionery}
brands, each with sales in excess of USD 100 million”, surpassing its competitors Mars and Nestlé.

Thus, the combined company would become number one in the chocolate and sugar confectionery segments and number two in the gum segment. Snack products will vault from 37% to almost half of Kraft’s sales transforming its products portfolio and bringing the company in a global snack product leadership position.

Figure 1: Global market share in the confectionery sector

Figure 2: Kraft Foods’ portfolio transformation

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73 Kraft Foods (2009), Thomson Financial
74 Kraft Foods (2009), Thomson Financial
**Geographical footprint**: Cadbury’s geographic presence is complementary to that of Kraft Foods. Acquiring Cadbury gives Kraft a meaningful entry into faster growing markets like India and South Africa, where Cadbury is particularly strong and would consolidate its position in South America. As Cadbury has 40% of sales in developing countries, Kraft’s percentage of sales in these regions would increase from roughly 20% to 25% through the addition of Cadbury. The sales contribution in Europe would see a moderate increase to 24% from 22%, primarily due to Cadbury’s strength in England and Ireland.

![Kraft Foods' geographical presence pre- vs. post-takeover](image)

**Distribution density**: Cadbury has a strong position in “*instant consumption channels, which have become increasingly important in both developed and developing countries.*” Whereas Kraft is strong positioned in the grocery channel in North America and Western Europe. “*A combination provides an enhanced platform […] to distribute both Cadbury’s and Kraft Foods’ products through both channels and creates an attractive opportunity for higher growth and margins.*” Furthermore acquiring Cadbury would increase Kraft’s exposure to Western Europe, where Kraft would be able to use Cadbury’s distribution channels to improve margins and profitability in the region.

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75 Kraft Foods Corporate/Financial News Release (09.11.2009)
76 Kraft Foods (2009), Thomson Financial
Revenue synergies and cost savings: According to Kraft “there is a significant opportunity to realize pre-tax cost savings of at least USD 625 million annually”, resulting from operational, administrative, marketing and selling cost savings. The USD 625 million can be broken down into USD 300 million of operational synergies (manufacturing, procurement, R&D, logistics, customer care), USD 200 million general and administrative synergies mainly through the elimination of redundant facilities and roles and USD 125 million of marketing and selling synergies. The expected revenue synergies and cost savings will drive long-term growth rates leading to estimated total revenues of approximately USD 50 billion per year.

Consolidation and economies of scale: A combination of Cadbury and Kraft Foods would provide the necessary scale for even more effective competition in the confectionery system, as “confectionery markets are consolidating and scale is becoming increasingly important, in part due to retailers’ increasing bargaining power, control of the supply chain and growing portfolio of their own retailer brands, which benefits from the global economic climate.”

Cadbury is a highly attractive asset being the world’s largest confectionery company with an impressive portfolio of market-leading global and local brands, with consistent sales growth over time and an attractive regional split. The combination of the two companies makes strategic sense due to their complementary nature and the expected revenue synergies and costs savings.

77 Kraft Foods Corporate/Financial News Release (07.09.2009)
4.5. Event timeline of Cadbury’s takeover

The following section gives an illustrated timeline as well as a more detailed view of the key events during the five month battle for Cadbury’s independence.

Figures 4: Cadbury takeover event timeline

**Aug. 28, 2009:** Irene Rosenfeld, CEO of Kraft Foods met Cadbury’s chairman, Roger Carr to present a proposal to combine the two companies. The offer was structured as follows: 300 pence in cash and 0.2589 new Kraft shares for each Cadbury share, valuing Cadbury’s share at GBP 7.55. Cadbury’s board of directors rejected the offer in a letter stating that “the proposal is unsolicited, unattractive and fundamentally undervalues Cadbury.”

**Sept. 7, 2009:** The bid is made public, leaving the terms unchanged but the offer dropped to GBP 7.45 per share (with a closing price of USD 28.10 per Kraft share price on September 4th 2009 and an exchange rate of 1.6346 $/£), resulting in a valuation of GBP 10.2 billion for Cadbury’s issued share capital.78

**Sept. 12, 2009:** In a letter to Irene Rosenfeld, Roger Carr rejects Kraft’s offer, emphasizing the wish of Cadbury staying an independent company and pointing out that under Kraft’s

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78 Kraft Foods Corporate/Financial News Release (07.09.2009)
proposal, “Cadbury would be absorbed into Kraft’s low growth, conglomerate business model, an unappealing prospect which contrast sharply with our [Cadbury’s] strategy to be a pure play confectionery company.”

**Sept. 22, 2009:** Cadbury approaches the UK Takeover Panel asking the regulator to set a deadline for Kraft to place a formal bid for Cadbury’s shares or walk away for six months.

**Sept. 23, 2009:** Cadbury Chief Executive, Todd Stitzer, states at a Bank of America/Merrill Lynch conference that he acknowledges the strategic sense of the proposed deal and the expected revenue synergies but based on comparable transactions sees the fair value of Cadbury at 15 times EBITDA\(^79\). This would imply a valuation of GBP 9.00 per share and a total company value of GBP 12.2 billion.\(^80\)

**Sept. 25, 2009:** Cadbury brings a clarification regarding the press commentary on Todd Stitzer’s statements at the aforementioned conference, stating that the CEO’s remarks have been misinterpreted and that Stitzer “does not believe that Kraft’s proposal makes strategic or financial sense for Cadbury.”\(^81\)

**Sept. 30, 2009:** The UK Takeover Panel announces that Kraft has until 9 November 2009, 5.00 p.m. to place an official offer for Cadbury or walk away. In the case that Kraft doesn’t make an offer it has to retreat for six months starting from the date of the announcement.\(^82\)

**Oct. 21, 2009:** Cadbury releases its third quarter results, showing a 7% revenue growth in the chocolate sector, 4% in gum, 11% in candy, an excellent growth in England and Ireland of 10% as well as in emerging markets, 18% in South America and 14% in Asia and the Middle East.\(^83\)

**Nov. 9, 2009:** Kraft launches its official hostile bid for Cadbury. The offer remained unchanged, 300 pence in cash and 0.2589 new Kraft shares for each Cadbury share, valuing each Cadbury share at GBP 7.17, based on Kraft’s closing price of USD 26.78 on 6 November 2009. This results in a total value of GBP 9.8 billion for Cadbury’s issued

\(^79\) Acronym for Earnings Before Interest, Tax, Depreciation and Amortization
\(^80\) Cadbury CEO says past deals beat Kraft offer-note (23.09.2009)
\(^81\) Cadbury Press Releases (25.09.2009)
\(^82\) U.K. Takeover Panel Ruling (2009)
\(^83\) Cadbury Press Releases (21.10.2009)
shares, an EV multiple of 13.9 times Cadbury’s underlying EBITDA and an estimated EV of GBP 11.6 billion. Furthermore Kraft announces that it has secured a senior unsecured term loan facility with Citigroup, Deutsche Bank and HSBC in a total amount of GBP 5.5 billion to finance the deal.

The offer letter also highlights the substantial premium that the offer represents:

- “37 per cent. over Cadbury’s share price of 524 pence on 3 July 2009, prior to analysts suggestion regarding potential sector consolidation;
- 29 per cent. over Cadbury’s 90-day average share price of 555 in the period up to 4 September 2009, the last Business Day preceding the announcement by Kraft Foods of a possible offer for Cadbury; and
- 26 per cent. over Cadbury’s closing share price of 568 pence on September 2009, the last Business Day preceding the announcement by Kraft Foods of a possible offer for Cadbury.”

Roger Carr’s response to the offer: “The repetition of a proposal which is now of less value and lower than the current Cadbury share price does not make it any more attractive. As a result, the Board has emphatically rejected this derisory offer and has strengthened its resolve to ensure the true value of Cadbury is fully understood by all.”

**Nov. 18, 2009:** After increased speculation regarding a possible rival offer, Hershey and Ferrero announce that they are reviewing their options regarding a possible bid for Cadbury.

**Dec. 14, 2009:** Cadbury issues its defence document raising revenue growth and margin targets for the next four years and an update of the Vision into Action programme.

**Jan. 5, 2010:** Kraft announces the sale of its North American pizza business to Nestlé. The full net proceeds from the deal, USD 3.7 billion will be used to sweeten the cash portion of the Cadbury offer by 60 pence per share but at the same time cuts back the stock portion of the offer.

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84 Kraft Foods Corporate/Financial News Release (09.11.2009)
85 Cadbury Press Releases (2009)
86 Hershey, Ferrero Mull Options on Kraft Target Cadbury (18.11.2009)
88 Kraft Foods Corporate/Financial News Release (05.01.2010)
Jan. 12, 2010: Cadbury releases its last defence document and highlights the 2009 outstanding financial performance, as “2009 performance is well ahead of market expectations, driven by strong growth in the fourth quarter and the savings generated by Cadbury's Vision into Action business plan.”

Jan. 19, 2010: The final takeover offer is published by Kraft, valuing each Cadbury share at GBP 8.40 (based on Kraft’s closing price of USD 29.58 on 15 January 2010 and a $/£ exchange rate of 1.63), with each Cadbury shareholder being entitled to 500 pence in cash and 0.1874 new Kraft shares. Additionally Cadbury shareholders will be entitled to a 10 pence special dividend. The final offer values the company’s issued share capital at GBP 11.9 billion, the enterprise value at GBP 13.3 billion, representing 13 times Cadbury’s underlying EBITDA. In order to honor the share portion of the offer Kraft will issue 265 million new shares, representing 18% of Kraft’s existing share capital.

After five months of resistance Cadbury’s board accepts the offer with the following statement: “We believe the offer represents good value for Cadbury shareholders and are pleased with the commitment that Kraft Foods has made to our heritage, values and people throughout the world. We will now work with the Kraft Foods' management to ensure the continued success and growth of the business for the benefit of our customers, consumers and employees.”

Jan 20, 2010: Warren Buffett, Kraft’s largest shareholder tells American news channel, CNBC that he has doubts regarding the acquisition of Cadbury and feels it is a bad deal.

Jan. 25, 2010: Italian company, Ferrero, decides not to take part in the bid for Cadbury, only three days after Hershey announced in a press release its decision not to make an offer for Cadbury.

Feb. 2, 2010: Kraft announces that after acquiring 71.73% of Cadbury’s outstanding shares, it is “pleased to announce that it has acquired control of Cadbury plc.”

89 Cadbury Press Release (12.01.2010)  
90 Kraft Foods Corporate/Financial News Release (19.01.2010)  
91 Warren Buffett to CNBC: I would have voted against Kraft-Cadbury deal (20.01.2010)  
92 Kraft Foods Corporate/Financial News Release (02.02.2010)
Feb. 5, 2010: Kraft receives acceptance of its offer of 75.41%, enabling it to cancel the trading and listing of Cadbury’s stock on the London Stock Exchange.\(^3\)

Mar. 2, 2010: Roger Carr, Chairman of Cadbury, Todd Stitzer, CEO and Andrew Bonfield, CFO announce their resignation.

### 4.6. Deal announcement and Cadbury’s defence strategies

![Graph showing share price movements and key events]

The reaction in Cadbury’s share price on the public announcement of Kraft’s offer is in line with the empirical evidence showing that target companies earn significantly positive abnormal returns on the announcement of the takeover offer. Jensen and Ruback (1983) assert that on average target share prices increased from 16% to 36% around the date of a takeover announcement, while Jarrell, Brickley and Netter (1988) report a substantial increase.

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\(^3\) Kraft Foods Corporate/Financial News Release (05.02.2010)

\(^4\) Bloomberg
increase of target returns during the 1980s to around 53%.\textsuperscript{95} The increase in Cadbury’s share price on 7 September, 2009, the day of the public announcement of Kraft’s takeover offer, represented 38%.

While the evidence on target returns is unanimous across the conducted studies, the evidence on bidder returns is mixed. Jarrell and Paulson (1989) find that the returns for bidders around the announcement date of a tender offer decreased from a 5% gain in the 1960s to a 1% loss in the 1980s.\textsuperscript{96} Kraft’s share price experienced a drop of almost 6% on the day after the offer was made public as Cadbury management promptly rejected the offer.

As seen in the previous section, 3.4. Hostile takeover defences under US vs. UK law, given the importance of shareholder protection and the prohibition of two-tiered offers, several preventive anti-takeover measures like poison pills, supermajority rights and staggered boards are ruled out. As a consequence, none of these defence mechanisms can be found in Cadbury’s corporate by-laws,\textsuperscript{97} thus limiting the company’s options for defending itself when confronted with an unwanted bidder.

In a first instance Cadbury’s management advised its shareholders not to tender their shares, emphasizing that the proposed deal “to exchange shares in a pure-play confectionery business for cash and shares in Kraft, a company with a considerably less focused business mix and historically lower growth”,\textsuperscript{98} would destroy shareholder wealth.

While Cadbury’s share price was climbing and Kraft still hasn’t stated its intentions clearly in a formal takeover offer, Cadbury approached the UK Takeover Panel, asking for a put up or shut up deadline, forcing Kraft to place an official offer or walk away from its proposal. As a reaction Cadbury’s share price increased by 2% in the days after Cadbury’s request.

After Kraft’s official takeover offer on 9 November, 2009 and increased speculation mainly from arbitragers and hedge funds regarding the appearance of a white knight, Cadbury’s share price reached an all-time high of GBP 8.04 after Hershey and Ferrero

\textsuperscript{95} Grinblatt-Titman (2002), p. 707
\textsuperscript{96} Grinblatt-Titman (2002), p. 708
\textsuperscript{97} CapitalIQ
\textsuperscript{98} Cadbury Press Releases (12.09.2009)
announced on 19 November, 2009 that they are reviewing their options for placing a
counter offer for Cadbury. A combination with Hershey would have suited Cadbury’s
board well, with Hershey a pure play confectionery company, who would have offered
more cash, being a better fit. Cadbury’s board fueled speculation by reporting that it was in
talks with Hershey over a possible rival bid, putting pressure on Kraft although no
imminent threat of a counter offer was actually in place. Finally, both Hershey and Ferrero
announced that they won’t place an offer for Cadbury, as they didn’t want to enter a
bidding war with multinational Kraft, which would have also involved a substantial debt
level needed to finance the deal.

After the release of Cadbury’s excellent third quarter results, updated revenue and margin
targets, management published its first official defence document in December 2009
putting pressure on Kraft. The released document raised the company’s long-term
performance targets and rejected Kraft’s offer, making an appeal to Cadbury’s
shareholders to take no action as Kraft has fundamentally failed to recognize the value of
the company and warning: “Don’t let Kraft steal your company.” Cadbury’s share price
failed to react as doubts regarding the achievement of these targets, considering the
persistent increase in cocoa prices, started rising.

But not only Cadbury’s management was urging its shareholders to reject Kraft’s offer.
Fearing their wages, work conditions and even their jobs Cadbury workers, members of the
Unite union have launched a campaign calling on the shareholders to turn down Kraft’s
offer and lobbying the Government to take action in order to block the bid. The immense
public outcry, protests and high media coverage surrounding the battle of one of Britain’s
most loved brands to stay independent in the wake of a hostile bid from a foreign
company, caught also the attention of the British government. Although government
intervention was not common in the UK, unless competition concerns arise, the British
Government expressed its concern regarding any bid that puts short-term gains ahead of
long-term commitment, with Lord Mandelson, a Labour party politician even warning: “If
you think that you can come here and make a fast buck you will find that you face huge
opposition from the local population and from the British government.”

100 Mandelson wades into battle for Cadbury (04.12.2009)
Cadbury’s final defence document on 12 January, 2009 came to underline again the company’s steady growth in revenues and margins for 2009, sketching a promising outlook for 2010 and promising shareholders a substantial dividend increase as management repeatedly raised the plea not to accept Kraft’s offer. As a response Cadbury’s share price increased during the following days reaching its highest level of GBP 8.26 on 19 January, 2009, the day when Kraft published its final offer, sweetening the deal to 500 pence in cash, 0.1874 new Kraft shares and a special dividend of 10 pence for each Cadbury share, valuing the company’s shares at GBP 8.50. Cadbury’s board recommended the deal to its shareholders, thus ending a five month battle over almost 200 years of the confectioner’s independence.

The lack of preventive anti-takeover defence mechanism, the low share price, attractive brands with a widespread emerging market portfolio and pure play confectionery nature of Cadbury’s business, especially after the demerger of its Americas Beverages business, made Cadbury an appealing target. In line with Schönberg and Thornton (2004), who find that the most commonly employed defence mechanism for UK traded companies when confronted with a hostile takeover is the release of profit forecasts and the finding of a white knight, these were also the two main mechanisms used by Cadbury’s management in their attempt to fend off Kraft’s unwanted bid.

But was the purpose of Cadbury’s management actually the prevention of the takeover or was its ultimate goal securing shareholder value, by getting a better price? None of the management’s employed measures had actually the power to fend off Kraft’s bid. Corporate communication played indeed an important role in Cadbury’s defence, the board being vocal about the lack of strategic sense of the deal, the outstanding performance of the company and its excellent outlook as an independent company, with Kraft fundamentally undervaluing Cadbury according to the company’s management. Nevertheless CEO Stitzer’s comment, although in hindsight catalogued as a misinterpretation through an official statement of the company, revealed the CEO’s true view on a possible takeover by Kraft, indirectly also naming his price expectation. Speculation regarding a possible rival offer by Hershey and Ferrero served Cadbury well, boosting its share price and putting pressure on Kraft to increase its offer even though no actual threat of a competing bid was in place.
Looking at management’s actions, the price movements in Cadbury’s stock and Kraft’s final offer one can conclude that if the ultimate goal was maximizing shareholder value, by getting a high price, this goal was definitely achieved. As chairman Carr states before his resignation: “Together we have fought an excellent defence campaign and delivered substantial value to Cadbury shareholders.”

5. Valuation: A theoretical framework

The current chapter provides a theoretical framework for the calculation of Cadbury’s standalone equity value per share prior to Kraft’s takeover. The first part of the chapter lays out the theoretical foundation for the discounted cash flow analysis, highlights the calculation steps necessary to derive the equity value per share for the company while taking into consideration the valuation input variables relevant for Cadbury’s valuation. The relative valuation approach, which is meant to cross-check the results of the discounted cash flow analysis, is presented in the second part of the chapter.

5.1. The discounted cash flow method

Perhaps the most commonly used method both by academics as well as by practitioners, the discounted cash flow valuation method derives the value of an asset as “the present value of the expected cash flow on the asset, discounted back at the rate that reflects the riskiness of these cash flows.”

With the ultimate goal of valuing the equity and thus the shares of a company one can choose between the enterprise valuation and the equity valuation. While enterprise valuation values the company’s operating cash flows by discounting these with the cost of capital, equity valuation values the claim of equity holders against the company’s

\[101 \text{ Cadbury executives quit in wake of Kraft takeover (03.02.2010) \}
\text{102 Damodaran (2006), p. 19} \]
operating cash flow with the according cost of equity. Although when applied correctly, both methods should lead to the same result, the tendency is to use the enterprise valuation and thus value the company’s operations.\(^{103}\)

Koller et al (2005) define four main steps to derive the enterprise value and ultimately the value of the company’s common stock:

- The company’s operations are valued by discounting the free cash flows with the weighted average cost of capital.
- The company’s non-operating (“excess marketable securities, non-consolidated subsidiaries and other equity investments”) are valued and summed up to the value of operating assets to arrive to the enterprise value.
- Non-equity financial claims, such as “fixed and floating-rate debt, pension shortfalls, employee options and preferred stock”, are identified and valued.
- The value of the company’s equity is computed by subtracting the non-financial claims from the enterprise value.\(^{104}\)

If done right, discounted cash flow valuation has a major advantage as it “requires analysts to understand the business that they are valuing and ask searching questions about the sustainability of cash flow and risk” by looking into the “fundamentals that drive value.” However as significantly more information is needed when applying the discounted cash flow method to estimate growth rates, cash flows and discount rates, a negligent approach in estimating these parameters can lead to value estimates that have “no relationship to intrinsic value.”\(^{105}\)

A structured approach for the completion of the valuation, which should ensure that the key decisions are considered at the right time during the valuation process, comprises the following steps:

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103 Koller, Goedhart and Wessels (2005), p. 103  
104 Koller, Goedhart and Wessels (2005), p. 104  
105 Damodaran (2006), p. 28 f
5.1.1. Deriving the free cash flows

In order to value the operations of a company we discount the free cash flows representing the company’s after-tax cash-flows, available for both equity and debt holders, by the according cost of capital, which reflects the operating risk of the company. As a contrast to the position “cash flow from operations” in the financial statement, the free cash flow is “independent of financing and nonoperating items” and can be thus referred to as the “unlevered” cash flow. Hence under the assumption of an all-equity financed company the free cash flows are derived by accounting for the cash flows that stem directly from the company’s operations and which should not be affected by any financing cash flows involving any debt or equity issuance, dividend or interest payments.

The starting point for deriving the free cash flows is the operating income of the company, defined as revenues less operating expenses. However the accounting measures for earnings can be misleading if operating, capital and financial expenses are misclassified. One of the most common mistakes involves the classification of R&D expenses which represent capital expenses, as operating expenses. In order to correct for this misclassification R&D expenses need to be capitalized. Another adjustment that needs to

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106 Koller, Goedhart and Wessels (2005), p. 164
107 Grinblatt and Titman (2002), p. 303
108 Grinblatt and Titman (2002), p. 303
be carried out is for financing expenses, such as operating leases, that are treated as operating expenses in the income statement.\textsuperscript{109}

As a company needs to reinvest in order to keep its operating income growing, the free cash flow to the firm is calculated after reinvestment needs. The two components used to derive reinvestment are discussed below:

- **Net capital expenditure**: We arrive to the net capital expenditures by deducting depreciation from capital expenditure as the positive cash flow from depreciation accounts for a part of the capital expenditure, while it is only the surplus that diminishes the company’s free cash flow.\textsuperscript{110} Although information on capital expenditure and depreciation can be obtained easily from financial statements it is important to remember that it is not only internal investments that need to be considered when computing the capital expenditures, but also external investments representing acquisitions, whereat it doesn’t make a difference if these are funded with cash or with stock.\textsuperscript{111}

- **Working capital**: Under accounting rules working capital is defined as the difference between current assets and current liabilities. However for valuation purposes Damodaran suggests the use of non-cash working capital representing mainly accounts receivable and inventory, which implies two adjustments of the accounting definition of working capital. First cash and cash equivalents namely government treasury bills, commercial paper and other money market instruments which represent a riskless investment for which the company earns a “fair return” are excluded from current assets. Second, in order to avoid double counting, all interest bearing debt, meaning short-term debt and the part of long-term debt which is callable in the current period, needs to be deducted from current liabilities, as these will be included in the calculation of the cost of capital.\textsuperscript{112}

We derive the unlevered free cash flow of the company from EBIT using the following formula:

\textsuperscript{109} Damodaran (2006), p. 109
\textsuperscript{110} Damodaran (2006), p. 133
\textsuperscript{111} Damodaran (2006), p. 137
\textsuperscript{112} Damodaran (2006), p. 140
5.1.2. Forecasting the free cash flows of the firm

Perhaps the topic where academics and practitioners face the biggest uncertainty is when making assumptions about the future growth in earnings and cash flows of the company, since this has a significant impact on the result of the valuation. Damodaran defines three approaches for growth estimation:

- **Historical growth**: Estimating future growth by looking at the company’s historical growth pattern can be a simple approach though it involves several measurement problems. The choice of computation plays an important role as the average historical growth rate can vary significantly depending on whether arithmetic or geometric average is used. When choosing the period of estimation one must bear in mind that the average growth rate can differ, depending on the starting and ending period of the estimation. Furthermore negative earnings can distort historical growth measures. But how useful is historical growth for estimating future growth? A study by Little (1960) finds that company’s reporting accelerated growth over a five-year period are not likely to exhibit the same growth rate over the next five-year period. Furthermore Damodaran examines growth rates in net income for US publicly traded companies over two consecutive five-year periods.

Unlevered free cash flow = EBIT + Depreciation and amortization - Change in working capital - Capital expenditures + Sales of capital assets - Realized capital gains + Realized capital losses - EBIT*tax rate

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113 Grinblatt and Titman (2002), p. 305
114 Damodaran (2006), p. 159
periods and finds no persistence of sustained growth between the two different periods.  

- **Management and analyst forecasts**: Managers have the best knowledge about the inner-workings of their company and are the decision makers when it comes to future investment. Hence management forecasts should be more reliable than those published by outside followers of the company. However, the danger of managers publishing biased forecasts arises as the company’s future outlook is a reflection of their own management skills and when management compensation is linked to the outperformance of certain future targets. Damodaran summarizes: “While managers draw on better information than other investors, when forecasting earnings and cash flows, the legal and competitive constraints that they work under, and the bias endemic in these forecasts reduces their value and predictive power.”

Equity research analyst track publicly traded companies and make buy or sell recommendations for the companies’ stock based on their future growth estimates. Relying blindly on the consensus of analyst forecasts can be dangerous though as these are often derived based upon the companies’ historical data and sometimes ignore the changes in the fundamental characteristics of the company. Damodaran argues that “analyst estimates of earnings (and growth) have some predictive value for short-term earnings forecast, but are of little or any value for long-term growth forecasts.”

- **Fundamental growth**: While with historical and analyst estimates growth represents an exogenous variable, that impacts value but at the same time disregards the operating performance of the company, the most accurate way of determining growth is to look at its drivers. Since growth is ultimately driven by the inner workings of the company, it is a function of how much the company reinvests and the “quality of its reinvestment”. Damodaran suggests that earnings growth can be decomposed into two fundamentals. “Sustainable growth”, representing investments in new assets and “efficiency growth”, representing efficiency improvements on existing assets.

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115 Damodaran (June 2008), p. 18  
116 Damodaran (June 2008), p. 26  
117 Damodaran (June 2008), p. 24  
118 Damodaran (June 2008), p. 2
We set up the equation for the enterprise valuation model, deriving the expected free cash flow to the firm as a function of sustainable and efficiency growth representing the reinvestment rate and the growth in after-tax operating income.

\[
Value \ of \ firm = \sum_{t=1}^{\infty} \frac{E(FCFF_t)}{(1 + k_c)^t}
\]

where,

\( k_c \) = The cost of capital

\( FCF \) = The free cash flow to the firm after taxes and reinvestment needs.

The free cash flow can be written as a function of earnings, using the after-tax operating income, and the total reinvestment.

\[
FCFF = After \ - \ tax \ Operating \ Income \ - \ (CapEx \ - \ Depreciation) \ - \ \Delta Working \ Capital
\]

The equation above becomes

\[
Value \ of \ firm = \sum_{t=1}^{\infty} \frac{After \ - \ tax \ Operating \ Income_{current}(1 + g_{AT \ 01})^t (1 - Reinvestment \ rate)}{(1 + k_c)^t}
\]

Where \( g_{AT \ 01} \) represents the growth in after-tax operating income and the reinvestment rate is defined as

\[
Reinvestment \ rate = \frac{(CapEx \ - \ Depreciation) \ - \ \Delta Working \ capital}{After \ - \ tax \ Operating \ Income}
\]

When looking at operating income the expected growth is derived as the product of the reinvestment rate, namely the “proportion of the after-tax operating income that is invested in net capital expenditures and non-cash working capital, and the quality of these reinvestments, measured as the return on the capital invested.”

\[
Expected \ Growth_{Operating \ Income} = Reinvestment \ Rate \times Return \ on \ Capital
\]

\[119\] Damodaran (2006), p. 173
Where,

\[
\text{Return on Capital} = \frac{\text{Operating Income}(1 - t)}{\text{Capital Invested}}
\]

While growth is often determined without considering its implications, it is worth keeping in mind that “it is not growth, per se, that creates value but growth with positive excess returns. Higher growth can add value, destroy value or leave value unchanged.”\(^{120}\)

In other words, value is increased when a company is able to generate a return on capital that is higher than its cost of capital.

The equations presented above will be used to derive the expected growth rate in operating income based on the future reinvestment rates and returns on capital and as a result the value of Cadbury Plc.

### 5.1.3. Choosing the tax rate

When calculating the expected free cash flow of a company we are faced with the choice between effective tax rates and marginal tax rates. Damodaran proposes the use of marginal tax rates instead of the effective tax rate in order to eliminate the risk of making the false assumption that taxes can be deferred in perpetuity. Damodaran also suggests the use of effective tax rates in the reference year and the move towards the marginal tax rate in the forecast years.\(^{121}\)

Dealing with multinational companies, the company’s income is taxed at different tax rates in the different countries of operation. Damodaran suggests three approaches when dealing with different tax rates:

- Compute a weighted average of the different tax rates, by using the income from each country as weights. The problem arises if in time the income growth rate varies over the different countries, causing a change in the weights.

\(^{120}\) Damodaran (June 2008), p. 37
\(^{121}\) Damodaran (2006), p. 125
• Under the assumption that foreign income generated will be repatriated to the country where the company is incorporated, use the marginal tax rate of the company’s country of origin.

• Differentiate between the incomes of each country of operation and apply the corresponding marginal tax rate.\(^\text{122}\)

Hence the tax rate applied for the reference year will be the effective tax rate, moving to the UK marginal tax rate for the forecast and calculation of Cadbury’s free cash flow to the firm.

The marginal corporate tax rate in the UK levied on taxable income equaling or exceeding GBP 1.5 million amounts to 28\%.\(^\text{123}\)

5.1.4. Terminal value

When valuing an asset that has a perpetual life we need to value the company’s expected cash flows beyond the explicit forecast period. In the context of DCF enterprise valuation this translates into the cash flow estimation over a pre-specified period and a terminal value at the end of the period.\(^\text{124}\)

\[
Value\ of\ the\ firm = \sum_{t=1}^{n} \frac{E(FCF)_t}{(1 + k_c)^t} + \frac{Terminal\ Value_{n}}{(1 + k_c)^n}
\]

The most consistent approach of estimating the terminal value of a company is to assume that the free cash flows will grow at a constant rate into perpetuity. Using a perpetual growth model the present value of the company’s free cash flows in the terminal stage can be computed as follows:

\[
PV(Terminal\ Value)_t = \frac{FCF_{t+1}}{k_c - g_{stable}}
\]

\(^{122}\) Damodaran (2006), p. 124

\(^{123}\) KPMG’s Corporate and Indirect Tax Rate Survey (2009)

\(^{124}\) Damodaran (2006), p. 154
$FCF_{t+1}$ represents the free cash flow to the firm in the terminal year, $k_c$ the weighted average cost of capital and $g_{\text{stable}}$ the constant growth rate expected to be sustained forever.\textsuperscript{125}

Since terminal value accounts for a large proportion of the total value of the company it is essential to make sensitive assumptions regarding the stable growth rate in perpetuity. One constraint regarding the level of the constant growth rate is that it cannot exceed the growth rate in the economy since no company can grow forever at a higher rate than the one in the economy. Furthermore in order to provide consistency the reinvestment rate should be linked to the expected stable growth rate. This can be accomplished by deriving the reinvestment rate as a function of the return on capital that the company is able to sustain in stable growth and the assumed stable growth rate, using the equations presented above.\textsuperscript{126}

\textit{5.1.5. Cost of capital estimation}

When valuing a company using the DCF method, the weighted average cost of capital (WACC) is employed to discount the company’s free cash flow. Koller et al give the following definition for the weighted average cost of capital: “The weighted average cost of capital represents the opportunity cost that investors face for investing their funds in one particular business instead of others with similar risk.” Thus, the cost of capital has to include the return for both creditors and shareholders, as the free cash flow of the company is available to all financial investors.

Three components are necessary to derive the cost of capital: the after-tax cost of debt, the cost of equity and the company’s target debt and equity values. As these variables are not directly observable, several approximations and assumptions have to be made.\textsuperscript{127}

Copeland et al define several criteria that have to be met in order to arrive to consistent results.\textsuperscript{128}

\textsuperscript{125} Damodaran (2006), p. 189
\textsuperscript{126} Damodaran (2006), p. 194
\textsuperscript{127} Koller, Goedhart and Wessels (2005), p. 292
\textsuperscript{128} Copeland, Koller and Murrin (2000), p. 202
Since the free cash flows of the company are available for all investors, who bear the investment risk, all sources of funding including debt and equity need to be included.

To ensure consistency with the free cash flow calculation, the computation of the cost of capital needs to be carried out after tax. Consequently any tax shield from financing is included.

As market values reflect better the underlying claim for each financing type, market values have to be used instead of historical book values.

The weighted average cost of capital including only two sources of financing, nonconvertible, non-callable debt and equity, is given by the following equation:

\[
WACC = \frac{D}{V} k_d (1 - T_c) + \frac{E}{V} k_e ,
\]

where

\[
\frac{D}{V} = \text{The target debt level to enterprise value, using market values, where enterprise value is defined as } D + E,
\]

\[
\frac{E}{V} = \text{The target equity level to enterprise value, using market values}
\]

\[
k_d = \text{The pre-tax cost of debt}
\]

\[
k_e = \text{The cost of equity capital}
\]

\[
T_c = \text{The marginal income tax rate of the company}
\]

Note that the equation has to be expanded if the company has other securities, e.g. preferred stock.\(^{129}\)

For simplicity practitioners usually discount the expected free cash flows with a single cost of capital, although the most accurate and theoretically correct method is to calculate different discount rates for each cash flow.\(^{130}\)

The following section describes the components of the weighted average cost of capital and the underlying assumptions leading to an estimation of these variables.

\(^{129}\) Koller, Goedhart and Wessels (2005), p. 292

\(^{130}\) Grinblatt and Titman (2002), p. 395
5.1.6. Setting the capital structure

In order to derive the capital structure of the company, which provides the weights for the cost of capital equation, market values are required. It is important to use a target capital structure than the company’s current capital structure for several reasons:

- The current capital structure of the company might be a temporary financing decision which might not be the best indicator for the capital structure expected in the future
- Changes in the market value of outstanding securities and management decisions to change the capital mix have an impact on capital structure
- The purpose of the DCF valuation is the determination of the value of equity and to compute this value we discount the free cash flow by the cost of capital. However in order to determine the cost of capital, market values are needed, especially the market value of equity. This circularity dilemma is solved by using a target capital structure.\(^\text{131}\)

A combination of the following factors has to be taken into account when setting the target capital structure:

- The company’s current market based capital structure – The elements of the current capital structure should be identified with their market prices. This shouldn’t represent a difficulty if the company’s securities are publicly traded, however in many cases the company’s sources of funds are not traded on the public market, hence estimation of these values is needed. For instance in the case of debt-type financing the market value can be approximated by identifying each financing instrument, defining the underlying credit quality of the valued instrument by looking at credit ratings and assessing the yield to maturity for which it would trade on the marketplace by applying the yield of securities with similar coupons, maturities and ratings. Finally the yield to maturity on a similar issue is employed as a discount rate to compute the present value of the financing payments.\(^\text{132}\)

\(^{131}\) Copeland, Koller and Murrin (2000), p. 203
\(^{132}\) Copeland, Koller and Murrin (2000), p. 205
The capital structure of comparable companies – The benefit of this approach is that one can assess if the capital structure of the company is similar to that of the industry average or if it deviates as a result of particular financial policy decisions.

Management’s position related to capital structure – Management’s philosophy regarding historical financing decisions might help in having a better understanding of how the company’s capital structure is being managed. 133

5.1.7. Cost of equity estimation

In order to derive the rate of return of the company’s stock we use the CAPM134 model, developed by Sharpe (1964) and Lintner (1965), which “defines a stock’s risk as its sensitivity to the stock market”:

\[ k_e = r_f + \beta_{levered} [E(r_m) - r_f] \]

where,

\[ r_f \] = The risk free rate

\[ E(r_m) \] = The expected rate of return on the market portfolio

\[ E(r_m) - r_f \] = The market risk premium

\[ \beta_{levered} \] = The levered systematic risk of the stock135

The following section describes how to estimate each variable of the above equation.

5.1.8. Estimating the risk-free rate

The risk-free rate is the “building block” used for the estimation of the cost of equity and consequently the cost of capital.136 Copeland et al define the risk-free rate as “the return on

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133 Copeland, Koller and Murrin (2000), p. 209
134 Acronym for Capital Asset Pricing Model
135 Koller, Goedhart and Wessels (2005), p. 294
136 Damodaran (December 2008), p. 4
a security or portfolio of securities that has no default risk and is completely uncorrelated with returns on anything else in the economy.”  

Damodaran names two conditions that have to be met when choosing the risk-free rate:

- The lack of default risk. This implies the use of government securities since securities issued by private companies are disqualified as they all bear a certain default risk
- “For an investment to have an actual return equal to its expected return there can be no reinvestment risk.” Meaning that “the specific instrument used to derive the risk-free rate will vary depending upon the period over which you want the return to be guaranteed.”

Consistency in currency and the duration of the cash flows is important when choosing the risk free rate. Thus as in Cadbury’s case the cash flows are estimated in British pounds, the long term government bond chosen will be in British pound rates. Furthermore Damodaran suggests the use of a 10-year government bond, matching it with the duration of the cash flows estimated in the analysis.

5.1.9. Calculating the equity beta

The equity beta is a driver for the stock’s expected return and “measures how much the stock and market move together.” As beta is not a directly observable variable several assumptions and estimations have to be made in order to compute its value.

Damodaran names three factors that determine the beta of a company:

- The type of the business: “Since betas measure the risk of a firm relative to a market index, the more sensitive a business is to market conditions, the higher is its beta.” Thus, ceteris paribus non-cyclical businesses like food companies will have

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138 Damodaran (December 2008), p. 6
139 Damodaran (December 2008), p. 10
140 Koller, Goedhart and Wessels (2005), p. 306
lower betas than for example companies involved in housing, showing a high sensitivity to market conditions.

- The amount of operating leverage in the company: “The degree of operating leverage is a function of cost function of a firm, and is usually defined in terms of the relationship between fixed costs and total costs.” Hence a company with high operating leverage will have higher fluctuations in EBIT leading in turn to a higher beta.

- The financial leverage of the company: Holding other things equal, an increase in the company’s financial leverage consequently increases its equity beta.\(^{141}\)

The estimation of the beta of an asset implies the regression of the returns of an asset “on an index representing the market portfolio, over a reasonable period of time.” Hence beta estimates are influenced by the choice of the market index used to regress against the stock, by the time period used for the estimation and by the return interval used to measure historical returns on the stock. The result of the different choices regarding the market index, time period and return interval are different beta estimates for the same company. Further criticism is brought to the historical nature of the beta estimation since “our objective is not to estimate the best beta we can over the last period but to obtain the best beta we can for the future.”\(^{142}\)

As a result many investment data services have tried to improve the beta estimates from the regressions by adjusting the regression betas towards one. The rationale behind this approach lies in the result of several studies showing that company betas tend to move towards one.\(^{143}\)

To improve the precision of beta estimates and the accuracy of the company valuation we look at the betas of peer companies. As the approach can be biased by looking at companies with more debt, facing a higher financial risk, we derive the unlevered betas of peer companies and re-lever the beta to the company’s target capital structure. We use the following equation to derive the equity beta or levered beta of a company:\(^{144}\)

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\(^{141}\) Damodaran (1999), p. 22f
\(^{142}\) Damodaran (1999), p. 10
\(^{143}\) Damodaran (1999), p. 11
\(^{144}\) Pratt (2008), p. 191 f
\[ \beta_{\text{levered}} = \beta_{\text{unlevered}} \left[ 1 + (1 - t) \frac{D}{E} \right] \]

### 5.1.10 Estimating the market risk premium

Market risk premiums, the difference between the market’s expected return and the risk-free rate, are key inputs for the calculation of the cost of equity and at the same time their estimation is the most disputed issue in corporate finance. It is general consensus though, “that riskier investments should have higher expected returns than safer investments, to be considered good investments.”

Damodaran names several factors that determine equity risk premiums:

- **Risk aversion**: As investors become more risk averse, equity risk premiums will increase. Several factors influence risk aversion such as the age of the investors or the preference of current over future consumption. Evidence has shown that investors get more risk averse as they are ageing, leading to higher risk premiums. Furthermore equity risk premiums should increase when investors prefer current consumption and savings rates decrease in the market.

- **Economic risk**: Equity risk premiums are influenced by macroeconomic factors such as inflation, economic growth and interest rates and the uncertainty about their level.

- **Information**: When information about cash flows and earnings of companies in the market is not available or is not reliable, investors will demand to be compensated for additional uncertainty and will ask higher equity risk premiums.

- **Liquidity**: Illiquidity creates additional risk in the market. Thus, if investors are forced to “accept large discounts on estimated value or pay high transaction costs to liquidate equity positions”, they will ask for higher equity risk premiums.

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145 Damodaran (October 2009), p. 2
146 Damodaran (October 2009), p. 7
147 Damodaran (October 2009), p. 8
148 Damodaran (October 2009), p. 10
Damodaran defines three different estimation approaches which are generally used to estimate equity risk premiums. One is the survey approach where investors and managers provide estimates for future equity risk premiums. The second is the historical return approach, where we look at “returns earned in the past on equities relative to riskless investments and use the historical premium as the expectation.” And third, the implied approach, which represents an “attempt to estimate a forward-looking premium based on the market rates or prices on traded assets today.”

The premiums estimated can vary considerably across the three methods and we face the dilemma, which number to use in our analysis. Damodaran argues, that “the choice of the premium will depend upon the forecast period, whether you believe markets are efficient and whether you are required to be market neutral in your analysis”, concluding that there is not a single approach to estimate equity risk premiums that applies for all analyses.

5.1.11. Cost of debt estimation

When the debt of the company “is highly rated and not callable or convertible”, the promised yield to maturity of the company’s debt is a good estimate for the pre-tax cost of debt. Hence when a company’s debt is relatively risk-free we can derive the cost of debt as yield to maturity times one minus the company’s corporate tax rate. However this doesn’t hold for highly levered companies with increased default risk as the promised yield to maturity on risky debt will be higher. Thus, when estimating the cost of debt “for a company with investment-grade debt (debt rated BBB or better), yield to maturity is a suitable proxy.” It is essential though to use long-term bonds in order to match the duration of company’s free cash flow to the duration of the bond.

If bond ratings are used to derive the cost of debt of a company, Damodaran suggests three steps, which need to be followed: First estimate the company’s “dollar debt and interest expense at each debt ratio”, both dollar debt and interest expenses rise as leverage increases. Second, “we compute a financial ratio (...) that measures default risk and use

149 Damodaran (October 2009), p. 15
150 Damodaran (October 2009), p. 80
151 Grinblatt and Titman (2002), p. 477
152 Koller, Goedhart and Wessels (2005), p. 319
the ratio to estimate a rating for the firm; again, as firms borrow more, this rating will decline.” Third, we arrive to the pre-tax cost of debt, by adding a default spread, derived from the estimated rating, to the risk-free rate.¹⁵³

5.1.12. Calculating equity value from firm value

As stated at the beginning of this chapter, the ultimate goal of a company valuation is to value the company’s equity. In order to get from the value of operating assets to the value of equity we need to net out any non-equity claims against the company value. Furthermore non-operating assets owned by the company, which are not included in the free cash flow calculation but represent value to the company’s shareholders need to be added on to the value of the company.

The table below provides the calculation steps required to derive equity value from operating asset value:

<table>
<thead>
<tr>
<th>Step</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount the FCF of the firm at the cost of capital to arrive to</td>
<td>Value of operating assets of the firm</td>
</tr>
<tr>
<td>Add the value of any assets whose earnings are not part of operating income</td>
<td>+ Cash and cash equivalents + Value of minority holdings in other companies + Value of idle/unutilized assets</td>
</tr>
<tr>
<td>Subtract non-equity claims on the company</td>
<td>- Value of interest bearing debt - Present value of operating lease commitments - Estimated value of minority interests in consolidated companies - Unfunded health care or pension obligations - Expected litigation payout</td>
</tr>
<tr>
<td>In order to arrive to the value of equity</td>
<td>= Value of Equity</td>
</tr>
</tbody>
</table>

Table 3: Deriving equity value from operating asset value¹⁵⁴

¹⁵³ Damodaran (2006), p. 289  
¹⁵⁴ Damodaran (2006), p. 257
5.2. The relative valuation

While the discounted cash flow analysis is viewed as being the most accurate method to value a company’s assets, relative valuation methods provide an easy and less time consuming approach for asset valuation, by looking how “similar assets are currently priced by the market.”\(^\text{155}\)

The first step when conducting a relative valuation is the identification of comparable companies. When selecting the comparable companies, one should be aware that companies within the same industry can still differ in terms of risk, growth potential and cash flows.\(^\text{156}\) The next step is to convert the prices of similar companies into multiples and compare the resulting multiples across the comparable companies. Damodaran defines this process as “standardizing prices“, which can be conducted by applying earnings, revenue, book value or sector specific variables.\(^\text{157}\)

An accurate multiples analysis can provide valuable insights about a company; nevertheless the pitfalls in the application of this method can lead to confusion. Damodaran names four steps that need to be followed in order to arrive to sound multiples:

1. “Define the multiple consistently and measure it uniformly across the firms being compared.”
2. “Have a sense of how the multiple varies across firms in the market. In other words, we need to know what a high value, a low value and a typical value are for the multiple in question.”
3. “Identify the fundamental variables that determine each multiple and how changes in these fundamentals affect the value of the multiple.”
4. “Find truly comparable firms and adjust for differences between the firms on fundamental characteristics.”\(^\text{158}\)

Finally the comparable multiple is applied to the company’s financial figure to arrive to the value of the company.

\(^\text{155}\) Damodaran (2006), p. 299
\(^\text{156}\) Damodaran (2006), p. 318
\(^\text{157}\) Damodaran (2006), p. 299
\(^\text{158}\) Damodaran (2006), p. 327
6. Valuation of Cadbury Plc.

Based on the theoretical framework outlined in the previous chapter, I derive Cadbury’s standalone equity value per share using a discounted cash flow analysis. The result of the discounted cash flow valuation are validated by applying enterprise multiples for comparable companies. Furthermore I perform a precedent transaction analysis using EBITDA multiples over a class of major deals in the food processing industry prior to Cadbury’s takeover. The last subsection discusses Kraft Foods’ takeover offer in the light of the results yielded by the three valuation methods.

6.1. Discounted Cash Flow Valuation

The discounted cash flow valuation is conducted by applying a three-stage model. After deriving the free cash flow to the firm in the reference year, I determine the forecast horizon and assumptions necessary to compute the future free cash flows and the terminal value. The valuation is performed by discounting the Free Cash Flows to the Firm by the calculated weighted average cost of capital. As a last step I calculate Cadbury’s equity value to finally arrive at the equity value per share.

6.1.1. Deriving the Free Cash Flows to the Firm

The first step in valuing Cadbury’s operations was deriving the free cash flow to the firm for the reference year 2009 using the consolidated financial statement of the company.

In order to correct the misclassification of R&D expenses, which represents a capital expense and is included in Cadbury’s income statement in the operating expenses, a capitalization of these expenses and consequently adjustment of EBIT is necessary. Corrections regarding operating leases are not applicable and will not be conducted as the company reports no operating leases in its income statement.
Assuming an amortizable life of three years and a linear amortization over the period, I collected data on R&D expenses over the last three years, to finally arrive at the value of the research asset and the amortization of the R&D expenses in the reference year. The next step was to adjust the EBIT to reflect the capitalization of the R&D expense. This is conducted by adding back the R&D expense in the reference year to the EBIT and netting out the calculated amortization of the research asset.

The following table illustrates the computation of the value of the research asset and amortization in the reference year:

<table>
<thead>
<tr>
<th>Year</th>
<th>R&amp;D expense</th>
<th>Unamortized portion</th>
<th>Amortization reference year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>80</td>
<td>1</td>
<td>80.00</td>
</tr>
<tr>
<td>2008</td>
<td>69</td>
<td>67%</td>
<td>46.00</td>
</tr>
<tr>
<td>2007</td>
<td>68</td>
<td>33%</td>
<td>22.67</td>
</tr>
<tr>
<td>2006</td>
<td>77</td>
<td>0%</td>
<td>25.67</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value of research asset</th>
<th>148.67</th>
</tr>
</thead>
</table>

| Amortization expense reference year | 71.33 |

Table 4: Capitalization of Cadbury’s R&D expenses

After carrying out the necessary adjustments to EBIT, I applied the effective tax rate for the reference year in order to arrive to the after-tax operating income of the company. As a next step I added back depreciation and amortization and subtracted the change in working capital obtained from Cadbury’s consolidated financial statement. After deducting the capital expenditures I arrive to the free cash flow of the company in the reference year.

The calculation steps used to derive the free cash flow in the reference year 2009 are summarized in the table below:
Furthermore using the equations presented under subsection 5.1.2. *Forecasting the free cash flows of the firm*, I derived the return on invested capital as well as the reinvestment rate and computed the growth in revenues and operating income for the reference year 2009 so that the forecasted figures are anchored in fact in the light of the company’s historical performance.

### Key ratios

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on capital invested</td>
<td>8.79%</td>
</tr>
<tr>
<td>Reinvestment rate</td>
<td>13.64%</td>
</tr>
<tr>
<td>Revenue growth</td>
<td>10.98%</td>
</tr>
<tr>
<td>EBIT growth</td>
<td>26.65%</td>
</tr>
</tbody>
</table>

**Table 6: Key financial ratios for reference year**

<table>
<thead>
<tr>
<th>Free Cash Flow Calculation (in GBPm)</th>
<th>Reference year 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted EBIT</td>
<td>816.67</td>
</tr>
<tr>
<td>Effective tax rate (%)</td>
<td>27.30%</td>
</tr>
<tr>
<td>After-tax EBIT</td>
<td>593.72</td>
</tr>
<tr>
<td>+ Depreciation and amortization</td>
<td>222</td>
</tr>
<tr>
<td>- Change in working capital</td>
<td>-105</td>
</tr>
<tr>
<td>- Capital expenditures</td>
<td>408</td>
</tr>
<tr>
<td><strong>Free Cash Flow to the Firm</strong></td>
<td><strong>512.72</strong></td>
</tr>
</tbody>
</table>

**Table 5: Cadbury’s Free Cash Flow calculation for reference year**
Building on the considerations stated in subsection 5.1.2. Forecasting the free cash flows of the firm, the length of the forecast period was chosen with ten years, using three growth stages, divided into a four-year stage of accelerated growth, a six-year stage of stable moderate growth followed by a growth perpetuity starting after the tenth year. The assumptions and characteristics of each growth stage are discussed below:

1. A high growth period of four years, starting 2010 and ending in 2013, in line with the company’s extension of its Vision into Action business plan until 2013. During this period the company will earn returns on invested capital in excess of its cost of capital, bringing it to reach the average return on invested capital in the food processing industry by the end of this four year stage. The reinvestment rate is increased in order to reflect enhanced investments into the company’s operating assets. The growth in operating profit increases as the company’s return on invested capital improves.

2. A moderate growth period of six years starting in 2014 characterized by a stable growth period. The return on invested capital is maintained at the industry average and the reinvestment rate is kept constant.

3. A growth perpetuity after the ten year forecast period. Since a company is not expected to sustain a higher growth rate than the one in the economy in perpetuity, the growth rate in the terminal year is set equal to the expected global real gross domestic product. Furthermore excess returns are not expected to be maintained in perpetuity, thus the return on capital will drop below the cost of capital and the reinvestment rate is decreased accordingly.

The expected growth in revenues during the forecast period was defined by looking at the historical growth pattern of the company, management forecasts as part of Cadbury’s Vision into Action business plan and the revenue growth of comparable companies in the food processing industry.

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159 Economist Intelligence Unit Countrydata
Starting with the first forecast year, I moved to the marginal tax rate levied on taxable income in the UK and maintained a constant level of the tax rate during the forecast period.

The company’s working capital was set as a constant ratio of the expected revenues. Applying the sales-to-working capital ratio for the food processing industry, sourced from professor Damodaran’s website, I calculated the year-on-year change in working capital.

The net capital expenditures, defined as the difference between gross capital expenditures and depreciation was defined using the equation under subsection 5.1.2. *Forecasting the free cash flows of the firm*, in order to provide consistency between the reinvestment rate and the amount of investment during the forecast period.

### 6.1.3. Weighted average cost of capital

The next step in Cadbury’s valuation was deriving the weighted average cost of capital.

As Cadbury is a public company, information about market values for equity and debt are available and no further assumptions are necessary to derive these values.

When setting the target capital structure I looked at the company’s actual capital structure and the management’s position related to financial policy decisions. The following changes to the company’s capital structure are stated in the 2008 annual report:

“During 2008, our market capitalisation decreased to approximately £8.2 billion from £13.1 billion. This was principally driven by the demerger of the Americas Beverages business, which resulted in a reduction of £3.5 billion and the widespread fall in equity values during 2008. Net debt decreased during the year from £3,219 million at the end of 2007 to £1,887 million at the end of 2008.”\(^{160}\)

Furthermore on 3 April 2009 the company completed the disposal of Australia Beverages, becoming a pure-play confectionery business. This resulted in an observed market-debt-to-enterprise-value of 16.52% end of 2009, representing a decrease from the previous year’s ratio of 25.73%. I further looked at the estimated average debt-to-equity ratio for the food

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\(^{160}\) Cadbury Annual Report 2008
processing industry, provided by Damodaran. The food processing industry shows a rather moderate leverage ratio amounting to 29.35%. As food processing is a broad industry, I looked at the leverage ratios of comparable confectionery companies (Hershey, Nestlé and Kraft Foods). The leverage ratios ranged from 13.22% (Nestlé) to 50.15% (Kraft Foods), where Hershey, the company with the most similar product portfolio to that of Cadbury, showed a leverage ratio of 24.25%. With the observed debt-to-equity ratio of 19.78%, the rather low leverage ratios in the confectionery industry segment and management’s historical decisions regarding financing of the company, I considered the actual capital structure as a good proxy for Cadbury’s target capital structure.

In estimating the equity beta I looked at Cadbury’s levered adjusted beta, which I unlevered in order to cross-checked it with the betas of comparable confectionery companies. The adjusted betas sourced from Bloomberg were the two year weekly betas regressed against the S&P 500 market index. The confectionery segment is a non-cyclical business characterized by a low sensitivity to market conditions and with rather low leverage ratios, which is also confirmed by the betas of the observed companies. The average formed over the comparable companies’ unlevered beta revealed a slightly lower value than Cadbury’s unlevered beta. The equity beta for the calculation of the cost of equity was chosen as Cadbury’s levered adjusted beta.

<table>
<thead>
<tr>
<th>Unlevered beta comparables</th>
<th>0.59</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlevered beta Cadbury</td>
<td>0.69</td>
</tr>
<tr>
<td>Levered adjusted beta Cadbury</td>
<td>0.79</td>
</tr>
<tr>
<td><strong>Equity beta Cadbury</strong></td>
<td>0.79</td>
</tr>
</tbody>
</table>

*Figure 8: Deriving Cadbury’s equity beta*

The risk-free benchmark rate was the 10-year U.K. government bond\(^{161}\), furthermore the Q4 2009 equity risk premium was sourced from professor Damodaran’s webpage. As a next step I plugged in the determined variables into the CAPM equation to arrive to Cadbury’s cost of equity.

\(^{161}\) Bloomberg
Given Cadbury’s stable profitability and bond rating of BBB, the cost of debt was chosen as the average of the company’s yield to maturity on its long term notes.

The cost of capital was computed using the target capital structure, the derived cost of capital and after-tax cost of debt and assumed to remain constant over the forecasted period.

Figure 9: Calculation of Cadbury’s cost of equity

<table>
<thead>
<tr>
<th>Factor</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk free rate</td>
<td>4.10%</td>
</tr>
<tr>
<td>Equity risk premium</td>
<td>5.30%</td>
</tr>
<tr>
<td>Levered adjusted beta</td>
<td>0.79</td>
</tr>
<tr>
<td>D/E ratio</td>
<td>19.78%</td>
</tr>
<tr>
<td>Marginal tax rate</td>
<td>28.00%</td>
</tr>
<tr>
<td><strong>Cost of equity</strong></td>
<td>8.27%</td>
</tr>
</tbody>
</table>

Figure 10: Calculation of Cadbury’s WACC

<table>
<thead>
<tr>
<th>Factor</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of equity</td>
<td>8.27%</td>
</tr>
<tr>
<td>Target Equity/EV</td>
<td>83.48%</td>
</tr>
<tr>
<td>Cost of debt</td>
<td>5.92%</td>
</tr>
<tr>
<td>After-tax cost of debt</td>
<td>4.26%</td>
</tr>
<tr>
<td>Target Debt/EV</td>
<td>16.52%</td>
</tr>
<tr>
<td><strong>WACC</strong></td>
<td>7.61%</td>
</tr>
<tr>
<td></td>
<td>Reference year</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Revenue growth</td>
<td>10.98%</td>
</tr>
<tr>
<td>Return on capital</td>
<td>8.79%</td>
</tr>
<tr>
<td>Reinvestment rate</td>
<td>13.64%</td>
</tr>
<tr>
<td>Growth in EBIT</td>
<td>26.65%</td>
</tr>
</tbody>
</table>

(in GBP million)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Revenues</th>
<th>Working capital</th>
<th>EBIT</th>
<th>Tax rate (in %)</th>
<th>After-tax EBIT</th>
<th>Δ in Working capital</th>
<th>Capex-Depr.&amp;Amort.</th>
<th>FCF</th>
<th>WACC</th>
<th>TV</th>
<th>PV(FCF)</th>
<th>PV(TV)</th>
<th>Stable growth in perpetuity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>5,975.00</td>
<td>367.46</td>
<td>816.67</td>
<td>27.30%</td>
<td>593.72</td>
<td>-105.00</td>
<td>186.00</td>
<td>512.72</td>
<td>7.61%</td>
<td>18,123.70</td>
<td>283.20</td>
<td>340.86</td>
<td>410.28</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>6,692.00</td>
<td>411.56</td>
<td>913.79</td>
<td>28.00%</td>
<td>657.93</td>
<td>44.10</td>
<td>350.66</td>
<td>263.17</td>
<td>7.61%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>7,495.04</td>
<td>460.94</td>
<td>1,022.11</td>
<td>28.00%</td>
<td>735.92</td>
<td>49.39</td>
<td>392.16</td>
<td>294.37</td>
<td>7.61%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>8,394.44</td>
<td>516.26</td>
<td>1,143.27</td>
<td>28.00%</td>
<td>823.15</td>
<td>55.31</td>
<td>438.58</td>
<td>329.26</td>
<td>7.61%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>9,401.78</td>
<td>578.21</td>
<td>1,279.20</td>
<td>28.00%</td>
<td>921.03</td>
<td>61.95</td>
<td>490.66</td>
<td>368.41</td>
<td>7.61%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>9,965.88</td>
<td>612.90</td>
<td>1,363.63</td>
<td>28.00%</td>
<td>981.81</td>
<td>34.69</td>
<td>554.40</td>
<td>392.73</td>
<td>7.61%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>10,563.84</td>
<td>649.68</td>
<td>1,453.63</td>
<td>28.00%</td>
<td>1,046.61</td>
<td>36.77</td>
<td>591.19</td>
<td>418.65</td>
<td>7.61%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>11,197.67</td>
<td>688.66</td>
<td>1,549.57</td>
<td>28.00%</td>
<td>1,115.69</td>
<td>38.98</td>
<td>630.43</td>
<td>446.28</td>
<td>7.61%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>11,869.53</td>
<td>729.98</td>
<td>1,651.84</td>
<td>28.00%</td>
<td>1,189.32</td>
<td>41.32</td>
<td>672.28</td>
<td>475.73</td>
<td>7.61%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2018</td>
<td>12,581.70</td>
<td>773.77</td>
<td>1,760.86</td>
<td>28.00%</td>
<td>1,267.82</td>
<td>43.80</td>
<td>716.89</td>
<td>507.13</td>
<td>7.61%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>13,336.60</td>
<td>820.20</td>
<td>1,877.08</td>
<td>28.00%</td>
<td>1,351.50</td>
<td>46.43</td>
<td>764.47</td>
<td>540.60</td>
<td>7.61%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7: Free Cash Flow projection and present value calculation
6.1.4. Deriving the equity value

After computing the enterprise value, which was calculated by adding up the discounted free cash flows over the forecast period to the present value of the terminal value, I carried on with the calculation of the equity value to ultimately arrive to Cadbury’s share price.

I first calculated the net financial debt by taking into account the company’s total borrowings including short-term and long-term borrowings and offsetting the cash and cash equivalents as well as short-term investments. Using the calculation steps presented in subsection 5.1.12. Calculating equity value from firm value, I computed Cadbury’s equity value. Starting from the enterprise value I subtracted the net financial debt, the minority interests and the unfunded pension obligations obtained from the company’s consolidated financial statement.

As a last step I divided the value of equity by the total number of shares outstanding\textsuperscript{162} in order to derive the company’s share price.

The calculation steps used are presented in the following table:

<table>
<thead>
<tr>
<th>Calculation Steps</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV of Free Cash Flows (GBPm)</td>
<td>6,452.60</td>
</tr>
<tr>
<td>+ PV of Terminal Value (GBPm)</td>
<td>8,705.28</td>
</tr>
<tr>
<td>= Enterprise Value (GBPm)</td>
<td>15,157.88</td>
</tr>
<tr>
<td>- Net financial debt (GBPm)</td>
<td>1,441.00</td>
</tr>
<tr>
<td>- Minority interests (GBPm)</td>
<td>504.00</td>
</tr>
<tr>
<td>- Unfunded pension obligations (GBPm)</td>
<td>20.00</td>
</tr>
<tr>
<td>= Equity Value (GBPm)</td>
<td>13,192.88</td>
</tr>
<tr>
<td>/ Nr. of shares outstanding (m)</td>
<td>1,356.00</td>
</tr>
<tr>
<td>= Equity Value per Share (GBP)</td>
<td>9.73</td>
</tr>
</tbody>
</table>

\textsuperscript{162} Bloomberg

Table 8: Deriving Cadbury’s equity value per share
6.2. Relative valuation

In order to cross-check the plausibility of the results derived using the discounted cash flow valuation I performed a multiples analysis, looking at comparable companies in the food processing industry.

I avoided applying the industry average multiples as this approach overlooks the fact that companies, even though in the same industry, can still differ significantly in terms of expected growth rates, risk, capital structure and returns on invested capital. As the class of comparable companies would have been too narrow to perform an accurate multiple based analysis given the small number of listed pure-play confectionery companies for which data could be obtained, I included companies engaged in the packaged food processing sector.

Controlling for differences across the food processing sector, I selected comparable companies by accounting for several criterias. One of the criterias was choosing companies with similar product portfolios, sensitivity to increases in agricultural commodity prices, business models and similar financial leverage, translating into similar risk profiles. Next to the increased presence in developed countries the selected companies need to have a high exposure and thus cash flow generation in emerging markets. Furthermore the companies considered need to have similar expected earnings growth rates.

In order to find the boundaries of Cadbury’s fair value, the relative valuation was performed using EBITDA, EBIT and sales multiples. Enterprise value multiples were chosen as these are not affected by changes in the capital structure, which allows a comparison across companies irrespective of their capital structure.

The 2009 company information for European and US companies in the food processing industry were obtained from professor Damodaran’s website. The following table presents the seven comparable companies, the criterias accounted for in the selection and the median multiples across the comparables class.
As a next step I applied the median multiples across the comparables class to Cadbury’s 2009 financials, arriving at an EV ranging from GBPm 11,091.82 to 12,654.40.

I followed the same calculation steps to compute the equity value and equity value per share as the ones used in the discounted cash flow analysis. After subtracting the net financial debt, the minority interest and the unfunded pension obligations I derive the equity values. Dividing the figure by the total number of shares outstanding I obtain a share price ranging from GBP 6.73 to 7.88.

<table>
<thead>
<tr>
<th>Company</th>
<th>Market cap (in USDm)</th>
<th>Firm value (in USDm)</th>
<th>Market Debt/Capital</th>
<th>Expected growth in EPS next 5 years</th>
<th>Beta</th>
<th>EV/EBITDA</th>
<th>EV/EBIT</th>
<th>EV/Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hershey</td>
<td>8,279.40</td>
<td>10,286.90</td>
<td>19.52%</td>
<td>4.50%</td>
<td>0.65</td>
<td>10.05x</td>
<td>13.30x</td>
<td>2.00x</td>
</tr>
<tr>
<td>Nestlé</td>
<td>174,288.00</td>
<td>197,323.90</td>
<td>11.67%</td>
<td>8.65%</td>
<td>0.50</td>
<td>11.06x</td>
<td>13.26x</td>
<td>1.86x</td>
</tr>
<tr>
<td>Lindt</td>
<td>5,535.00</td>
<td>5,558.70</td>
<td>0.43%</td>
<td>5.50%</td>
<td>0.50</td>
<td>12.18x</td>
<td>16.02x</td>
<td>1.90x</td>
</tr>
<tr>
<td>Kraft Foods</td>
<td>40,378.90</td>
<td>60,629.90</td>
<td>33.40%</td>
<td>6.50%</td>
<td>0.61</td>
<td>9.42x</td>
<td>11.17x</td>
<td>1.39x</td>
</tr>
<tr>
<td>Danone</td>
<td>37,609.50</td>
<td>50,004.50</td>
<td>24.79%</td>
<td>4.12%</td>
<td>0.63</td>
<td>12.85x</td>
<td>16.84x</td>
<td>2.31x</td>
</tr>
<tr>
<td>Parmalat</td>
<td>4,781.10</td>
<td>5,500.80</td>
<td>13.08%</td>
<td>2.00%</td>
<td>0.63</td>
<td>13.81x</td>
<td>17.92x</td>
<td>0.69x</td>
</tr>
<tr>
<td>Unilever</td>
<td>91,979.20</td>
<td>106,970.80</td>
<td>14.01%</td>
<td>5.31%</td>
<td>0.59</td>
<td>12.26x</td>
<td>14.41x</td>
<td>1.82x</td>
</tr>
<tr>
<td>Median</td>
<td>14.01%</td>
<td>5.31%</td>
<td>0.61</td>
<td>12.18x</td>
<td>14.41x</td>
<td>1.86x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Selected class of comparable companies for relative valuation

<table>
<thead>
<tr>
<th>Relative valuation based on</th>
<th>EBITDA</th>
<th>EBIT</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple comparables x Cadbury financials (GBPm)</td>
<td>12.18</td>
<td>14.41</td>
<td>1.86</td>
</tr>
<tr>
<td>= Enterprise Value (GBPm)</td>
<td>12,654.40</td>
<td>11,771.15</td>
<td>11,091.82</td>
</tr>
<tr>
<td>- Net debt (GBPm)</td>
<td>1,441.00</td>
<td>1,441.00</td>
<td>1,441.00</td>
</tr>
<tr>
<td>- Unfunded pension plans (GBPm)</td>
<td>504.00</td>
<td>504.00</td>
<td>504.00</td>
</tr>
<tr>
<td>- Minority interest (GBPm)</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td>= Equity Value (GBPm)</td>
<td>10,689.40</td>
<td>9,806.15</td>
<td>9,126.82</td>
</tr>
<tr>
<td>/ Nr. shares outstanding (m)</td>
<td>1,356.00</td>
<td>1,356.00</td>
<td>1,356.00</td>
</tr>
<tr>
<td>= Equity Value per Share (GBP)</td>
<td>7.88</td>
<td>7.23</td>
<td>6.73</td>
</tr>
</tbody>
</table>

Table 10: Relative valuation based on EV/EBITDA multiples

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163 Prof. Damodaran’s website
6.3. Precedent transaction analysis

While almost every acquisition is backed up by a discounted cash flow analysis it is common practice to determine the value paid for a target company using multiples. A common method used by practitioners in mergers and acquisitions is the precedent transactions analysis. The method uses multiples in recent mergers and acquisition deals usually within the same business sector as a proxy to determine the value of a company.

Looking at previous transactions and the multiples that bidders paid in order to acquire a target company represents an easy approach as it is based on public information, it can reveal valuable information about bidding, consolidation trends, investor appetite and can be used as a benchmark when assessing the multiple paid for a target company. At the same time, as with the comparable companies analysis, it is often difficult to find a set of truly comparable transactions. The multiples paid can vary significantly across the transactions and can be misleading especially when acquisitions in the past have been influenced by market conditions.

Thus, it is essential to select a relatively recent transaction universe as this will provide a better reflection of the price that acquirers in the market are currently willing to pay. As with comparable companies analysis it is almost impossible to find a perfect precedent transaction, since no company is totally similar to another, but one can control for differences across the transaction universe by accounting for characteristics like business sector, geography, and distribution channels.

An important distinction between the comparable companies and the precedent transactions analysis is that the precedent transactions method captures the control premium in the valuation, meaning the premium that the acquirer had to pay in order to gain control over the target company.

I thus selected ten precedent transactions in the food processing industry, dating back to 2000 and calculated the average EV/EBITDA multiple.
Table 11: Major global M&A valuation multiples 2000-2008\textsuperscript{164}

<table>
<thead>
<tr>
<th>Acquirer</th>
<th>Target</th>
<th>Year</th>
<th>Price (USD bn)</th>
<th>EV/EBITDA</th>
<th>Price/Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unilever</td>
<td>Bestfoods</td>
<td>2000</td>
<td>24.2</td>
<td>14.3x</td>
<td>2.9x</td>
</tr>
<tr>
<td>Kraft</td>
<td>Nabisco</td>
<td>2000</td>
<td>18.9</td>
<td>14.0x</td>
<td>2.3x</td>
</tr>
<tr>
<td>Pepsico</td>
<td>Quaker Oats</td>
<td>2001</td>
<td>14</td>
<td>15.9x</td>
<td>2.7x</td>
</tr>
<tr>
<td>General Mills</td>
<td>Pillsbury</td>
<td>2001</td>
<td>10.5</td>
<td>n.a.</td>
<td>2.5x</td>
</tr>
<tr>
<td>Nestlé</td>
<td>Ralston Purina</td>
<td>2001</td>
<td>11.2</td>
<td>15.7x</td>
<td>3.9x</td>
</tr>
<tr>
<td>Cadbury Schweppes</td>
<td>Adams</td>
<td>2003</td>
<td>4.2</td>
<td>14.3x</td>
<td>0.0x</td>
</tr>
<tr>
<td>Nestlé</td>
<td>Gerber</td>
<td>2007</td>
<td>5.5</td>
<td>15.7x</td>
<td>2.8x</td>
</tr>
<tr>
<td>Kraft</td>
<td>Danone Biscuits</td>
<td>2007</td>
<td>7.3</td>
<td>13.6x</td>
<td>2.7x</td>
</tr>
<tr>
<td>Danone</td>
<td>Numico</td>
<td>2007</td>
<td>18.4</td>
<td>21.7x</td>
<td>4.3x</td>
</tr>
<tr>
<td>Mars</td>
<td>Wrigley</td>
<td>2008</td>
<td>23.4</td>
<td>19.3x</td>
<td>4.3x</td>
</tr>
</tbody>
</table>

\begin{tabular}{lrrr}
 & \textbf{Mean} & \\
& \textbf{Mean (excl. Numico & Wrigley)} & \\
EV/EBITDA & 16.1x & 14.8x \\
Price/Sales & 2.8x & 2.5x \\
\end{tabular}

Looking at the previous M&A bid multiples one can see that Kraft got a good bargain by paying just GBP 8.50 per Cadbury share. The average transaction multiple has been 16.1x EBITDA and 2.8x sales, figures which are elevated by the most recent deals prior to Cadbury’s takeover, the 21.7x EBITDA paid by Danone for Numico and the 19.3x EBITDA paid by Mars for Wrigley. Even if we exclude the two figures we arrive at an average multiple of 14.8x EBITDA, which is still reasonably higher than the 13x EBITDA paid by Kraft for Cadbury.

The following table provides the implied equity value per share for Cadbury using the average EV/EBITDA multiples over the class of comparable transactions in light of Kraft’s final offer.

\textsuperscript{164} Mergermarket, Thomson Financial
If we would take the 14.8x EBITDA multiple, Kraft would have had to pay GBP 9.89 per each Cadbury share and taking the overall multiple of 16.1x EBITDA we arrive at a share price of GBP 10.88. Perhaps in a competitive bidding process these prices would have been realistic but overall the 13x EBITDA multiple paid by Kraft for Cadbury makes it the cheapest major deal in the global food processing industry in more than a decade.

### Table 12: Kraft’s offer vs. precedent transaction multiples

<table>
<thead>
<tr>
<th></th>
<th>Mean all transactions</th>
<th>Mean excl. Nabisco &amp; Wrigley</th>
<th>Kraft offer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EV/EBITDA x Cadbury EBITDA 2009</strong></td>
<td>16.1</td>
<td>14.8</td>
<td>13.0</td>
</tr>
<tr>
<td></td>
<td>1,038.67</td>
<td>1,038.67</td>
<td>1,038.67</td>
</tr>
<tr>
<td><strong>= EV (GBPm)</strong></td>
<td>16,722.53</td>
<td>15,372.27</td>
<td>13,502.67</td>
</tr>
<tr>
<td>- Net debt (GBPm)</td>
<td>1,441.00</td>
<td>1,441.00</td>
<td>1,441.00</td>
</tr>
<tr>
<td>- Unfunded pension plans (GBPm)</td>
<td>504.00</td>
<td>504.00</td>
<td>504.00</td>
</tr>
<tr>
<td>- Minority interest (GBPm)</td>
<td>20.00</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td><strong>= Equity Value (GBPm)</strong></td>
<td>14,757.53</td>
<td>13,407.27</td>
<td>11,537.67</td>
</tr>
<tr>
<td>/ Nr. shares outstanding (m)</td>
<td>1,356.00</td>
<td>1,356.00</td>
<td>1,356.00</td>
</tr>
<tr>
<td><strong>= Equity Value per Share (GBP)</strong></td>
<td>10.88</td>
<td>9.89</td>
<td>8.50</td>
</tr>
</tbody>
</table>
6.4. Offer analysis in light of the valuation performed

The goal of the valuation performed was to derive Cadbury’s standalone value per share in absence of Kraft’s takeover bid and any speculation regarding a possible takeover offer. The discounted cash flow analysis performed yielded a share price of GBP 9.73 for Cadbury while the multiple-based approach resulted in a lower value per share of GBP 6.73 to 7.88. The performed valuation and consequently the derived equity values per share have to be interpreted with prudence and in light of the assumptions on which they are based while bearing in mind the following:

- Discounted cash flow valuation is highly sensitive to small changes in assumptions regarding the expected return on invested capital and as a consequence the expected growth rates, the weighted average cost of capital and the future macroeconomic environment. Hence “any analysis is only as accurate as the forecasts it relies on.”

- On the other hand the accuracy of the relative valuation depends on the universe of comparable companies selected. Finding pure-play comparable companies is obviously not possible but identifying and accounting for differences in growth, risk and cash flow potential across the companies can help reduce the inconsistencies of the estimated values. Furthermore as relative valuation is much more likely to “reflect the current market mood” it can result in too high values if the comparable companies are overvalued by the market or too low values if these companies are undervalued.

Looking at Cadbury’s share price of GBP 5.68 on the last trading day in September 2009 prior to Kraft’s initial offer, the discounted cash flow analysis and relative valuation conducted revealed significantly higher equity values per share. Considering that the derived values do not incorporate any premium that Kraft would have paid to gain control over Cadbury, reflecting the cost and revenue synergies expected from the takeover, one would conclude that Kraft was able to acquire an outstanding company at a bargain.

165 Koller, Goedhart, Wessels (2005), p. 361
166 Damodaran (2006), p.303
On the other hand the discounted cash flow analysis performed by Bernstein Research, who probably gave the deal the largest coverage, derives an even higher stand-alone equity value per share of GBP 10.43 based on the released guidance for 2009 year end profits, concluding that Kraft acquired a great company, with “tremendous operating momentum at a steal” by paying only GBP 8.50 per Cadbury share.\(^\text{167}\)

In the light of the valuation conducted, Kraft’s initial offer of GBP 7.45 per share, which dropped to GBP 7.17 by the time it has formalized its bid in November 2009 due to currency movements and a decrease in Kraft’s share price, seems actually bold. The “attractive multiple” of 13.9x EBITDA appraised in Kraft’s initial offer letter looks disappointing especially as the valuation relies on 2008 financials. Basing your offer on 2008 year-end figures when the target company has meanwhile released strong updated financials and year-end guidance just isn’t convincing and confirms the importance of updated earnings. This point was also highlighted in Cadbury’s defence document, which placed Kraft’s offer at an even less appealing multiple of 11.6x 2009 EBITDA.

Kraft’s final offer of GBP 8.50 per share represents a 49.64% premium above Cadbury’s share price of GBP 5.68 prior to Kraft’s proposal announcement. When determining the offer premium Eckbo (2009) suggests in an empirical research analyzing offer premiums in corporate takeovers, the selection of a target share price two to three months prior to the initial offer announcement. The rationale behind this approach is that “a price this far back from the initial bid is largely free of market anticipation of the pending offer.”\(^\text{168}\) Looking at Cadbury’s share price of GBP 5.29 on July 1, 2009 prior to any speculation launched by analysts regarding a possible consolidation in the confectionery industry the final premium paid by Kraft is 60.68%. The premium paid is in line with Eckbo’s research, who finds on a sample of 10,806 control contests for publicly traded targets in the US between 1973 and 2002, that hostile takeovers attain the highest final offer premiums (61%).\(^\text{169}\)

Considering the stock price prior to the offer announcement and Kraft’s final offer one would say that Cadbury’s management has done a good job in serving its shareholders’ interests. Nevertheless the valuation conducted based on 2009 full-year profits, released

\(^{167}\) Bernstein Research (Feb. 2010)  
\(^{168}\) Eckbo (2009), p. 154  
\(^{169}\) Eckbo (2009), p. 155
after Kraft has gained control over Cadbury, revealed a significantly higher equity value per share, which doesn’t make Kraft’s offer look so generous. Moreover criticism can be brought to Cadbury’s management for allowing Kraft to launch its bid from such a low share price. With a history of failing to deliver ambitious profit targets, product recalls due to a labelling error in 2007 and a salmonella contamination in 2006 which affected seven of its products, Cadbury has disappointed the market, which reacted rather sceptical to management’s efforts to deliver stronger operating performance through the implementation of the Vision into Action business plan. The consequence was a low stock price, which made the company even more attractive to possible suitors.

Although Kraft was forced to increase its bid, the precedent transaction analysis showed that the 13x 2009 EBITDA multiple offered by Kraft represented the lowest multiple paid in a major mergers and acquisitions deal in the food processing industry in a decade prior to Cadbury’s takeover.

The undervalued stock price, the strong growth prospects combined with the strong operating momentum highlighted in the 2009 year-end guidance and confirmed by the released 2009 annual report, prove that Kraft was able to acquire an outstanding asset at a very cheap price.
7. Conclusion

The purpose of the current thesis was to analyze the hostile takeover of the iconic British brand, Cadbury, by multinational Kraft Foods while answering the following questions:

- What was the motivation behind Cadbury’s takeover?
- What takeover defence mechanisms did the board of Cadbury employ and how effective were these in maximizing shareholders’ wealth?
- Did the price offered by Kraft Foods represent the fair value of Cadbury?

The austerity measures of several companies during the financial crisis combined with low stock prices and decreasing company valuations exposed weakened companies to the raids of highly liquid corporations with a strong capital basis and efficient operations. The spike in commodity costs and the increased competition from retailer brands called for diversification and consolidation in the confectionery industry, with large players turning their attention towards complementary sectors, niche markets and expansion in emerging markets with huge growth potential. Furthermore the acquisition of Wrigley by Mars in the spring of 2008 turned out to be an important event. The scale achieved though the combination of Mars and Wrigley made every other confectionery company in the market rethink its strategy and vulnerabilities.

The attractiveness of Cadbury’s business, the strong operating performance delivered through the implementation of the Vision into Action business plan and its strong potential of operating margin improvements combined with the high exposure to emerging markets accounting for over 40% of the company’s sales and its low share price, made Cadbury the perfect target for potential suitors. The disposal of Cadbury’s Americas and Australia beverages business in 2008 and 2009 respectively, transforming Cadbury into a pure-play confectionery company made it a likely takeover candidate for Kraft Foods, who was looking to improve its brand portfolio, strengthen its vulnerable position in the European chocolate segment and increase its exposure in emerging markets.
A combination of the two companies would create a “global powerhouse in snacks, confectionery and quick meals” placing the combined entity as the world leading confectionery company with a market share of 14.8%, before its main competitor Mars/Wrigley. Furthermore the complementary nature of Cadbury would allow Kraft an entry into faster growing markets like India and South Africa and consolidate its position in South America. The combined companies would benefit from each other’s distribution channels and would provide the necessary scale for an even more effective competition in the confectionery segment. Expected operational, administrative, marketing and selling cost savings of USD 625 annually and revenue synergies will drive long-term growth rates resulting in estimated total revenues of USD 50 billion per year.

The prohibition of several preventive anti-takeover measures under the UK City Code on Takeovers and Mergers limited Cadbury’s options for defending itself when confronted with an unwanted suitor. As seen in chapter three the most commonly employed defence mechanism for UK traded companies is the release of profit forecasts and the finding of a white knight, strategies also employed by Cadbury’s management. The release of its 2009 year-end guidance and the speculation around a possible bid by Hershey and Ferrero served Cadbury well, increasing its share price and putting pressure on Kraft to raise its offer although no actual threat of a rival offer was in place.

While putting a credible defence and maximizing shareholders’ wealth, as holders of stock received a substantial premium to their shares worth GBP 5.68 just before Kraft’s public offer, the only accusation that can be brought to Cadbury’s management is that it allowed Kraft to start its bid from such a low share price.

The standalone company valuation performed in chapter six based on the 2009 year-end consolidated financial statement proved that Cadbury’s stock was undervalued. The discounted cash flow analysis revealed a share price of GBP 9.73 and the relative valuation based on comparable companies yielded a slightly lower equity value per share, while Cadbury’s share price was trading at GBP 5.68 on 4 September 2009, the last business day preceding Kraft’s offer announcement and GBP 5.29 on 1 July 2009 prior to any speculation regarding a possible consolidation in the confectionery sector.
Finally, the precedent transaction analysis conducted places Kraft’s final takeover offer for the global leadership position in the confectionery industry, of 13x Cadbury’s 2009 EBITDA, as the lowest multiple paid in a large mergers and acquisitions deal in the food processing industry in a decade prior to Cadbury’s takeover, concluding that Kraft was able to acquire an outstanding asset with strong operating momentum at a bargain.
References


Cadbury-Kraft Takeover Timeline (24.05.2011). In: The Telegraph. Source: http://www.telegraph.co.uk


1


Damodaran, Aswath (June 2008): “Growth and Value: Past Growth, Predicted Growth and Fundamental Growth”. Stern School of Business


If words were food, nobody would go hungry (19.11.2009). In: The Economist. Source: http://www.economist.com.


KPMG’s Corporate and Indirect Tax Rate Survey (2009). Source: www.kpmg.com


The Inside Story of the Cadbury takeover (12.03.2010). In: Financial Times. Source: Factiva Database

Appendix

Abstract (English)

Hostile takeovers have been extensively explored during the past years due to their increased presence in global M&A activity. Considerable attention has been dedicated to the rising complexity of takeover strategies and anti-takeover defence mechanisms employed by target companies and the impact of these on shareholders’ wealth.

The purpose of this thesis is to analyse the background and bitter fight to stay independent of one of Britain’s most loved brands, Cadbury Plc., drawing upon existing theories. The thesis tries to find answers to the following questions:

- What was the rationale behind Cadbury’s takeover?
- What takeover defence mechanisms did the board of Cadbury employ and how effective were these in maximizing shareholders’ wealth?
- Did the price offered by Kraft Foods represent the fair value of Cadbury?

The paper is divided into seven main chapters. The introduction presents the research objectives and short outline of the case analysed. The second chapter provides a theoretical framework for hostile takeovers. The third chapter reviews the most commonly employed anti-takeover defence mechanisms and the implication of their use. The forth chapter is dedicated to the analysis of the background and motivation of Kraft Foods’ hostile takeover offer as well as the defence tactics applied by Cadbury Plc. Chapter five outlines the theoretical foundation for the Cadbury’s valuation conducted in chapter six, with the aim of providing an estimate of the target’s fair value. Chapter seven summarizes and concludes.
Abstract (Deutsch)


Es wird versucht Antworten auf folgende Fragen zu formulieren:

- Welche waren die Beweggründe hinter Cadbury’s Übernahme?
- Welche waren die Abwehrmaßnahmen, die Cadbury’s Management eingesetzt hat und wie erfolgreich waren diese in der Maximierung des Vermögens seiner Aktionäre?
- Widerspiegelt der von Kraft Foods angebotene Preis Cadbury’s fairen Wert?

CURRICULUM VITAE
Stefania Alexandrina Naicu-Svaiczer

PERSÖNLICHE DATEN:
Geburtsdatum: 13.01.1987 in Targu Mures, Rumänien
Staatsangehörigkeit: Rumänien / Ungarn
Familienstand: ledig
E-Mail: stefania.naicusvaiczer@gmail.com

AUSBILDUNG:
2010-2012 Universität Wien Wien, Österreich
Magisterstudium Betriebswirtschaft
Spezialisierungen: Corporate Finance, Externe Unternehmensrechnung
2006-2009 Universität Wien Wien, Österreich
Bakkalaureatsstudium Betriebswirtschaft
2005 Österreichische und ungarische Matura (mit Auszeichnung) Budapest, Ungarn
2001-2005 Österreichische Schule Budapest Budapest, Ungarn
1993-2001 Friedrich Schiller Deutsche Volksschule und Gymnasium Targu Mures, Rumänien
Sept.-Dez 1999 Josef Voit Schule Freihung, Auslandssemester Freihung, Deutschland

ARBEITSERFAHRUNG:
Aug 2011-Feb 2012 Raiffeisen Investment AG Wien, Österreich
Praktikum – Team Energy/Utilities M&A
• Projekte im Energy/Utilities Sektor in den CSEE Ländern
• Besonderer Fokus auf erneuerbare Energie in Osteuropa
• Erstellung von Dokumenten, Unternehmensprofilen und Präsentationen
• Recherchearbeit, Unternehmensbewertung, Finanzanalyse, Management von Datenbanken
**Jan-Dez 2010**  
**Erste Bank der österreichischen Sparkassen AG**  
Wien, Österreich  
Praktikum – Teilzeit neben dem Studium  
Großkundenabteilung  
- Unterstützung bei der Erstellung von Finanzierungsanträgen und Veranlassung von Verbriefungen  
- Abwicklung von Tagesgeschäft (Zahlungsverkehr, Reklamationsbearbeitung)  
- Administrative Verarbeitung konkreter Geschäftsfälle (Termingeldveranlagung, usw.)

**International Desk:**  
- Unterstützung in allen bankbezogenen geschäftlichen Angelegenheiten  
- Unterstützung bei der Kontoeröffnung, Finanzierung und der Gewährung von Sicherheiten  
- Weitergabe von landesspezifischen Informationen (CEE Länder)

**Sept-Nov 2006**  
**REKO Immobilien**  
Wien, Österreich  
- Unterstützung bei der Entwicklung von Immobilienprojekten  
- Marktrecherche, administrative Unterstützung

**WEITERE INFORMATIONEN:**

**Sprachkenntnisse:** *Rumänisch* (Muttersprache), *Ungarisch* (Muttersprache), *Deutsch* (fließend in Wort und Schrift), *English* (fließend in Wort und Schrift), *Spanisch* (Grundkenntnisse)

**IT Kenntnisse:** Microsoft Office, Bloomberg, Capital IQ, Thomson Financial

**Aktivitäten, Interessen:** Reisen, Skifahren, Politik, Wandern, Sprachen