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SCHOOL OF BUSINESS & ECONOMICS

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Master Thesis International MSc in Finance

Mergers and Acquisitions

Nestlé Group acquires Starbucks Corporation

Author:

Charlotte Köhler

Student ID:

152411013

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Supervisor:

José Carlos Tudela Martins

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ABSTRACT

This paper will analyze the possibility of creating additional shareholder value through mergers and acquisition between Nestlé Group and Starbucks Corporation at the end of the first quarter of 2013. Nestlé, the current market leader, has been under attack on its position as number one in the industry. At the same time, Starbucks has established itself as the leading speciality coffee shop chain worldwide.

By using Discounted Cash Flow, a Dividend Discounted model and Relative Valuation, both companies are firstly valued individually and the result is compared to the performance of the stock over the past years. The analysis suggests that Nestlé is valued fairly by the market at the time of study while Starbucks is undervalued by almost 40%. A valuation of the combined company reveals that there are considerable opportunities for additional value creation through a merger.

Based on the analysis and the valuations performed, the paper concludes that Nestlé should proceed with an acquisition. The deal will be presented to Starbucks' shareholders in the form of a public advertisement for the outstanding shares of the company as a friendly tender offer. The bidding price will be USD 72,50 per share, representing a 25,41% premium over the market price at time of this study. Nestlé will finance the all cash deal by using existing cash reserves and by raising new debt, in line with the company's acquisition history.

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Charlotte Köhler

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

1. INTRODUCTION

Through the following Master dissertation a possible acquisition of Starbucks Corporation by the Swiss industry leader Nestlé Group will be analyzed. Both companies are market leaders in their respective fields and operate globally. The intention of such a study is to apply the acquired theoretical financial knowledge to a realistic real life scenario by closely studying the steps involved in such an M&A deal.

For this purpose, the first section of the work is a literature review dealing with current M&A topics in general, as well as a review of basic financial concepts. Views of different researchers in the field about best practice in the valuation process are critically discussed to close this chapter.

A study of the food and beverage industry in general, and the hot beverage industry more specifically, is contained within the second part of this work. It is followed by an analysis of both companies that illustrates their performance of the past three financial years and compares each one to their main competitors.

The subsequent section is an essential one in that it is where the valuation will be performed and discussed. By applying a Discounted Cash Flow using the Weighted Average Cost of Capital as a discount rate, a Dividend Discount model and a comparable analysis, the pitfalls of each of the valuation methods is counterbalanced and the valuation result is backed up.

Having established the value of each individual firm, both companies will be merged together in order to have a benchmark value for the synergy effects. Considering that the entire purpose of an M&A deal is to create value in a way in which one plus one equals three instead of two, it is crucially important to distinguish the various cost saving and revenue enhancing opportunities that arise from a deal while allocating a fair value estimate for them. Equally important are the effects of a new capital structure that will present a number of opportunities worth investigating further. This section is also where the deal and the details of the structure will be explained, helping to draw the conclusion that the acquisition of Starbucks could add value to the shareholders of Nestlé and Starbucks.

The proposal will consist of a cash offer to the existing Starbucks shareholders of USD 72,50 per share, composing a 25,43% premium over the current stock price and a 32,13% premium over the average stock price of the past 52 weeks.

The deal value of USD 56.042 million or CHF 52.248 million will be financed with 10% cash reserves and the other 90% by issuing of new financial debt at currently favorable low rates.

2. LITERATURE REVIEW

1.1 Mergers & Acquisitions

A 2006 survey polled by Accenture/Economist Intelligence Unit revealed that only half of the executives questioned believed they had actually achieved the revenue synergies expected from their M&A deals, whereas just 45 % affirmed that expected cost synergies had been captured (Ficery, et al., 2007). In fact, a common reference in the industry is that only about 20% of mergers are successful, meaning that they add value to stockholders. This figure led to the belief that a decline in M&A deals should be noticeable. Conversely, however, the opposite is the case; and the number of transactions as well as the size of deals continues to grow. In an attempt to understand the underlying motives of executives who still engage in M&As, the following paragraphs will give a comprehensive summary of the academic literature highlighting the main types of acquisitions, as well as the way deals are structured and conducted. Finally, empirical studies will be consulted to understand where shareholder lose and where they gain.

M&A advisor Bill Pursche (2000), identifies three interrelated factors that determine whether an acquisition will be successful: "…buying the right company, paying the right amount, and then capturing whatever value is needed to overcome any premium that was paid." This shows how M&A activities demand strategic planning for the first factor, technical analysis for the second and operational adaptations. in form of Post-Merger Integration, for the third (Pusche, 2000). The empirical evidence is important because it shows that "there is no magic formula to make an acquisition successful" (Copeland, et al., 2000). As in any other strategic business move, M&A's have to be valued and followed through.

1.1.1 Types of Acquisitions

In his publication, Damodaran (2002) paints a picture of the different ways a firm can be acquired. Firstly, he differentiates between buyouts where the target is acquired by external investors, potentially in combination with the management (MBO), and the acquisition of one firm by another. Buyouts lead to the firm going private and are often linked with a tender offer. Concerning arrangements between firms, the author broadly distinguishes between four types. The first is a merger in which two firms are combined, where usually the target stops to exist and both firms are run under the bidder. The decision comes, however, from both firms' boards of directors and the stockholders approval. The only difference from a consolidation is that — in this example — none of the firms keep on operating when a new firm is launched. When the acquirer goes behind the board of directors and seeks to purchase the free-floating stock directly from the shareholder, it is said to

be a hostile takeover and called a "tender offer." Finally, the fourth method is a purchase of assets that occurs when one firm acquires another, allowing it to potentially operate differently in the future (Damodaran, 2002).

As briefly mentioned before, the difference between friendly and hostile takeovers relates to the type of deal and the tone in which it is carried out. During a hostile takeover the management does not welcome the takeover and often relies on various methods to fight back, such as a poison pill or green mail. A friendly takeover, meanwhile, is defined as one in which the management on both sides seek the deal and they are usually is easier to for the bidder to complete.

1.1.2 The reasons for M&As: Synergies

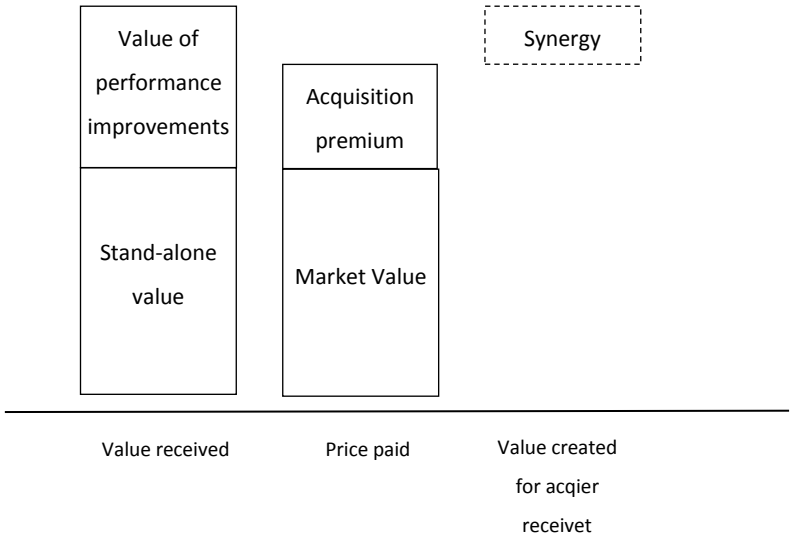
As defined by Damodaran (2005), the added value created by combining two firms is called synergy. To quote Bill Pursche *"Synergies are the present value of the net additional cash flow that is generated by a combination of two companies that could not have been generated by either company on its own."* (Bill Pursche, Synergies: The Art and Science of Making 2 + 2 = 5)

Synergies are the underlying driver behind every M&A, even though their value is difficult to accurately estimate due to the high number of assumptions needed. Fichery et al. (2007) mention synergies as explanation executives use in order to justify big premiums paid in M&A. And yet, synergies can only be realized after the deal has gone through; therefore, executives are referring to expected increases in cash flow, not actual synergies (Ficery, et al., 2007).

An approach to quantifying synergies is to value both firms separately without the synergy and then adding their values. The third step is for the merged firm to be valued and the difference between the value of the merge and the two separate firms results in a value of the synergy (Damodaran, 2005).

The resulting value can come from different sources, broadly speaking from operating or financial synergies. The most important opportunities for operating synergy as mentioned by Damodaran (2005) are economy of scale, greater pricing power, combination of different functional strength and higher growth in new or existing markets. Financial synergies arise either when the cash flows are increased or the cost of capital is decreased.

Figure 1: Acquisition Evaluation Framework (Copeland, et al., 2000)



The timeliness of the synergy effects is also of importance due to the nature of discounted cash flows, where the further in the future the added value arises, the lesser its value (Damodaran, 2005). Whereas Ficery et al. (2007) argue that between 70 -75% of synergy opportunities occur in the first year after the deal. Ficery et al. (2007) confirm, when analyzing potential synergies, a cost-benefit analysis has to be conducted. Furthermore, they mention how managers often focus on one aspect of synergy and, in an attempt to pull through with archiving the benefit, oversee other potential revenue increases and cost reductions; they specifically mention examples the of R&D and design (Ficery, et al., 2007). Additionally Ficery et al. detects three dimensions important to the value of synergies. Firstly the size, secondly the time necessary to implement it, and thirdly how difficult it is to actually capture (Ficery, et al., 2007).

1.1.3 Structuring the Deal

Under structuring the deal refers to both, the price paid and the method of payment. McKinsey's Textbook mentions that shareholders of the acquirer react better to cash offers than to share offers. Moreover, it points out that the decision regarding how to pay is determined by who should carry the risks and consequetally the rewards. A cash payment implements all the risks of caputing synergies and exessive premiums to the bidder's shareholder, whereas when shares are exchanged, the targets shareholders also assume a part of the the risk exposure. Does the bidder believe their own stock is overvalued? Stock exchange can, in fact, be a feasable method of payment (Copeland, et al., 2000). Lastly, the recources available will play a decicive role. If the acquierer cannot raise more funds, a share transation will be nessesary. When the capital structure allows for raising more cash without imposing the negative effects of debt financing on the new combined firm, this should be done (Copeland, et al., 2000).

Heron and Lie (2002), having studied the effect of operating performance in relation to the method of payment in takeovers, point out how stock-based acquisitions can temporarily inflate the purchasing power of the acquirer's stick, creating an added incentive for managers to use this method. However, they conclude that there is no significant difference in operating performance based on payment type, but higher returns in cash payment deals in comparison with stock-based deals (Heron & Lie, 2002). Loughran and Vijh (1997) discovered that when bidders use stock payment, a negative return of -25% is observable, whereas with cash tender offers a positive excess return of 61,7% is evident.

1.1.3.1 *Acquisition price and premium*

The bidding price for the target is naturally influenced by the valuation conducted of the bidder. However, market capitalization, potential other bidders and the recent economic climate also have an influence. The valuation that already incorporates all the synergies should be viewed as a price ceiling so that the bidding firm shareholders capture the positive effect of the firm's strategy (Copeland, et al., 2000).

Equation 1

$$\begin{aligned} &Value\ created\ for\ Acquierer \\ &\quad = (Standalone\ value\ of\ target \\ &\quad + Value\ of\ Performance\ improvements) \\ &\quad - (Market\ Value\ of\ Targer + Acquisition\ Premium) \end{aligned}$$

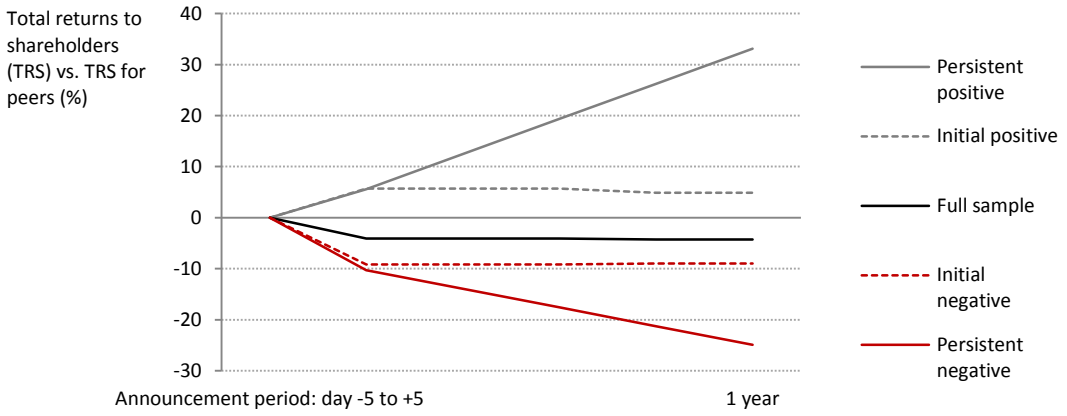
1.1.4 Stockholders' Return

The underlying assumption of any M&A deal is that value can be created for the shareholder; may it be by reducing costs, economies of scale or even better management. Empirical research has, however, shown that bidder shareholders do not gain compared to target shareholders. Financial literature in recent decades reached the consensus that shareholders of target firms receive premiums of on average 20–40% relative to the preannouncement share price (Goergen & Renneboog, 2004). When examining the abnormal returns shortly after announcement of an M&A transaction on the side of the bidder, the opinions are split between small negative, zero, and small positive abnormal returns (Goergen & Renneboog, 2004).

Goergen et al. (2004) found announcement effects of 9 and 0,7% for target and bidder firms in European cross border M&A's, respectively. Furthermore, they show the effect the bid type has on short-term stock performance after announcement where hostile takeovers result in much larger price reactions than friendly bid offers (Goergen & Renneboog, 2004). Sirower et al. (2006) argue that one of the reasons for the negative announcement effect on the buyer's side is that full payment

upfront is required in M&A deals, whereas other expansions are explored and financed in stages over time

Figure 2: Shareholder Returns from Acquisitions, 1995-2001



	Number of Deals	Announcement Returns	1 Year Return	Premium
Persistant Positive	52	5.6%	33,1%	25,8%
Initial Positive	103	5,7%	4,9%	30,7%
Full Sample	302	-4,1%	-4,3%	35,7%
Initial Negative	199	-9,2%	.90%	38,4%
Persistant Negative	133	-10,3	-24,9%	40,5%

Source: Mark Sirower and Sumit Sinha "Avoiding the Synergy Trap: Practical Guidance on M&A Decisions for CEOs and Boards, "Journal of Applied Corporate Finance 18, no. 3 (Summer 2006): 83–95.

Graph one illustrates how in the longer run (one year in this case) positive as well as negative returns persist. The research examining a sample of 302 deals between 1995 and 2001 concluded that average announcements, as well as one year returns, are negative. A second conclusion that can be made is the relationship of the premium paid. Here, it is noticable that the higher the premium, the more negative the stock returns are.

1.1.4.1 *Shareholders Value at Risk*

In their publication, "Avoiding the Synergy Trap," Sirower and Sinha (Sirower, et al., 2006) introduce the notion of Shareholders Value at Risk (SVAR) as a measurement tool for acquiring a company's shareholders risk exposure. They define it as the premium paid for the acquisition divided by the market value of the acquiring company before announcement. Therefore, it can be thought of as an index quantifying the company's value at risk if no post-merger synergies are realized. This index can also be calculated as the premium percentage multiplied by the market value of the seller relative to the buyer. The greater the premium percentage paid to sellers and the greater their market value relative to the acquiring company, the higher the SVAR.

Equation 2

$$SVAR = \frac{Premium\ Paid\ for\ Aquisition}{Market\ Value\ Acquiring\ company}$$

Considering that it is possible for acquirers to lose more than the premium, SVAR can underestimate the true risk.

1.2 Valuation Approaches

As mentioned in the deal structure, one major aspect of whether a deal will be successful is to pay the right price. Excessively large premiums will destroy value for the shareholders instead of creating value through synergies. Therefore, determining the value of the target is essential.

Broadly speaking, one can differentiate between the discounted cash flow models that discount future cash flows to present times using the corresponding discount rate. A more statuary, however also faster and easier to construct set of approaches, is called multiples. It is frequently adopted in the financial industry and based on comparing different indicators to a so-called peer group of the industry (Lie & Lie, 2002). Asset based models are useful in order to determine a minimum value or residual value. Lastly, option pricing valuation models offer the possibility to value opportunities and the future choices (Luehrman, 1997).

Even though most valuation methods should result in the same value of the firm — supposing the assumptions in use are consistently applied (Young et al, 1999) — the researcher should adopt the valuation method that best incorporates the availability of information, the situation the firm is in (concerning, business life cycle and therefore the growth and financing needs) and the industry.

Young et al, (1999) discuss the focus of the diverse approaches on estimating value and conclude the differentiation between equity value and enterprise, where the difference is the inclusion of debt claims in enterprise value.

In the following part, the two first groups of valuation methods will be discussed and the underlying concepts and assumptions will be highlighted from pursuant literature. Asset based models will not be further discussed as they predominately play a role in situations of acquisitions of distressed companies.

1.2.1 Discounted Cash Flow Valuation

The concept of understanding the value of a firm as the present value of its future cash flows, as the intrinsic value, is the most broadly taught technique in finance academia (Lie & Lie, 2002). The rationale behind Discounted Cash Flow (DCF) approaches is converting the free cash flows due to the shareholders and debtors arising from the operating assets and future assets due from growth opportunities into the present value (Luehrman, 1997). The financial industry has for a long time relied on traditional valuation approaches based on discounting the estimated future cash flows by the weighted average cost of capital (WACC) (Luehrman, 1997). Luehrman argues that instead of using a "one-size-fits-all" (Luehrman, 1997) approach, such as the Discounted Cash Flow (DCF) using the WACC, managers should split the valuation process into the three fundamental aspects of value creation: operations, opportunities and ownership claims. (Luehrman, 1997). He suggests valuing operations using an adjusted present value procedure because this model allows for change in capital structure and, therefore, separates the process into two parts. On one hand the value of the business operation by discounting the future operating cash flows by the cost of assets or unlevered equity and on the other hand, the effect associated with the financing mix of the firm. Both parameters are added up (Luehrman, 1997). Oded (2007) lists four types of cash flow based models: namely Adjusted Present Value (APV); Capital Cash Flows (CCF); Free Cash Flows to Equity (FCFE); and Free Cash Flows to the Firm (FCFF). The most important difference between them is the way in which they can accommodate specific capital structure needs. Furthermore, the computation of free cash flows vary as well as the discount rate used (Oded & Michel, 2007). Below the FCFF as well as the APV will be explored further.

1.2.1.1 *Free cash flow to the firm*

Using the free cash flow to all investors, the value of the firm is given as:

Equation 3

$$V_{FCFF} = \sum_{t=1}^{n} \frac{FCFF_t}{(1+WACC)^t} + Terminal\ Value$$

The first part of the formula computes the present value for a specific period in which exact estimates will be applied to the major cash flow drivers. The horizon of this period can vary, keeping in mind the tradeoff between elaborateness of forecasts and workload. Copeland et al. debate using

no less than 5 years and, at least for a non-cyclical companies, no more than 10 years of detailed forecast estimation (Copeland, et al., 2000). Depending on the stage of the life cycle that the firm finds it in, growth is expected to vary. However, Damodaran found that in the long run, a company's growths flatten and are close to the growth of the economy. For reasons of simplicity and practicality, cash flows are forecast for a limited time period and the "terminal value" is calculated using a perpetual growth rate (Damodaran, 2002). This property allows the analyst to do a "going concern" valuation (Penman, 1998). The latter parameter of equation 3, called the terminal value, is defined as the present value of the cash flows generated by the assets with a perpetual growth. The definition of the detailed estimates is mainly determined by exactly this stable growth rate g.

Equation 4

$$Terminal\ Value = \frac{\left(\frac{FCFF_{n+t}}{(WACC - g)}\right)}{(1 + WACC)^n}$$

In order to identify g for the long run, the rational is the operating efficiency measured by return on invested capital (ROIC) by the investments made in the business (Damodaran, 2008).

Equation 5

$$g = (1 - Dividend\ payout) * Return\ on\ Equity$$

Where Reinvestment rate is (Damodaran, 2007):

Equation 6

$$Reinvestment\ Rate = \frac{Cap\ Ex - Depriciation + \Delta\ Non\ Cash\ WC}{EBIT(1 - t)}$$

And Return on invested capital:

Equation 7

$$ROIC = \frac{After - tax\ Operation\ Income_t}{Book\ value\ of\ Invested\ Capital_{t-1}}$$

Whereas, usually in finance market values are preferred for computation, in the case of invested capital the book values should be favored due to the fact that market values include expected value of growth assets, which will not generate income in the period in question resulting in a downward biased (Damodaran, 2007).

Regardless of the specific DCF approach used, in a first step the future cash flows will be estimated. This is where the most errors occur, as the cash flows are highly sensitive to specific assumptions needed in order to set up the model (Damodaran, 2002). The definition of Free Cash Flow to the firm is given below:

Equation 8

$$FCFF = EBIT\ (1 - T_c) + Depreciation - \Delta\, Working\ Capital - Capital\ Expenditure$$

Equation 8 yields the free cash flow to all owners of the company, the shareholders as well as the debt holders and should therefore be discounted at the average cost of capital (WACC) in order to arrive at the value of the firm. Once this value has been attained, it is a straightforward process to reach the value of equity by using the simple Enterprise value equal to equity plus debt notion.

1.2.1.2 *Adjusted Present Value*

When a firm does not have a stable capital structure for one reason or another it has been argued that an adjusted present value (APV) methodology yields a more precise estimation of the value of the firm. This is because of the APV values effects of financial structure individually instead of embedding them in the cost of capital (Copeland, et al., 2000).

Equation 9

$$APV = Base\ case_{Unlevered\ firm} + PV_{tax\ shields} - PV_{Financial\ destress}$$

Whereas the value of the unlevered firm is defined as:

Equation 10

$$Base\ Case_{Unlevered\ firm} = \sum_{t=1}^{t=n} \frac{FCFF_t}{(1+k_u)^t} + \frac{\left(\frac{FCFF_{n+t}}{(k_u - g)}\right)}{(1+k_u)^n}$$

In order to account for the positive as much as negative effects of leverage the present value of tax shields and financial distress are conducted.

Equation 11

$$PV_{Tax\ shields} = \sum_{t=1}^{t=n} \frac{T_c * k_d * D_t}{(1+k_d)^t} + \frac{\left(\frac{T_c * k_d * D_t}{k_d - g_n}\right)}{(1+k_d)^n}$$

Tax shields are the value of the benefits of a firm to use leverage to finance its operations with the underlying assumption that interest expenses are tax deductible. Corporate finance literature, more specifically the theorem of Modigliani and Miller, at the same time also recognizes that maximization of the value of the firm is not reached with full debt financing as leverage carries costs. Those costs, referred to as financial distress, arise from different direct and indirect sources and are usually difficult to express in one numerical figure (Almeida & Philippon, 2007). Financial distress is a function of the probability of default and the cost of bankruptcy. This definition illustrates further why a computation is problematic. Neither the probability of default nor the cost of bankruptcy can be directly observed. Almeida & Philippon reference the work of Andrade and Kaplan, who found

that the indirect cost of financial distress, such as loss of market share, arriving at distress is about 10-20% of pre-distress firm value. Nonetheless, this percentage cannot be understood as cost of financial distress as the probability of default is small for most public firms.

Also Damodaran recognizes the estimation problematic in quantifying the bankruptcy cost. He argues for the use of default rates for the firms bond rating in order to obtain probability of default. As the cost of bankruptcy he proposes a percentage of firm value (Damodaran, 2002).

1.2.1.3 *Dividend Discount Model*

Likewise a DCF, the Dividend Discount model obtains the present value of all future cash flows due to the owner, in this case the dividends. As the model values obligations to equity holders, it has to be discounted at the cost of equity.

Equation 12

$$P_0 = \sum_{t=1}^{\infty} \frac{D_t}{(1+k_e)^t}$$

From this formula the Gordon Growth Model is derived by assuming constant perpetual growth to infinity:

Equation 13

$$P_0 = \frac{D_t}{k_e - g}$$

Where:

P_0= stock price today
D_t=in the dividend due in the next period
k_e= cost of equity
g= perpetual growth rate

Equation 14

$$g = (1 - Dividend\ payout) * Return\ on\ Equity$$

Myron J. Gordon and Eli Shapiro first published the formula in 1956 (Gordon & Shapiro, 1964), making reference to John Burr Williams`s "The Theory of Investment Value" (1938).

The Gordon growth model is best suited for companies growing at a rate equal to or lower than the nominal growth in the economy and which have well established dividend payout policies that they intend to continue. The model will, however, underestimate the value of firms that pay out fewer dividends than they can afford and accumulate cash (Damodaran, 2008).

Assuming a constant growth rate may, however, not be suitable for all companies, especially companies with a high growth rate and those companies that do not currently pay dividends.

1.2.1.4 *Multistage Dividend Discount Model*

In order to overcome the problematic of a constant growth rate until infinity, a number of adaptations to the original Gordon DDM model have been introduced, such as the two or three stage DDM, and the H model (Damodaran, 2002).

All models have in common changing growth rates that are applied to different time periods.

The two-stage model has a positive or negative initial growth rate and jumps then to a steady and positive growth rate period. This instant change is a large drawback in this model leading to the H-model.

1.2.1.4.1 H-Model

The H-model has a high initial growth rate. From high growth it passes over a linearly declining rate over to a stable perpetual growth rate. A major drawback that the H-model still has compared to other valuation models is that it assumes a constant dividend payout ratio and cost of equity.

Equation 15

$$P_0 = \frac{DPS_0 * (1 + g_n)}{k_e - g_n} + \frac{DPS_0 * H * (g_a - g_n)}{k_e - g_n}$$

Where

DPS_t = *Dividends per share in year t*
g_a = *Growth rate in high growth phase (lasts n1 periods)*
g_n = *Growth rate in stable phase*

1.2.1.4.2 Three Stage Model

Finally, the three-stage model has an initial phase of stable high growth that lasts for a certain period. In the second phase the growth rate declines linearly until it reaches a final stable growth rate. This model improves upon both previous models and can be applied to nearly all firms.

Equation 16

$$P_0 = \sum_{t=1}^{t=n1} \frac{\mathrm{EPS_0} * (1 + \mathrm{g_a})^{\mathrm{t}} * \Pi_{\mathrm{a}}}{(1 + \mathrm{k_{e,hg}})^{\mathrm{t}}} + \sum_{t=n1+1}^{t=n2} \frac{\mathrm{DPS_t}}{(1 + \mathrm{k_{e,t}})^{\mathrm{t}}} + \frac{\mathrm{EPS_{n2}} * (1 + \mathrm{g_n}) * \Pi_{\mathrm{n}}}{(\mathrm{k_{e,st}} - \mathrm{g_n}) * (1 + \mathrm{r})^{\mathrm{n}}}$$

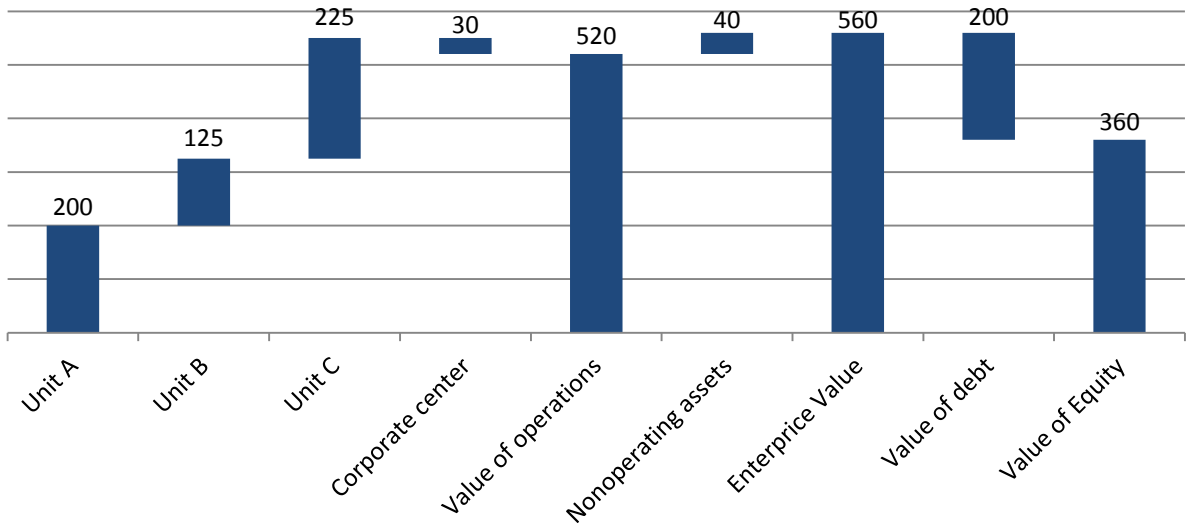
Where:

EPS_t = Earnings per share in year 0
DPS_t = Dividends per share in year t
g_a = Growth rate in high growth phase (lasts n1 periods)
g_n = Growth rate in stable phase
Π_a = Payout ratio in high growth phase
Π n = Payout ratio in stable growth phase
k_e = Cost of equity in high growth (hg), transition (t) and stable growth (st)

1.2.2 Enterprise Value of Multibusiness Companies

On a side note, it is essential to stress the special nature of valuing multibusiness companies. As not only cash flows arise from one single operation, it is important to determine the value of the enterprise that is to be valued. Copeland et al. illustrate the relation of enterprise value as follows:

Figure 3: Enterprise Valuation of a Multibusiness Company



Source: Copeland, et al., 2000

1.2.2.1 *Components of the Discount rate*

The second step of the valuation process requires the computation of the corresponding discount rate. As stated before, the discount rate will be different for each of the DCF methods. In the three valuation models demonstrated by the WACC, the cost of assets or cost of unlevered equity and the cost of equity will be used. Below, the single influencing factors going into each of these discount rates will be distinguished.

The rate used to express future cash flows into the value they are today is commonly called the discount rate or expected rate of return. Consequently, this rate should reflect the investors' opportunity cost of taking on that particular investment, the time value of money or risk free rate, plus a risk premium for the specific risk associated with that investment (Luehrman, 1997). By this definition, it is clear to see that the discount rate must be adapted for the valuation method used. When discounting the future free cash flows to the firm, meaning the cash flows belonging to the owners as well as debtors, the discount rate must be a weighted-average cost of capital (WACC) as it reflects the overall risk of the total capital employed. On the other hand, a DCF using the APV approach must be discounted by the cost of debt and the unlevered cost of equity. The DDM — representing the dividends and hence cash flows to equity holders — has to be discounted at the

cost of equity. Following the individual factors of the different discount rates will be further highlighted.

1.2.2.1.1 Risk Free Rate of Return

The guaranteed return yielded by an investment, where expected return is equal to real return, is called the "risk free rate of return" (Damodaran, 2008). The availability of such a risk free rate to investors is highly important for a wide range of financial concepts, such as modern portfolio theory and pricing models (Damodaran, 2010).

The rate defines the time value of money, building one of the main assumptions for the Discounted Cash flow models and it is used to adjust real return to excess returns. On the reverse, you can also understand the actual return of a risky asset as the risk-free rate, plus a risk premium, that compensates the investor for baring the extra risk (Damodaran, 2008).

In order to determine the risk-free rate, two factors have to be given. Firstly, the investment cannot the exposed to default risk, excluding any investment in cooperation's due to the limited liability. Governments, however, being in control of the money supply, should theoretically be able to settle obligations (Damodaran, 2008). Nonetheless, the recent financial crises and, more specifically, the European sovereign debt crises have shown that the power to print money, *"does not give governments immunity from default*" (Damodaran, 2010). This raises a question about how to assess the risk of severing debt obligations. Brodsky et al. (2011) suggest ratios, such as debt-to-GDP and debt-to-tax revenue, to assess the ability of a country to acquit its obligations, reasoning that the ratios examine the income resources available to the debtor.

Secondly, the reinvestment risk has to be equal to zero as well in order for a return to be riskless. When considering a long-term investment, the rate at which the periodic return can be reinvested can fluctuate (Damodaran, 2008).

In order to find the corresponding risk free rate, the horizon of the investment is essential. Damodaran (2005) found that even when comparing risk free rates of the same duration across currencies, one finds substantial differences. If all else is equal, the difference must arise from inflation of the currencies being the fundamental reason for adjusting the nominal to a real risk-free rate (Damodaran, 2008).

Finally, Copeland et al (Copeland, et al., 2000) conclude that using long-term Treasury bond yields to compute the risk free rates permits a consistent and correct valuation.

1.2.2.1.2 Cost of Equity

While empirical evidence suggests that the Capital Asset Pricing Model does not optimally explain the expected return for equity investments (Fama & French, 2004), the model, firstly introduced by William Shard (1964) and John Lintner (1965), is still the most frequently used model to estimate the expected rate of return on an equity investment. Its relevance up until today may arise from its intuitive explanation about the risk return tradeoff. The model explains the expected return of equity as a linear regression between the expected excess market return and the systematic risk of the stock, which is measured by the firm's beta using the risk free rate as the constant/ intercept.

Equation 17

$$E(R_i) = r_f + \beta_L\,[E(R_M) - r_f]$$

Modern Portfolio Theory (Markowitz, 1952) states that investors can reduce their risk exposure by diversification until only baring market risk, also called systematic risk. Hence, investors should only be compensated for the systematic risk. The parameter beta in the formula above is the measure of systematic risk, meaning the risk of on asset that is added to a fully diversified portfolio. Beta is defined by the volatility of the stock's returns in comparison to the market return or mathematically as:

Equation 18

$$\beta = \frac{cov(R_i, R_M)}{\sigma_M^2}$$

Damodaran (2002) supports regression models to estimate a stock's beta. Financial information providers, such as Bloomberg and financial institutions, also use regressions to derive their beta estimates, but they commonly use adjustments as well (Damodaran, 2002). Bloomberg's regressions, for example, use the stock's weekly returns of the past two years and the market return of the same period. The specific adjustment is used due to the assumption that a security's beta moves toward the market average of 1 over time 1. The adjustment is achieved using the following formula:

Equation 19

$$Adjusted\ \beta = Raw\ \beta\ (0{,}67) + 1(0{,}33)$$

Even though confirming the mean reverting property of betas, Damodaran (2002) does not support this and other methods used to adjustment believing them to be arbitrary. Furthermore, he reminds us that the outcome of the regression model will come with a standard error.

In order to arrive from the levered beta, as obtained using market values, to the unlevered beta and further to adjusted to the specific target debt ratio this formula can be applied:

Equation 20

$$\beta_{Ulev} = \frac{\beta_{Lev}}{\left[1 + (1 - T_c) * \left(\frac{D}{E}\right)\right]}$$

The previously referenced cost of unlevered equity used in APV is determined by Copeland et al. who base their findings on the work of early corporate finance researchers, Modigliani and Miller.

Cost of levered equity:

Equation 21

$$k_e = k_u + \frac{D}{E}(k_u - k_d) - \frac{V_{txa}}{E}(k_u - k_{txa})$$

From this formula, we can derive the unlevered cost of equity by assuming that the risk of tax shields will equal the risk of operating assets. Therefore, the unlevered cost of equity is solved for as pursue:

Equation 22

$$k_e = k_u + \frac{D}{E}(k_u - k_d)$$

1.2.2.1.3 Cost of Debt

The cost of debt in a company can vary depending on the debt-liabilities mix used. To determine the cost of debt, all interest baring debt instruments, short and long term, are considered. This includes debt arising from bank borrowings and other sources such as corporate bond offerings. Further operating leases have to be capitalized in order to be included. When the outstanding bonds of the company are liquid and trading frequently, cost of debt is commonly determined as a function of the current level of risk-free interest rate and a default spread depending on the rating of the company (Damodaran, 2002).

Equation 23

$$k_d = r_f + Dafault\ Spread$$

1.2.2.1.4 Weighted Average Cost of Capital

Using the cost of debt and equity (explained above), we reach the cost of capital employed, which is the cost that the firm has towards all of its owners. By definition, it is the weighted average of both ownership-required rates of returns adjusted for tax benefits of the ownership structure.

Equation 24

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

Weights are based on market values, as the cost of capital measures the cost of issuing securities (Damodaran, 2002). The market value of equity is simply the shares outstanding, times the market value of stock, plus all other equity claims, such as warrants and management options. For the market value of debt a conversion has to be applied. The reason for this is that most firms do not have only traded bonds as debt, but also bank debt and other instruments. Therefore, Damodaran (2002) suggests using formula 25, which treats all book value of debt as one coupon baring bond with a coupon of the interest expenses on all the debt and the maturity set equal to face value weighted average maturity prices at the current cost of debt of the company:

Equation 25

$$Estimated\ market\ value\ of\ debt = Coupon\left(\frac{1-(1+i)^{-n}}{i}\right) + FaceValue\ (1+i)^{-n}$$

1.2.3 Relative Valuation

In contrast to DCF valuation models, which are based on the intrinsic value of the enterprise, studying the cash flows generated considering the growth and risk profile, Relative valuation is based on the market value of a firm by comparing a number of indicators of the to be valued firm with a so called peer group.

Due to the large number of assumptions in a DCF valuation approach, Goedhart et al. defend the view that a carefully executed relative valuation — that is, comparing indicating figures of the to be valued firm with other firms in the industry — can complement a DCF valuation. They stress, however, that the difficulty of finding the firms to be used in the peer group. As a solution they present a four-rule guideline: firstly, use peers with similar prospects for ROIC and growth, as strategic advantages translate into ROIC and growth and that translates into higher multiples. Secondly, they recommend, where possible, the use of forecasted based multiples. In addition, the use of enterprise-value multiples is advocated. Finally, they advise to adjust the specific multiple EV/EBITA by excluding nonoperational items such as excess cash and operating leases.

Relative valuation can comprise the comparison to other companies or to similar transactions (Ruback, 1996). The underlying assumptions for relative valuations are that the value of a firm moves in direct proportion to the applied ratio and that the comparable used have the same expected cash flows. Ruback & Kaplan (1996) agree that if those two assumptions hold, a valuation using multiples gives a more accurate valuation than, in fact, any other valuation approach. Having said this, though, they point out that these two hypotheses rarely hold.

In order to standardize the price of the various firms in the peer group, a number of ratios are used for comparability. McKinsey et al. mention tree groups of ratios:

1.2.3.1 *Earnings Multiples*

The most widespread multiple in investing is the Price/ earnings ratio. However, when acquiring the entire firm, the operating income becomes the most used indicator (Damodaran, 2005). While, as a buyer of the equity or the firm, a lower multiple is better than a higher one) and these multiples will be affected by the growth potential and risk of the business being acquired.)

Equation 26

$$\frac{P}{E} = \frac{current\ market\ price}{Earnings\ per\ Share}$$

Equation 27

$$Price\ per\ Share = \frac{Dividens\ per\ share * (1+g)}{k_e - g}$$

1.2.3.2 *Book Value or Replacement Value Multiples*

Book-value multiples focus on the accounting value of the firm not the market value, which can differ significantly. Instead of valuing the future cash flows expected, the original cost and accumulated depreciation or the replacement cost is in focus.

Equation 28

$$\frac{P}{BV} = \frac{Valu\ of\ the\ firm}{BV\ of\ all\ assets}$$

Despite the drawbacks, PBV has positive aspects (according to) as it is easily obtainable, objective, and stable and it can be used in companies with losses.

1.2.3.3 *Sales ratios*

A big advantage of sales ratios is that Sales is the first line in the financial statement and, therefore, not easily manipulated by accounting policies and decisions, which can be of specific importance in cross-border valuations. Because it is a function of profit margins, this ratio varies widely across sectors. The prime convenience of this ratio is that it cannot be manipulated by accounting tricks. However, this ratio does not consider the efficiency of a company.

1.2.3.4 *Enterprise Value*

They perform an asset valuation; therefore, debt has to be deducted in order to derive the equity value. Therefore, they are fairly similar to a DCF approach as they analyze the firm's capacity for a positive cash flow. They consider the efficiency of the management and are, therefore, good in use when comparing companies with different business models.

1.2.4 Cross Border Valuation

The globalization of organizations, as well as of investors, has led to new challenges in the valuation process (Damodaran, 2009). Also in M&A, the trend has been shifting towards larger and more globally spread transactions (Conn & Hughes, 1996). Conn et al. (2002) found that cross-border mergers account for more than 80% of all foreign direct investment (FDI) by industrialized countries. According to Zenner et al. (2008), cross-border acquisitions have continuously grown in number and in 2007 accounted for 1,983 billion US Dollar in volume, more than 40 % of global M&A deals. Nonetheless, Lau et al. (2012) state research shows only 17% of cross-border M&As create value for shareholders. Claiming that executives focus too heavily on financial factors of cross-border M&A, while underestimating socio-cultural and political–economic aspects especially in the post-merger integration phase, they suggest including these parameters in the strategic planning and target selection and valuation (Lau, et al., 2012).

Damodaran (2009) identifies the main reason for companies to pursue M&A deals across borders as the need for growth opportunities by entering new business sectors or markets. When reaching maturity in the domestic market, geographical expansion provides new development prospects. He further remarks this to be the reason that North American and European companies in particular have been going through this development. This is especially true when considering the fact that Emerging markets usually still offer potential for growth within the market.

Whereas the main aspects of M&A are similar in cross-border and domestic transactions, there are some specifics to be considered (Zenner, et al., 2008). Issues arising from valuation of transaction across borders add risk due to currency differences and fluctuations of exchange rates. Tax legislation differences and the cost of capital calculations using domestic or foreign inputs (Copeland, et al., 2000) are also considerations. According to Damodaran (2009), the valuation of the target can be either conducted in the local or the foreign currency. Depending on that decision, the discount rate will be estimated using either the local risk-free rate and equity risk premium or the foreign market, specific risk-free rate and the consistent equity premium. Consequently, the cash flow will have to be estimated using the corresponding growth and inflation estimates. Zenner et al. (2008) add that when converting the free cash flows before discounting them, the forward exchange rate is used for near term cash flows while the interest rate parity based estimates for exchange rates is used for the for-out cash flows. When choosing the method of converting the present value of the firm into the home currency, the spot exchange rate should be used with the according time horizon.

When addressing relative valuation models in a cross border transaction, the main challenges arise from comparability of EBITDA and other financial statement indicators due to differences in

accounting systems (Zenner, et al., 2008). For this reason, Zenner et al. (2008) conclude that DCF methods are more flexible in adapting the unique features of cross-border M&A deals.

Kester et al. (1997) propose the use of an APV valuation approach to accommodate the specific challenges of cross-border valuation, such as the special cost of benefits associated. Here the previously mentioned problem of different taxation rules can be separately calculated in the form of present value of tax shields. (Kester, et al., 1997).

2. INDUSTRY AND COMPANY ANALYSIS

Broadly speaking, both companies operate in the Food & Beverage (F&B) Industry. This industry covers all aspects of food from farming, production/ packaging and distribution or retail and catering. Furthermore, beverage is usually divided into alcoholic and non-alcoholic and under non-alcoholic under soft drinks and hot beverages.

Nestlé operates in several of those sub-categories, whereas for the scope of this work, the hot-beverage industry is of highest importance as it covers the production/ roasting and the retail of coffee and tea. Starbucks, being a processor of coffee as much as a distributor/ vendor to the final customer, can also be classified in this sub-industry. However, for comparability, Starbucks should be categorized with other fast food restaurants selling a similar product.

The industry is one of the major contributors to growth of all economies having turned around €1,017 billion in 2012 in Europe alone, followed by the U.S. (€478 billion) and China (€379 billion) (Food Drink Europe, 2012).

Low barriers to enter have led to a highly fragmented market, with the five leading companies (Nestlé, Kraft Foods, Unilever and Cargill) holding a small market share. Competitors contest on price, quality, innovation and brand recognition.

Supplying a basic human need, the F&B industry is not considered cyclical and has shown stable performance even in times of economic turbulence. According to the IMAP the industry as a hole, has demonstrated a steady CARG of 3,5%.

2.1 Market and Growth drivers

The F&B industry is highly correlated with two macroeconomic drivers: population growth and per capita income.

The dependency of the F&B industry performance and population growth is reasonably straight forward, and similarly with per capita income. Not necessarily more will be consumed, however, different goods such as gourmet foods and ready to consume products.

Concerning the first growth driver population growth, UN projections estimate the global population to grow from 2,3 billion to 9 billion by 2050. In order to feed this increased population, the industry would need to grow by 70%. The major contributors of this growth, however, are the developing countries. It is also in these regions of the world that the increasing per capita income offers beneficial opportunities for the industry. Especially in BRIC countries, the fast growing middle class is gradually increasing their spending on better quality F&B products, as well as on leisure and luxury products from the industry.

The previously mentioned growth drivers are also applicable to the hot beverage sub category. Furthermore, the highly habitual and frequent nature of coffee consumption is a supporting factor for the industry. According to research of the Coffee Association (NCA), 40% of 18-24 year olds drink coffee daily, whereas in the age group of 25-39, 54% answered “daily consumption” in 2012. More specifically, the world’s coffee and tea market is expected to reach almost 20 billion by 2015 (National Coffee Association USA, 2012).

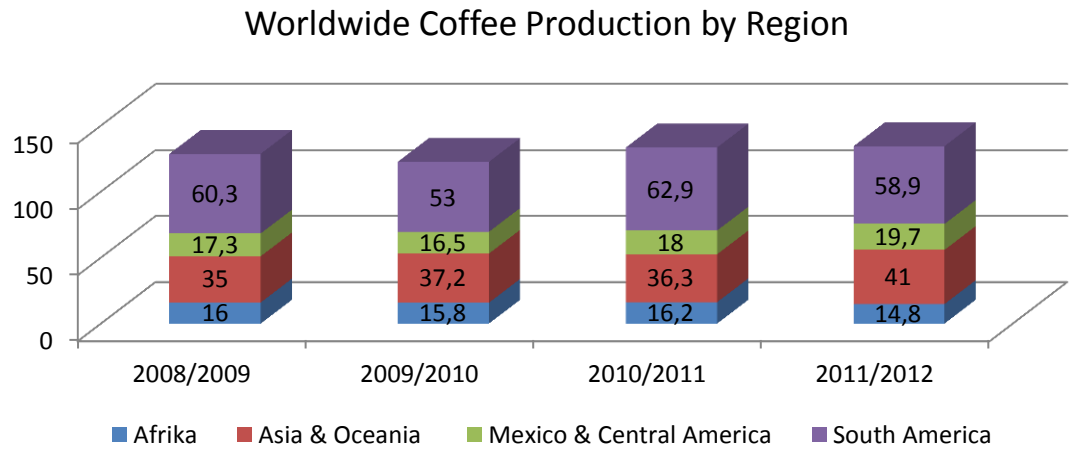
In Europe and North America the per capita spending and population growth rate demonstrate a much flatter rate. However, increasing demand for convenience and health consciousness are growth factors. This can be seen in the growth of sales of gourmet coffee and the increasing popularity of singe cup coffee machines. In the health sector, tea has become increasingly popular demonstrating health benefits. In this sector, innovation and increasing quality are the main competitive advantages for companies.

Factors impacting the industry negatively are rising raw material prices, increasing oil prices leading to higher transportation costs, and a decline in consumer spending, especially within the past five years. The fluctuating prices of commodities are influenced by the fact that agricultural products are always exposed to risk of external factors and natural disasters. Further speculations on the markets can impact prices greatly.

2.2 Sub- Industry – Hot Beverages

The following section will focus exclusively on the specific areas of the industry: hot beverage production/ retail and service industry. Roughly 1,6 billion cups of coffee are drunk daily, making coffee one of the most widely enjoyed beverages globally and therefore a critical sector in the F&B industry. Overall, the market is characterized by fragmentation, although the structure is increasingly changing with international conglomerates and coffee shop chains.

Figure 4: Worldwide Coffee Production by Region



Source: ICOAnnual Review 2011/12

Coffee is the world's most widely traded tropical agricultural commodity, with production of about 134.4 million 60 kg bags worldwide in crop year 2011/2012 (ICO Annual Review 2011/12). In fact, the coffee industry, including all types of finished coffee products in retail and service, generated nearly USD 70,86 billion over the year 2012 (The Fairtrade Foundation, 2012) Based on market research conducted by Euromonitor International, covering the period from 1997 to 2011, the International Coffee Organization (ICO) published a report studying the trends in coffee consumption in selected importing countries (representing 79,5% of consumption by all importing countries from 1997 to 2011). The main importers are the USA (20,3 bags or 17% of world total consumption (Germany with an average of 9,3 million bags and 7,8% world consumption followed by Japan with 5,8% and Italy and France importing 4,5% both.

Although markets such as Europe and the United States show stagnation or even decline in coffee consumption in the past view years, new market opportunities are arising in regions with a fast growing middle class. Considering the status of coffee as well as the social aspect of its consumption, coffee has, for example, been shown to have a rising popularity in Asia. In recent years, the majority of the growth was led by producing countries themselves (57%), as well as emerging markets (49%) (The Fairtrade Foundation, 2012).

2.2.1 Industry Outlook

World coffee consumption has shown a growth of 91% in the past 40 years, whereas the past ten years have demonstrated a stable growth of about 2,5% annually (The Fairtrade Foundation, 2012). The engine for this growth has been exporting countries with an increased consumption of 57%. This is in comparison to emerging markets, like Eastern Europe and Asia with 46% growth, and Western Europe and North America, where there is only 12% growth.

Recent economic conditions have, however, left their marks on the industry, and become the main reason for the adjustment of the International Coffee Organization (ICO) consumption forecast from 11 million to 9.09 million tons by 2019 (The Fairtrade Foundation, 2012).

Market growth is being fuelled by heightened awareness of the health benefits of tea, while coffee demand is being increasingly marketed as a luxurious and stylish product. Coffee is also benefiting from rising global affluence with greater per capita consumption as developing countries, in particular, promise vast growth potential (Global Industry Analysts, Inc., 2012).

According to a KPMG survey questioning managers of F&B conglomerates in 2012/13, the industry itself has a positive outlook for future years. In spite of the growth shown in the industry in the last year — 84 percent of respondents indicated an increase in revenue in 2013/2014 — the industry participants expect further growth. More than half of survey respondents plan on investing capital to drive growth, many indicating they expect to increase spending on geographic expansion. Other key investment areas include acquiring a business and expanding facilities. Growth is expected to be reached by product innovations and adding new customers, especially by using technological advancements. However, management also answered operational improvements and reducing costs as manners to fuel growth (KPMG, 2013)

2.2.2 Growth by geography

2.2.2.1 *Americas*

According to the 2012 National Coffee Drinking Study from the National Coffee Association (NCA) 78% of Americans drink coffee and, of these, 62% consume it on a daily basis. There are more U.S. consumers who drink coffee daily than there are soft drink consumers (51%) (National Coffee Association USA, 2012). Additionally, in the hot beverage subsection, coffee accounts for 83.3% of the market. The NCA expects coffee consumption to increase through 2015 at an average annual rate of 2.7%, while tea consumption is expected to increase 3.1% annually. The majority of this growth is a result of the rising popularity of premium products as can be seen by 37% of coffee consumption was classified as gourmet in the NCA report. Further, in the industry itself, the fastest growing segment is by far the single serving coffee.

Because they are surrounded by several of the world's main coffee producers, Latin American countries have historically been more important as exporters than importers or consumers, but this is changing rabidly. The rising affluence of the population and the rooted cultural connection with coffee makes this reason an emerging market.

2.2.2.2 *Europe*

Europe is home to the top coffee drinking nations worldwide, namely the Scandinavian countries, the Netherlands and Germany, where average annual consumption lays between 12-6.5 kg (2012). Growth is especially observed in the single portion coffee segment with double digit growth rates over the past decade in all of the mentioned markets.

According to IICF research, the branded market of coffee shops is expected to grow at a compounded annual rate of 6,3% over three years.

2.2.2.3 *Asia*

In the Asian region coffee consumption is small in comparison to the rest of the world, whereas tea consumption is significantly higher. However, the coffee market, especially the out of hope segment, is showing growth.

The Asian region is conversely also a very wide contributor to the worldwide coffee and tea production.

Indonesia, for example, whose production increased 17% since 2008, has announced plans to usurp Vietnam as the top coffee producer in Asia by rapidly expanding its plantations.

Nonetheless, the biggest growth potential in the industry lies in China. According to the International Coffee Council (2012), coffee consumption in China has quadrupled in the past five years and continues to grow rapidly. The report further stresses that since 2008, consumption in Thailand and Vietnam has doubled, with the Philippines following close behind. Those figures are nowhere comparable with growth in Europe or the US.

In terms of retail, Nestlé is the clear market leader in the Asian region, accounting for around 68% (The Coffee Guide, 2012). India and Malaysia are examples where the soluble coffee brand Nescafé is the main coffee consumed.

However, over the last years there has also been an explosion in the number of new coffee shops. Starbucks, alone, has opened more than 400 new shops in different cities throughout China since 1999. With the largest population of about 1.3 billion inhabitants, average per capita consumption is currently only 25 grams; however, it has been growing at an annual rate of 12.8%. Assuming this rate

can be sustained, the Chinese coffee market is expected to reach 2.8 million bags by 2020 (International Coffee Council, 2013).

On the other hand Asia is the largest market for tea consumption. The tea drinking culture is comparable with the coffee culture in Europe and the US. Therefore, innovations around tea could potentially gain popularity in the market.

2.3 Coffee as a commodity

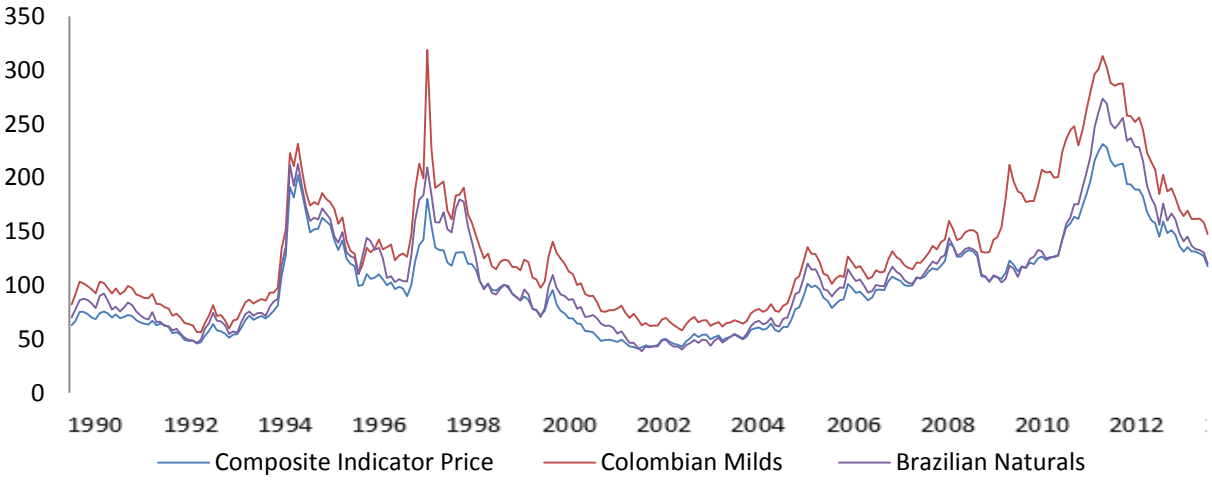
2.3.1 Price volatility/ Economic importance

As mentioned previously, in 2011 world exports of coffee amounted to 6,24 million tones or USD 23.5 million. This makes coffee the second most important commodity after crude oil. Now, even though the number of tones exported grew only by 7%, the value of exports rose by 40% or USD 16,7 billion. This illustrates the high price of coffee through the year as well as the importance of the price stability of the commodity (The Fairtrade Foundation, 2012).

Until 1989 the International Coffee Agreement (ICA) regulated the global coffee trade through export quotas to buffer stocks, which largely maintained stable and remunerative prices. Due to incompatibility with prevalent free market economic policies the agreement was, however, abolished and producing countries switched from state-controlled coffee sectors to open competition. Even though efficiency was improved by this move, so did the price competition and, therefore, fluctuations. As a direct consequence, prices initially hit rock bottom. External conditions, such as weather, resulted in a lower supply while demand increased worldwide. The result was that coffee prices grew steady, which lured speculator activities.

Procuring countries, looking for a piece of the pie, invested heavily in the expansion of the coffee sector. Vietnam, for example, went from being an insignificant producer to the second largest producer after Brazil. This, in turn, resulted in overproduction, which flooded the market and was followed by a coffee crisis between 1999 and 2004 (The Fairtrade Foundation, 2012).

Figure 5: Comparison of Green Coffee Types, Historic Price Volatility between 1990 and 2013



Source: Bloomberg

Coffee beans trade as a commodity whose price is dependent on supply from the once-per-year harvest along with demand trends. The companies discussed earlier in this article have performed well on average, despite the recent volatility in the coffee bean market. The price of coffee beans has fluctuated much like the price of wheat, corn and crude oil, increasing through April 2011 and then trending downward. As shown in the chart below, coffee bean prices rose 33% from November 2010 to April 2011 as adverse weather conditions in Brazil and Colombia limited the supply of coffee beans. Additionally, stronger demand from emerging markets put upward pressure on prices. This demand, coupled with increased fuel and packaging costs, translated to higher retail coffee prices for consumers as roasters and retailers cautiously passed on rising expenditures. For example, J.M. Smucker raised prices for its coffee brands sold in the United States by 10% in February 2011 and 11% in May 2011. This followed two price increases in 2010. Starbucks marked up the price of packaged coffee by 17% in July 2011.

As coffee bean prices have dropped 32% over the past 12 months in response to expectations of a robust harvest from Brazil, companies have reduced retail prices, although not to the same degree as input costs have fallen. For example, both Kraft and J.M. Smucker have lowered their coffee prices by 6% twice — once in August 2011 and again in May 2012.

Consumer prices tend to be somewhat insulated by short-term swings in coffee bean prices due to extensive use of hedging. However, if changes in input pricing persist, retail costs will eventually rise or fall because hedging is short-term by nature.

2.4 Coffee supply and value chain

The coffee supply chain is constructed of stages:

- the grower/ producer of the raw material
- the trader
- the roaster and producer of the end product

The end product can again be divided into different segments:

- Roasted and instant coffee purchased at supermarkets and other retail outlets
- Away-from-home consumption of regular and specialty coffee at coffee shops, restaurants, and other establishments
- Ready-to-drink (RTD) coffee products

2.4.1 Producer/ Farmers

The coffee bean is grown in about 70 tropical and subtropical countries. There are two types of beans, Robusta and Arabica, which differ in size, taste, and quality. They are processed differently and result in a different end product and are traded separately, which means the prices also differ. Coffee cherries are manually harvested and processed into the green coffee bean. The producers earn very little from the export and the roasters of the beans gain the majority of the profits.

2.4.2 Traders

Most of the trade is dealt with over the spot markets in the US and Europe through international traders building the links between the producer and the roaster. Usually, traders operate in the producing country and work in joint ventures with a local middle man.

2.4.3 Roasters

The roaster finally produces the various end products, from ground coffee for filter coffee to instant coffee and, nowadays, coffee pads. Beans from different origins are blended to achieve a consistent product. The Arabica bean, having a milder flavor, is usually used for high-quality products, whereas Robusta is often used for instant coffee. Roasters have two market segments: the retail market, where coffee is purchased for consumption at home, and the catering market, where coffee is destined for the out-of-home market e.g. restaurants, coffee shops and bars, hospitals, offices, and vending machines (International Trade Center, 2012)

According to the Tropical Commodity Coalition, about 45% the raw beans are purchased by the world's leading five roasters, which include:

Table 1: Market Share of top five Intenational Coffee Roasters

	Market share processed coffee	Brands
Mondelēz International (formerly Kraft)	13%	Kraft Foods, Jacob Suchard, Maxwell House, Splendid, Grand Mere, Carte Noir, Lyons, Birds, Brim, Gevalia, Maxim
Nestlé	13%	Taster's choice, Nescafé, Hills Brothers, Lite, Sarks, MGB
Sara Lee/ Douwe Egberts	10%	Egberts, Merrild, La Maison du Café, Café do Ponte, Caboclo, Café Pilao, Seleto, Uniao, Marcilla, Soley
Proctor & Gamble	4%	Folgers, Millstone, Highpoint
Tchibo	4%	Eduscho, Tchibo Privatkaffee

Source: The Coffee Guide 2012

The roasters can maintain attractive profit margins due to low importing prices and strong brand equity.

2.5 Final Retailer/ vendor

This section is divided into the products for at home consumption and coffee products enjoyed in restaurants/ specialized shops.

The following table was taken from and illustrates the preferred location of coffee consumption in a number of coffee importing countries. The location preference is highly influenced by the cultural background of the country. While northern European countries, for example, have a much stronger consumption inside the home, countries such as Italy and Portugal have a very strong cultural tie to consumption outside the home, where coffee is deeply rooted in the socio-cultural tradition.

Table 2: Location of coffee consumption in selected importing countries

2011	Austria	France	Germany	Italy	Japan	Portugal	Russia	Spain	UK	USA
at home	90,30%	79,30%	84,30%	73,10%	64,80%	39,70%	89,70%	55,60%	69,30%	82,40%
out-of-home	9,70%	0,50%	0,50%	30,00%	7,20%	2,60%	0,10%	2,00%	14,40%	3,10%

Source International Coffee Council, 2012

Generally, it is clear that coffee is largely consumed at home, with the exception of a few countries, such as Portugal. However, it should be noted that the table presents averages over 15 years, which does not always represent the latest change in the market structure.

2.5.1 Retail for at home consumption

Making the division between roasted and soluble coffee, it is notable that over the past 15 years, soluble coffee has gained slightly in popularity from 20,9% to 23,1%. However, undoubtedly, roasted coffee is still the preferred choice, accounting for 79,1% and 76,9% accordingly. In the USA**,** by far the

world's largest coffee-consuming country with annual average consumption of 20.3 million bags, roasted coffee is the dominant form of consumption, accounting for 91.5% (compared with 8.5% soluble coffee). Contrary to the evidence of all selected countries, here the market share of soluble coffee has decreased over the past decade and a half. Per the ICO, this could be a result of the development of special niche markets, but more knowledgeable consumers also play an important role in this change.

As previously mentioned, the business is fragmented, but Nestlé is the clear leader in coffee retail. The company achieved revenues of 21,6 billion in this section, representing 22,57% of the conglomerates revenues.

Table 3: The Coffee Retail Market by Revenue and Market Capitalization

in billion USD	revenue in that industry	% of total revenue in this industry	Market Cap
Nestlé	21,6	22,57%	218,31
Mondelez International	5,84	16,69%	57,27
Green Mountain	3,86	100,00%	11,78
DE Master Blend	3,74	100,00%	9,84
Kraft Foods Group	2,73	14,91%	33,51
JM Smucker co	2,31	39,11%	12,01
Tata Global Beverages	1,32	98,96%	1,5
Strauss Group	1,09	51,41%	1,84

Source: Bloomberg

Mondelez International, previously part of Kraft Foods, split off the giant in order to focus on its core business. Industry experts comment that, both Mondelez International and Nestlé, have managed to jump into the fast-paced growth of many Asian countries (Scott, 2013).

The industry's third in terms of sales, D.E. Master Blenders, a Dutch based roaster, managed to establish dominant market shares in the Netherlands, its country of origin, and neighboring countries like France.

2.5.1 The capsule coffee market

Under the at home segment, a new product has established itself in the past decade: the single-serve coffee market.

According to the Speciality Coffee Market Research report by The Gourmet Retailer, the industry has undergone a radical change (Everage, 2003). For years, coffee was brewed in drop down filter machines, resulting in a weak watery end product, at least in the top coffee consuming markets (USA and Northern Europe). However, the coffee culture of enjoying a stronger, more intense cup has grown from South America and southern Europe to the rest of the world due to the invention of single cup coffee machines (International Coffee Council, 2012). Depending on the operating system,

Coffee pads or capsules, are portions of fresh ground coffee encapsulated in a container (metal, plastic, paper), which are used in special low pressure single serve machines. They can usually be used in only one type of machine. Each pad produces one portion of coffee and is discarded afterwards.

Despite its "mature life cycle stage, positive expectations for continued growth in coffee sales, are due to the innovations in premium coffee products. Economic woes aside, 37% of total coffee consumed was classified as gourmet, the NCA reported. This suggests consumers were set on drinking good coffee, even in the face of an uncertain economy.

In Europe Nespresso and Dulce Gusto, both brands under Nestlé, dominate the market. Nonetheless, other coffee producers have reacted to the enormous success and today there is a wide range of different offers ranging from low budget to higher.

Green Mountain Coffee Roasters', Keurig, is the US market leader in this segment, offering a number of different roasting choices using its patent K-Cup. Keurig's assortment includes Starbucks, Caribou and Dunkin' Donuts one-shot brewing.

Table 4: Single cup Coffee use as percentage of total consumption

	all selected Importing countries	Main Importers				
		France	Germany	Italy	Japan	USA
2004	0,9%	4,1%	0,7%	0,7%	0,0%	0,0%
2005	1,2%	5,1%	1,2%	0,8%	0,0%	0,2%
2006	1,8%	6,8%	2,3%	0,9%	0,0%	0,3%
2007	2,2%	8,6%	3,6%	1,1%	0,0%	0,3%
2008	2,3%	9,9%	4,6%	1,2%	0,1%	0,5%
2009	2,7%	11,8%	5,2%	1,6%	0,2%	0,7%
2010	3,3%	13,7%	6,1%	2,2%	0,2%	1,2%
2011	3,9%	15,9%	6,9%	2,7%	0,3%	1,6%

Source: The International Coffee Council (2012)

As is illustrated in table 4, the single sup coffee market has been continuously growing by an average of 24% annually. While France and Germany have illustrated the highest growth in this market, the US is catching up and accounted for 1.6% of total consumption in 2011 (International Coffee Council, 2012).

These figures do not include out of home consumption of coffee pads as, for example, at the workplace or in public areas.

2.5.2 Out of home consumption market

The market structure for coffee shops is quite different in different regions worldwide. As previously mentioned, countries such as Portugal, Italy and Turkey have a very rich cultural heritage when it

comes to coffee consumption. The primary place of consumption in these countries are small, individual coffee shops. International chains face difficulty entering these markets, due to price regulations as well as the loyalty of customers to their neighborhood coffee shop. In southern Europe especially, the coffee culture is embedded in out of home consumption, where the market is extremely fragmented with very little chains. Northern Europe has an increasing number of coffee shops and branded coffees have been rapidly growing in those areas.

In Europe, the branded coffee market is dominated by Costa Coffee, Starbucks and McCafé. Together, they hold about 34% of market share combined, whereas the competitors have only very small shares of the market (Veal, 2012)

The away-from-home segment in the US is clearly dominated by Starbucks, whose revenue is more than four times higher than that of Tim Hortons, its closest competitor. However, the segment has been under increasing pressure because chains, such as McDonald's and Dunkin' Donuts, have introduced premium blend coffee.

2.6 The Companies

2.6.1 Nestlé Group

Nestlé is the world's leading food manufacturer in terms of sales. The company's products include: Powdered and Liquid Beverages, water, milk products and ice cream, nutrition and health care, prepared dishes and cooking aids, confectionery and petcare. The company holds a 30% stake in L'Oreal and has Joint Venture agreements with several other companies. Nestlé followed different strategies to grow and penetrate the market in different segments. Through acquisitions, Nestlé gained entry into adjacent markets or additional value for existing products and services. Furthermore, by entering new unfamiliar markets allowing steady expansion of the business areas (Nutrition, Health and Wellness), Nestlé opened its operations in different directions.

Nestlé has factories in 86 countries and its products are sold in 194 countries around the world.
It's scale and spread enable it to deliver consistent results despite economic turbulences, which can be observed by the results of the financial year 2012, where Nestlé Group increased net profits by CHF 1,1 billion to CHF 10,6 billion.

As stated by Nestlé itself, their unmatched geographic presence is one of the company's competitive advantages, as well as the wide product and brand portfolio and its very strong research and development capability. Furthermore, the wide range of products cover all ranges from Popularly Positioned Products (PPP) to premium products.

As growth drivers Nestlé identifies the following areas: Nutrition, health and wellness, Emerging markets, out-of-home consumption and premiumisation.

The group is divided into six operating reportable segments representing the management structure:

- Zone Europe
- Zone Americas
- Zone Asia, Oceania and Africa
- Nestlé Waters
- Nestlé Nutrition
- Other

The segment referred to as "other" includes mainly Nespresso, Nestlé Health Science, and Nestlé Professional, Globally Managed Business units that do not meet the 10% of group's sales, net income or assets threshold.

In terms of products, Nestlé is groups as follows:

- Powdered and Liquid Beverages
- Water
- Milk products and Ice Cream
- Nutrition and HealthCare
- Prepared dishes and cooking aids
- Confectionery
- PetCare

In 2012, Nestlé's reported sales were up CHF 8.6 billion, or 10.2%, to CHF 92.2 billion. Organic growth was 5.9%, building on the strong growth of recent years, and was composed of 3.1% real internal growth and 2.8% pricing.

After years of adverse impact, foreign exchange added 1.7% to sales, and acquisitions, net of divestitures, a further 2.6%.

The Group's trading operating profit in 2012 was CHF 14.0 billion, an increase of 11.8% in comparison to the previous financial year. The operating margin was 15.2%, up 20 basis points as the cost of goods sold fell by 30 basis points and distribution costs were down 20 basis points. Operating cash flow was increased by CHF 5.6 billion to CHF 15.8 billion, arising through substantial improvement in working capital.

Table 5: Nestlé Group Financial Report Highlights 2012

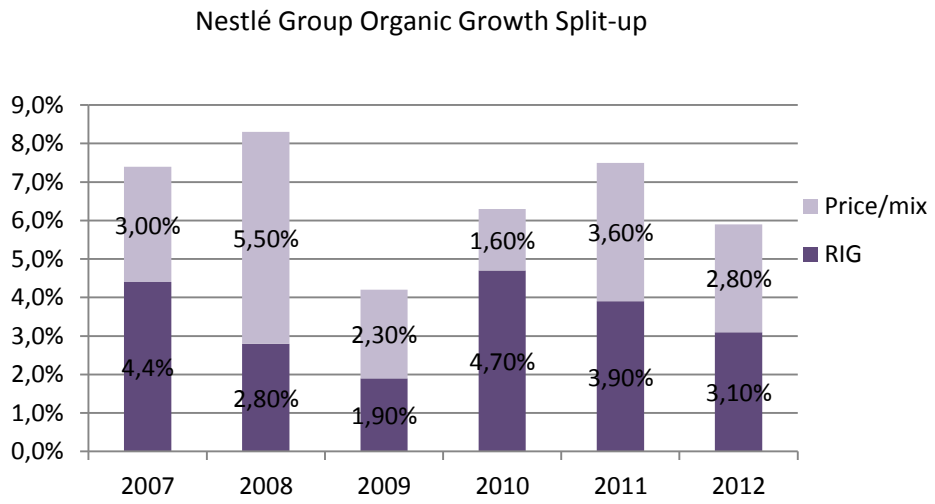
Financial year ending 2012 In million CHF	Sales	as % total	Trading operating profit	as % total	Operating margin
Powdered and Liquid Beverages	20.038	21,74%	4.502	32,13%	22,47%
Water	7.178	7,79%	636	4,54%	8,86%
Milk products and Ice cream	18.564	20,14%	2.799	19,98%	15,08%
Nutrition and HealthCare	10.726	11,64%	1.958	13,97%	18,25%
Prepared dishes and cooking aids	14.432	15,66%	2.041	14,57%	14,14%
Confectionery	10.438	11,32%	1.782	12,72%	17,07%
PetCare	10.810	11,73%	2.206	15,74%	20,41%
Total	92.186		14.012		15,20%

Source: Nestlé Group Annual Report 2012

2.6.1.1 *Revenues*

Revenues have displayed ups and downs, however, offering positive organic growth of on average 6,57% over the past six years. Figure 6 shows the composition of the overall organic growth between real internal growth — accomplished by new, measurable business — and sales figure growth, which is due to changes in pricing. Revenues include the impact of acquisitions, divestitures and foreign currency fluctuations and can therefore change the true picture of growth of ongoing operations. Therefore, the organic growth, excluding those influences, represents a better picture of the management of the company and the performance.

Figure 6: Nestlé Organic Growth Split-up



Source: Nestlé Group Annual Report 2012

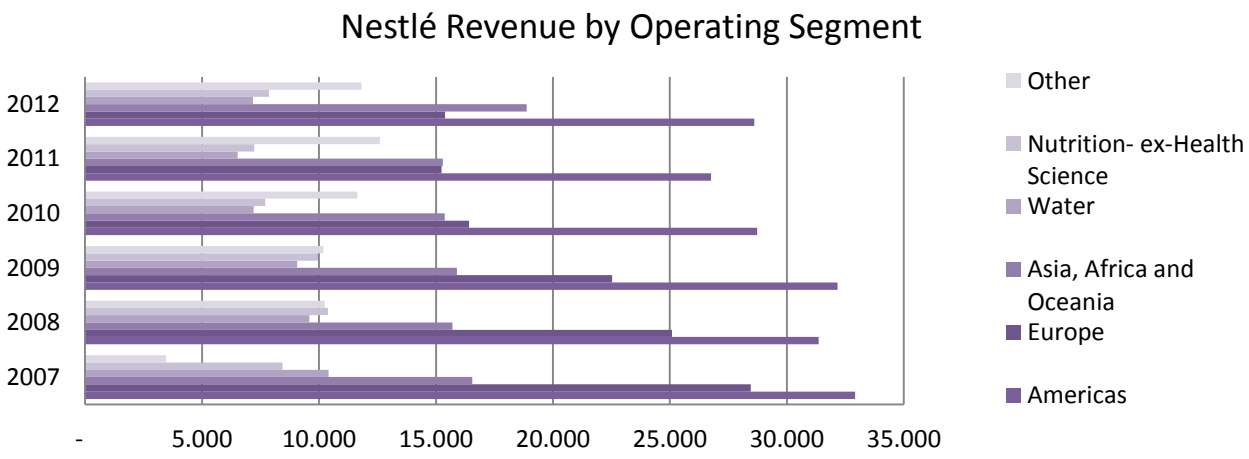
2.6.1.1.1 Revenue by Operating Segment

Figure 7 clearly shows that the majority of sales are in the Americas, followed by Europe. Whereas, sales figures in the Americas, and even more so in Europe, are declining overall in past years, sales in the operating Segment of Asia, Africa and Oceania are growing. Another operating segment that

illustrates rapid growth figures is "Other," which includes mainly Nespresso. In fact, in 2011, Nespresso showed a growth of 22% in sales and in 2012 continued with double-digit growth.

Emerging Markets accounted for 40% of the Group's sales demonstrating 13% organic growth whereby 10% growth In Africa, 23% in China, 20% in India and 14% in Mexico.

Figure 7: Nestlé Revenue by Operating Segment



Source: Nestlé Group Annual Report 2012

2.6.1.2 *Revenues by Geography and Product*

Americas in dominated by sales in Milk products and Ice Cream, followed by Petcare. Powered and Liquid Beverages, the most important product group for this work, accounts for 12,46% of sales in the Americas, representing the lowest percentage of all product groups (appendix 1).

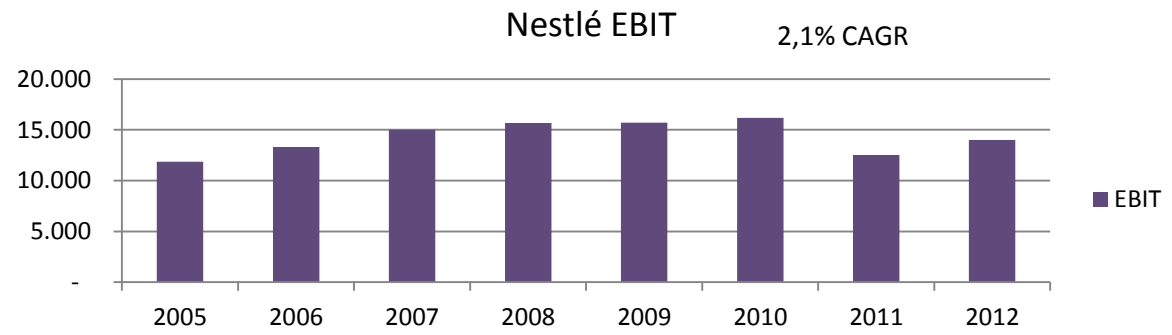
In Europe on the contrary, Powered and Liquid Beverages is the biggest group of products in terms of revenues with 26,34% (appendix 1).

Asia, Oceania and Africa have the most extreme divisions in product sales. With a large majority of sales in Milk products and Ice cream of 35,3%, Powered and Liquid Beverages are second with 31,93%. This again shows the lowest sales in Petcare compared to all the geographic regions (appendix 1).

2.6.1.3 *Operating Profits*

Over the period since 2005, Nestlé demonstrated a CAGR of 2,1% in operating profits. The figures show that from 2005 until 2010, there has been a continuous growth, reverting in 2011, when EBIT fell my 3,7 billion due to lower sales (figure 8). In 2012, however, Nestlé managed to aggregate growth of operating Profit.

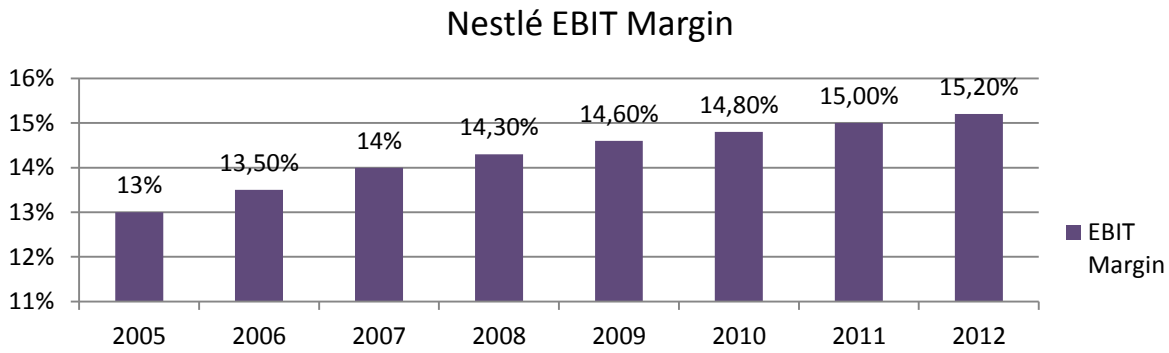
Figure 8: Nestlé Ebit



Source: Nestlé Group Annual Report 2012

Even though the EBIT fell in 2011, figure 9 shows that the EBIT margin increased anyway. This indicates continuously increasing efficiency in the operations of Nestlé. This will later on become one of the basic assumptions for making the argument that the company is already well-managed.

Figure 9: Nestlé EBIT Margin

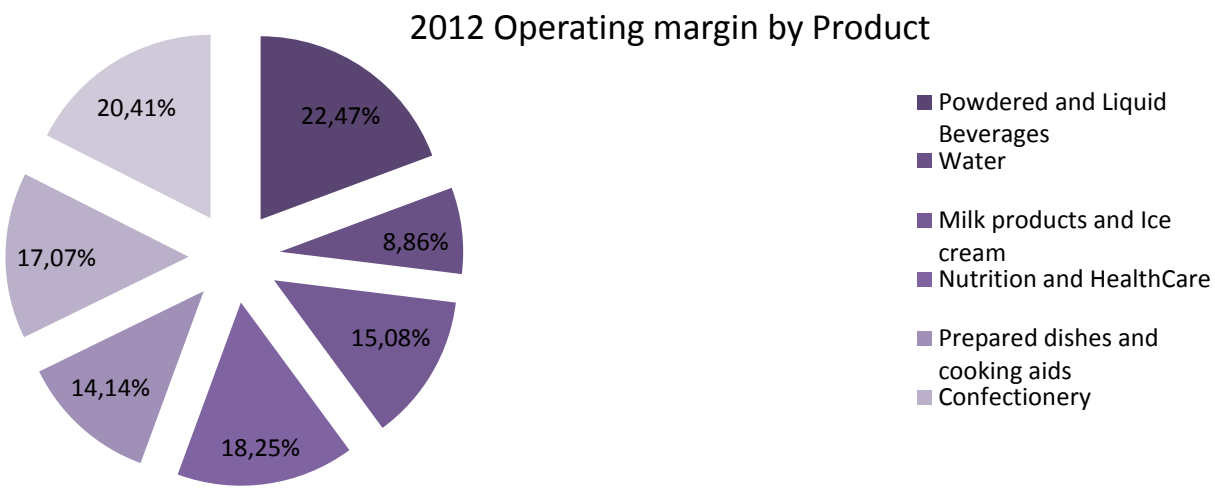


Source: Nestlé Group Annual Report 2012

2.6.1.3.1 Operating Margin by Product

Powered and Liquid beverages have the highest operating margin with 22,47%, closely followed by Petcare with just above 20%. Water has the lowest operating margin with almost 9%. Although these figures are from the financial year 2012, the numbers are illustrative over the past years.

Figure 10: Nestlé 2012 Operatig Margin by Product



Source: Nestlé Group Annual Report 2012

2.6.1.4 *Coffee*

Nestlé is the global leader in hot drinks in every region with the exception of North America. Even though the company's presence in fresh coffee is fairly weak, it is a market leader in instant coffee as well as coffee pods. Being the owner of the trademark and patents on Nespresso, the market pioneer and up to date leader in single-serving coffee, Nestlé was in the position to launch another coffee pod brand, Dolce Gusto. The target groups of both brands are very different and so is the product itself. The Nespresso system brewed espresso from coffee capsules, a type of pre-apportioned single-use container of ground coffee. Nespresso offered 16 different "Grand Cru" Arabica and Robusta. Two "Limited Edition Grand Crus" are released every year as well as a new set of "Variations", flavored espresso capsules

Dulce gusto on the other hand offers a vast array of 24 different blends and beverages; ranging from simple espresso to chococino and latte macchiato. (latte macchiato, cappuccino, etc. used an extra capsule for the milk part of the beverage). In addition to hot beverages, the brand also offers ice teas (Nestea) and tea-mix-beverages (chai tea latte).

In addition to the differences between Nespresso and Dolce Gusto in the coffee system, the distribution channels vary. Dolce Gusto had a different approach and distributed its capsules and machines through various channels, including electrical appliance store, hyper- and supermarkets, online sales and via telephone hotlines. In 2012, Nestlé invested CHF 180 million in a Dulce Gusto factory in Germany. The factory opened in 2006 in the United Kingdom and is running at 100% capacity. This has allowed Nestlé to reinvest GBP 110 million to triple capacity in order to supply the market.

Besides the pod market that is increasingly affected by growing competition Nestlé has a strong position in instant coffee, illustrating a good opportunity to encourage instant coffee drinkers to trade up to more premium products in both developed and emerging markets (Euromonitor International, 2013).

2.6.1.5 *R&D*

As one of the operating pillars, research and development is a key element to the growth and success of Nestlé. This is the reason for the foundation of the Nestlé Research Centre in Switzerland, the world's largest private food and nutrition research institute, which employs 600 researchers. Nestlé also operates R&D centers in China, India, Singapore and Switzerland. Product technology center focused on the technological aspects as for example the Nespresso.

2.6.1.6 *Costs*

The cost structure between COGS and AS and R&D is illustrated below. The structure has remained fairly stable over the past three years, whereas COGS have risen slightly in percentage, mostly due to higher commodity prices. COGS are also the largest percentage of costs, representing around 50% of total costs.

Table 6: Detailed Operating Cost Structure

as % of sales	2010	2011	2012
Cost of goods sold	41,79%	52,76%	52,50%
Distribution expenses	7,76%	9,09%	8,86%
Marketing and administration expenses	33,98%	20,80%	21,36%
Research and development costs	1,71%	1,70%	1,67%

Source: Nestlé Group Annual Report 2012

The group's objective is to minimize the impact of commodity price fluctuations and this exposure is hedged accordingly.

2.6.1.7 *Net profit and Earnings per Share*

Net profit was up CHF 1.1 billion to CHF 10.6 billion, and earnings per share were up 12.2% reported to CHF 3.33.

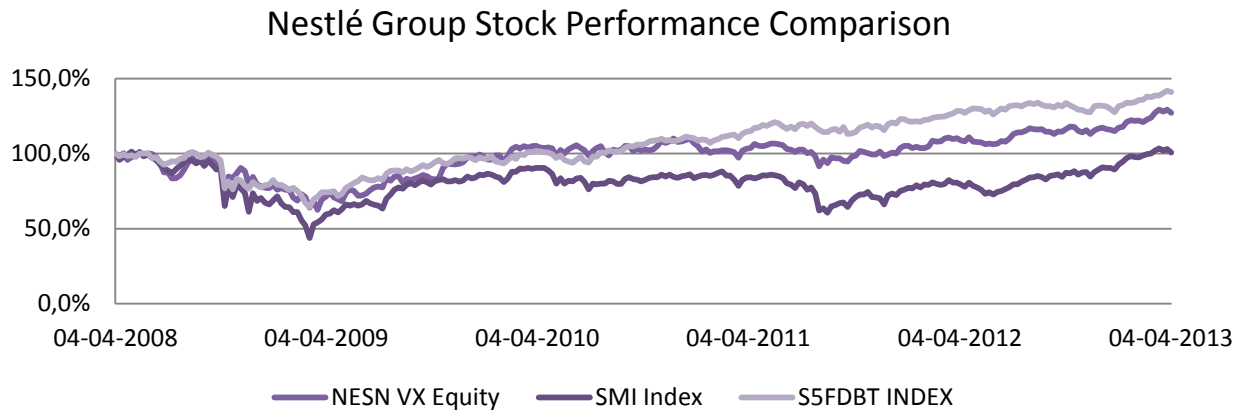
Underlying earnings per share in constant currencies were up 7.5%. The underlying tax rate was 27.2%, compared to 27.1% in 2011. The share of results of associates was CHF 1.1 billion, compared to CHF 0.9 billion in 2011.

2.6.1.8 *Financial position*

Despite the strong operating cash flow, the Group's financial net debt increased from CHF 14.3 billion to CHF 18.2 billion, with the dividend of CHF 6.2 billion, capital expenditure of CHF 5.4 billion, and the CHF 10.8 billion acquisition of Wyeth Nutrition being the main contributors.

2.6.1.9 *Performance comparison to Peer group*

Figure 11: Nestlé Stock Performance Comparison



Source: Bloomberg

The illustrated graph above shows the cumulative percentage return of Nestlé Group's stock in coparison with on the one hand the Swiss market inde and the S&P 500 Food & Beverage industry index (weekly returns between April 2008 and April 2013). The Swiss market index does not have a separate F&B industry benchmark index and, therefore, the US market index was used. This assumtion is reasonable considering Nestlé operates globally and so do its competitors. It is to be pointed out that the stock of Nestl'e shows the same trendline overall as the F&B industry, both outperforming the Swiss market index. In direct comparison with the F&B market however, Nestlé has been continiously outperformed since mid 2012. When analyzing the stock alone in the same period of five years, one can see that it hit its high at CHF 69,50 in the beginning of April 2013 and its low of CHF 35,20 in mid March 2009, with an average price of CHF 53,35.

Table 7: Peer Group Nestlé (market values as of 10th April 2013)

in million home currency besides beta and D/V ratio	Market Capitalization	Sales	adjusted beta	D/V	EBIT Margin	ROC
Nestlé	199.776	45.288	0,79	21,8%	15,11%	13,46%
Danone	30.958	11.058	0,72	26,0%	12,73%	9,31%
Kraft Foods Group INC	31.529	4.394	0,89	25,0%	19,13%	13,87%
Unilever NV	85.891	25.500	0,73	17,0%	14,56%	19,15%
Mondelez International INC	62.733	8.472	0,78	28,0%	11,30%	6,37%
Green Mountain Coffee Roaste	11.252	1.047	1,27	2,0%	17,56%	17,82%
Tata Global Beverages Ltd	79.062	72.703	1,00	12,2%	9,15%	7,42%
General Mills Inc	31.735	4.373	0,60	21,5%	15,58%	12,20%
JM Smucker Company	11.829	1.351	0,70	16,1%	16,55%	8,61%
Kerry Group PLC	7.450	2.949	0,70	17,1%	9,55%	8,95%
Associate British Foods	14.321	6.982	0,70	7,3%	8,81%	9,23%
PepsiCo INC	121.823	16.909	0,60	20,8%	14,37%	14,62%
Peer Mean	57.363	16.752	0.79	17,38	13,70%	11,75%

Source: Bloomberg

In assessing the peer group, the researcher has to pay attention to a number of indicators in order to find the group that best represents the company in terms of industry/ operating segment, size, risk and leverage. The companies in the group are not all the same size and the product range does not overlap 100%. However, as Nestlé operates a more diversified portfolio of products, a perfect match cannot be found. Therefore, the approach was to conduct a larger group that also includes companies such as Green Mountain Coffee Roasters, a coffee roaster that specializes in the beverage sector. On the other hand the group is also comprised of the two companies formerly building Kraft Foods INC., Kraft Foods Group INC and Mondelez International INC, both international conglomerates covering a wide range of F&B products.

When comparing Nestlé, it is striking that the adjusted beta is identical with the industry group, indicating the same risk exposure. Furthermore, the profitability ratios EBITA margin and Return on Capital are slightly higher for Nestlé compared to the peer group, indicating a well-managed firm. Leverage is slightly higher than the peers average, however, in a safe range.

2.6.2 Starbucks Corporation

Starbucks Corporation is the world's largest coffee-shop operator as well as the world's number one in specialty coffee retail. The company operates in just over 60 countries through owned (approximately 9.400) or licensed (approximately 8.600) shops, where coffee beverages, cold blended beverages, teas and complementary foods complete the product range. Additionally, bottled finished drinks and whole bean or grounded coffee packs are produced and sold in supermarkets.

The majority of Starbucks' operations around the world are licensed retail stores. Additionally, in the following entities, Starbucks holds 50% ownership: Starbucks Coffee Korea Co., Ltd.; President

Starbucks Coffee Taiwan Ltd.; Shanghai President Coffee Co.; Berjaya Starbucks Coffee Company Sdn. Bhd. (Malaysia); and Tata Starbucks Limited (India).

Bottled beverages are produced and distributed over The North American Coffee Partnership with the Pepsi-Cola Company, in which Starbucks also holds 50 % ownership.

Starbucks, which also sells Tazo Tea and cold-bottled drinks in supermarkets, has sought to expand its line of products sold at grocers to help boost sales. Revenue for the company's so-called channel development unit, which includes items sold through warehouse s and convenience stores, jumped 50 percent to USD 1.29 billion in the financial year 2012.

Starbucks purchases green coffee beans from multiple coffee producing regions around the world and custom roasts them to its own standards for various blends and single origin coffees.

In all segments Starbucks offers the same products, namely coffee and other beverages, complementary food, packaged coffees, single serve coffee products and a focused selection of merchandise. The Americas segment is the most mature business and has achieved significant scale.

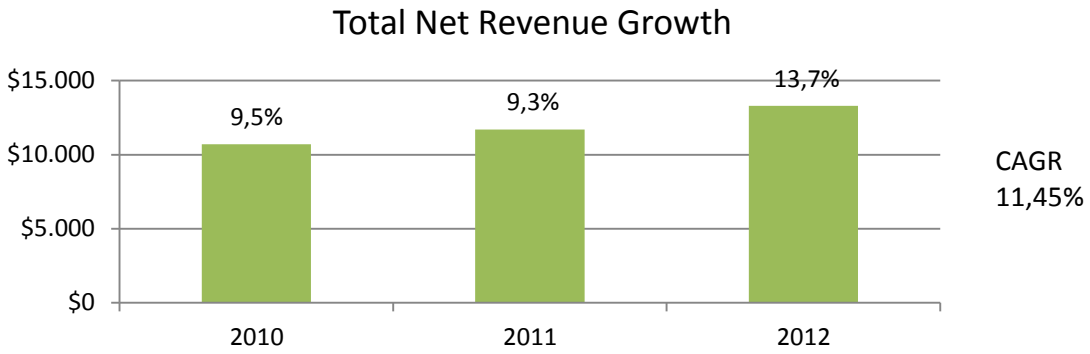
Europe, Middle East, and Africa (EMEA) are in an earlier stage in the life cycle and therefore require more extensive organizational support, but they also demonstrate higher growth opportunities. Similar to the EMEA, China /Asia Pacific (CAP) is an early stage with high growth of new store openings and growth in sales numbers per store.

Channel Development operations sell a selection of packaged coffees as well as a selection of teas and ready-to-drink beverage. The US foodservice business is also included in the Channel Development segment and sells coffee products to institutional foodservice companies.

2.6.2.1 *Net Revenues*

Starbucks, reporting under US GAAP, presents its financial statements in the indirect method, reporting net revenues in three lines: Company-operated stores, licensed stores and CPG, foodservice and others. Net revues from Company – operated stores are the largest figures, representing around 80% in the last three financial years. The other supplementary positions represent around 10% respectively. Net revenues have been growing by 9,5%, 9,3% and 13,7% in 2010, 2011 and 2012 respectively.

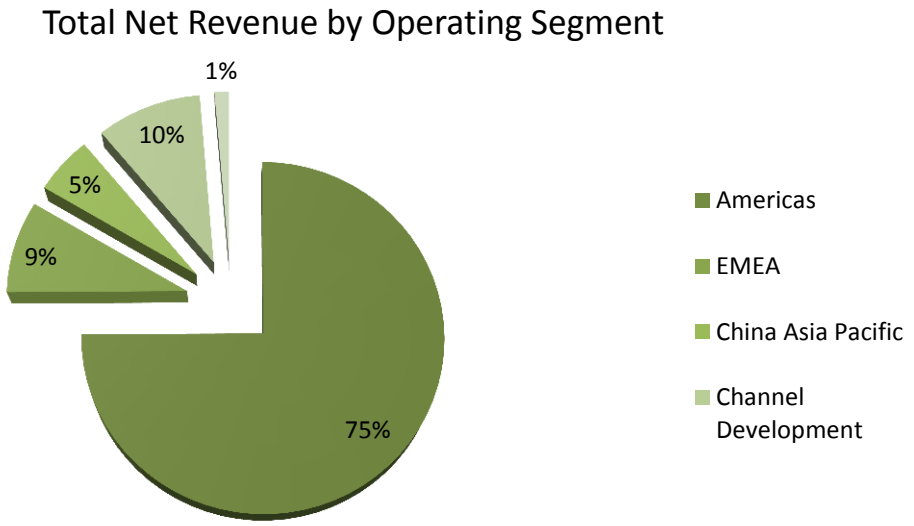
Figure 12: Starbucks Total Net Revenue Growth



Source: Starbucks 2012 Annual Report

2.6.2.2 *Revenues by Geography and Product*

Figure 13: Starbucks Total Net Revenue by Operating Segment



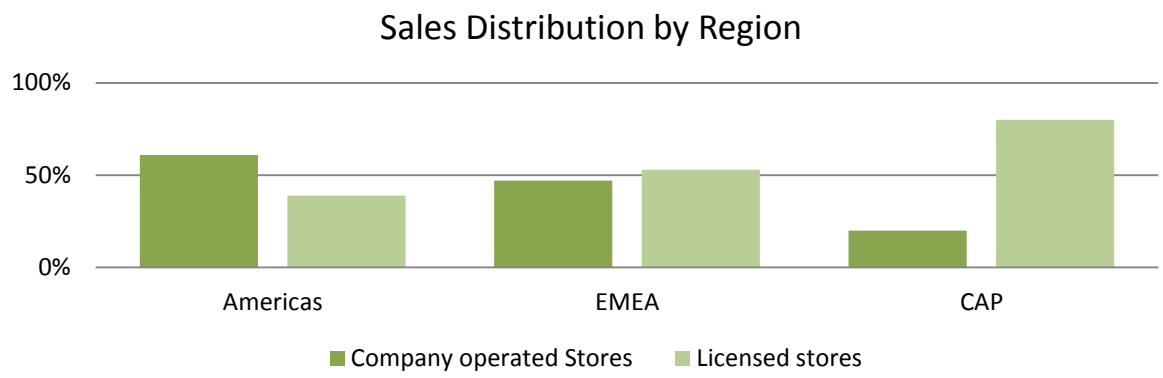
Source: Starbucks 2012 Annual Report

Americas account for about 75% of Starbucks revenues, followed by Cannel Development, EMEA and CAP. In the Americas total net revenues for fiscal 2012 increased 10%, or USD 871 million, primarily due to increased revenues from company-operated stores (contributing USD 712 million), driven by an increase in comparable store sales (approximately 8%, or USD 626 million). Licensed store revenues also contributed to the increase in total net revenues with an increase of USD 149 million due to higher royalty revenues through the opening of 270 new stores. In the region of EMEA, total net revenues rose by 9%, or USD 95 million. Pf this increase, USD 63 million came from company operated stores. The remaining growth was supported by the addition of new licensed stores. The largest growth was demonstrated in China / Asia Pacific with 31% or USD 169 million. Growth was

supported by an increase in comparable store sales as well as the opening of both company operated and licensed stores.

Channel Development managed to increase sales by 50%, especially with the large increase in K-Cup® portion packs coffee sales and tea sales (approximately USD232 million).

Figure 14: Starbucks Sales Distribution by Region



Source: Starbucks 2012 Annual Report

Figure 14 illustrates how the sales income is distributed between company operated and licensed stores by geographic separation. It is clear that in China and Asian Pacific the majority of stores are operated by licensees, whereas in America the majority of stores are Starbucks operated.

2.6.2.2.1 Company-operated Stores

In 2012 Starbucks operated a total of 9.405 stores worldwide. As previously mentioned, net revenues from Starbucks operated stores account for the big majority of income, with 79% in 2012. The Americas store count is the highest at around 84%, whereas within this group 87,4% of the stores are located in the US. In the group of EMEA (9,4%), The UK and Germany have the largest presentation of Starbucks operated stores. In the Asian Pacific, accounting for 7,1% of total company operated stores, is the largest market in in China. In terms of growth, the US has the highest amount of new stores opened in 2012 with 161 stores, followed by China with 130 new Company operated stores.

Sales mixed by product type for all company operated stores are illustrated in table 8 below.

Table 8: Sales mix by product type

Fiscal Year (in thousand USD)	**2010**		**2011**		**2012**	
Beverage	6.750	63%	7.217	62%	7.839	59%
Food	1.879	18%	2.008	17%	2.093	16%
Packaged and single serve coffees	1.131	10%	1.451	12%	2.001	15%
Other(1)	947	9%	1.024	9%	1.367	10%
Total	10.707	100%	11.700	100%	13.300	100%

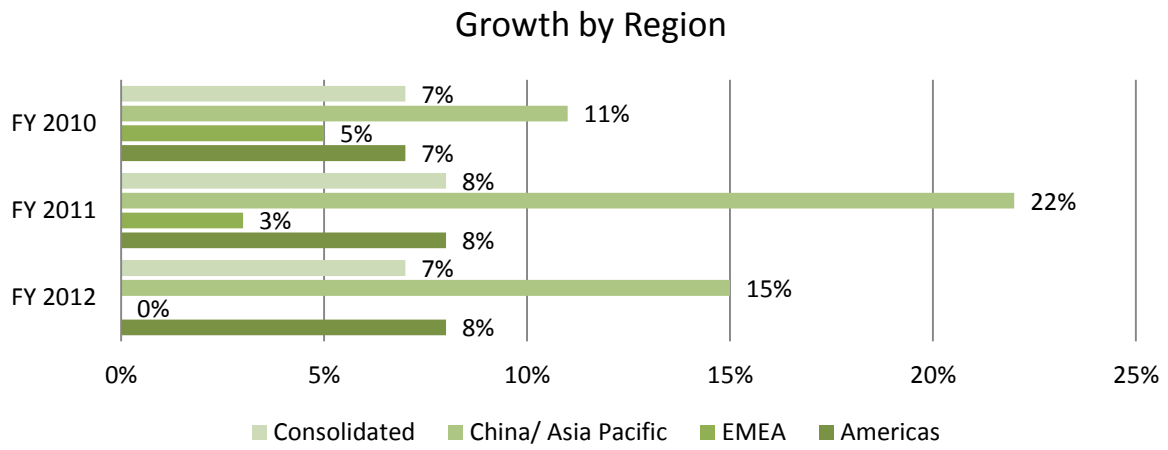
(1) Other includes royalty and licensing revenues, beverage-related ingredients, packaging and other merchandise.

Source: Starbucks 2012 Annual Report

As noted in the above table, packaged and single serve coffee is gaining in significance in the sales numbers of Starbucks.

As previously mentioned, the Asian region is clearly the growth driver. However, considering the mature market in which the business finds itself in the US, the sales growth figures are still elevated and point towards remaining business expansion in the Americas.

Figure 15: Starbucks Growth by Region



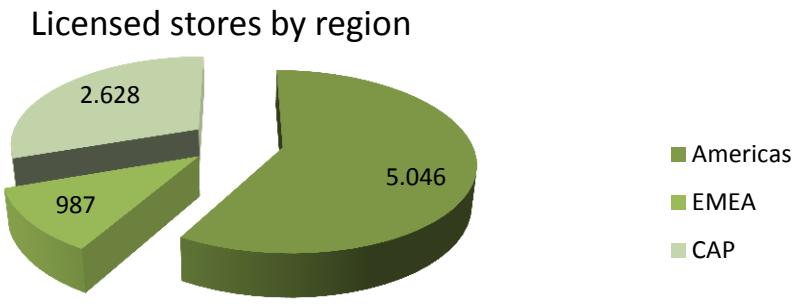
Source: Starbucks 2012 Annual Report

2.6.2.2.2 Licensed Stores

Starbucks also offers the possibility of operating a licensed Starbucks coffee shop by using a range of different agreements, which include franchising. In those cases, Starbucks gains from product sales such as coffee, tea and merchandise, to those stores as well as royalties and license fee revenues. Revenues from those sources accounted for 9% of total net revenue in 2012 and for 2011. Licensed stores generally have a higher operating margin than company-operated stores. Under the licensed model, Starbucks receives a reduced share of the total store revenues, but this is more than offset by the reduction in its share of costs as these are primarily incurred by the licensee. By using this kind of agreement, Starbucks gains entry to markets and locations that otherwise would not be accessible. In order to guarantee a consistent experience for the customer, all licensed stores are required to follow detailed store operating guidelines and procedures.

The majority of licensed stores are located in the CAP and this is due to the fact (mentioned earlier), that licensing is a method to enter the market with a local partner in debt market knowledge and accessibility.

Figure 16: Starbucks Licensed Stores by Region



Source: Starbucks 2012 Annual Report

In the Americas, 351 and 296 licensed stores were opened during 2012 and 2011, respectively. In EMEA, 139 and 111 licensed stores were opened during 2012 and 2011. In CAP, 354 and 264 licensed stores were opened during 2012 and 2011, respectively.

2.6.2.2.3 Consumer Packaged Goods and Foodservice

Consumer packaged goods includes global sales of packaged coffee and tea as well as a variety of ready-to-drink beverages and single-serve coffee at grocery and specialty retail stores. Furthermore, this segment includes revenues from supplying licensed stores and Seattle's Best Coffee brand. Foodservice comprises sales of coffee products to institutional foodservice companies, airlines, vending machines and others. Revenues from sales of consumer packaged goods comprised and food service totaled 11,7%, 9,1% and 8,1% in 2012, 2011 1nd 2010, respectively.

In 2012 Starbucks VIA Ready Brew sales grew significantly and were shipped nearly 500 million K-Cup packs, garnering approximately 16 percent of the premium single-cup market.

2.6.2.3 *Operating Income*

The cost of goods sold are largely comprised on the raw materials namely coffee tea and dairy products. The price of coffee is subject to significant volatility. Starbucks, however, is only interested in top quality altitude Arabica coffee, which tends to trade on a negotiated basis at a premium. This allows more predictability and stable prices.

Table 9: Cost Structure Split-up

as % of total net revenue	2012	2011	2010
Cost of sales including occupancy costs	43,7%	42,0%	41,6%
Store operating expenses	25,8%	30,7%	33,2%
Other operating expenses	3,2%	3,4%	2,7%
Depreciation and amortization expenses	4,1%	4,5%	4,8%
General and administrative expenses	6,0%	6,4%	5,8%

Source: Starbucks 2012 Annual Report

Operating costs are divided between store operating and other operating expenses, whereas store operating costs account for roughly 30% of total net revenues and other operation costs for about 3,5%. General and administrative expenses account for roughly 6%. From the financial year 2011 to 2012, all cost positions were slightly reduced due to improvements in the distribution channels and others according to Starbucks.

2.6.2.4 *Risk factors*

The financial performance of Starbucks is highly dependent on the Americas market as approximately 75% of consolidated total net revenues are achieved in the US. In order to buffer a potential decline in the US market, Starbucks should diversify its operations over the rest of the world. Furthermore, the American market does not offer high growth opportunities as the market is fairly saturated.

Exposure to fluctuations in commodity prices and in foreign currency exchange rates are the main financial risk exposures Starbucks faces.

2.6.2.5 *Taxes*

Income taxes for the fiscal year ended 2012 resulted in an effective tax rate of 32.8% compared to 31.1% for fiscal year 2011. The effective tax rate for fiscal 2013 is expected to be approximately 33%.

2.6.2.6 *Working capital and capital expenditure*

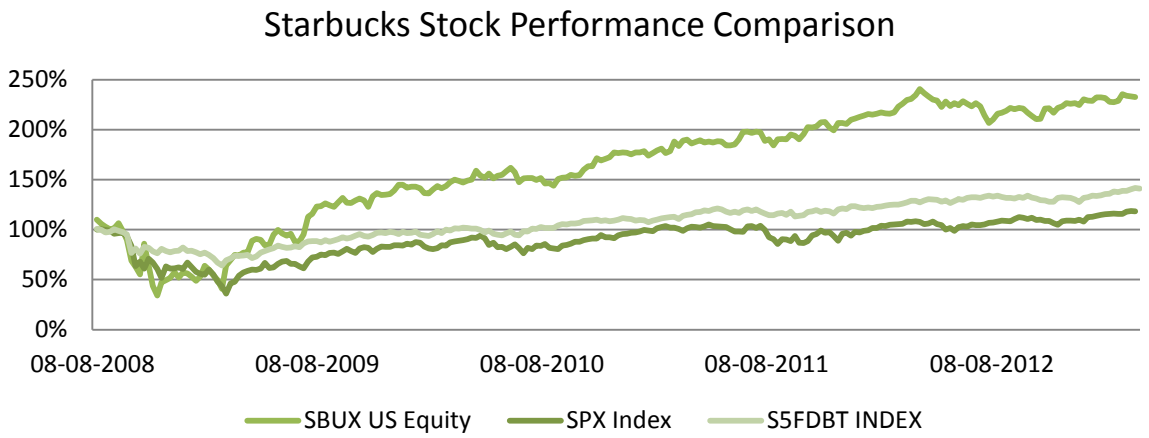
As stated in the annual management report, cash and short-term investments are expected to be invested in the growth of the core businesses in the form of new product innovations and related marketing support. Furthermore, the management emphasizes their strong belief that future cash flows — generated from operations and existing cash and short-term investments — will be sufficient to finance capital requirements.

Other than normal operating expenses, cash requirements for fiscal 2013 are expected to consist primarily of capital expenditures for remodeling and refurbishment of, and equipment upgrades for, existing company-operated stores. The requirements will also include systems and technology investments in the stores and the support infrastructure as well as new company-operated stores and additional investments in manufacturing capacity. Total capital expenditures for fiscal 2013 are expected to be approximately USD1.2 billion.

2.6.2.1 *Performance comparison to Peer group*

Cumulative Percentage Return of Starbucks stock compared to the S&P 500 index and the S&P 500 Food &Beverage index between April 2008 and April 2013. The cumulative percentage returns were used in order to provide more comparability.

Figure 17: Starbucks Stock Performance Comparison



Source: Bloomberg

Starbucks clearly outperforms both the market as well as the specific benchmark since mid-2009 and the gap appears to be widening.

Table 10 shows the peer group for Starbucks (market values as of 10th April 2013) taken from Bloomberg.

Table 10: Group of Comparable Companies for Starbucks

in million home currency besides beta and D/V ratio	Market Capitalization	Sales	adjusted beta	D/V	EBIT Margin	ROC
Starbucks	57.974	3.795	0.78	17%	14,82%	30,42%
Dunkin' Brands Group	4.830	186	0,75	28,7%	39,11%	8,85%
McDonald's Corporation	95.729	7.323	0,67	12,8%	31,34%	21,28%
Panera Bread Co	4.809	572	0,94		13,41%	
YUM! Brands INC US Equity	30.976	3.466	0,87	8,57%	14,72%	22,30%
Green Mountain Coffee Roaste	11.252	1.047	1,27	2,0%	17,56%	17,82%
Peer Mean	34.262	2.519	0.90	12,90	23,23%	17,56%

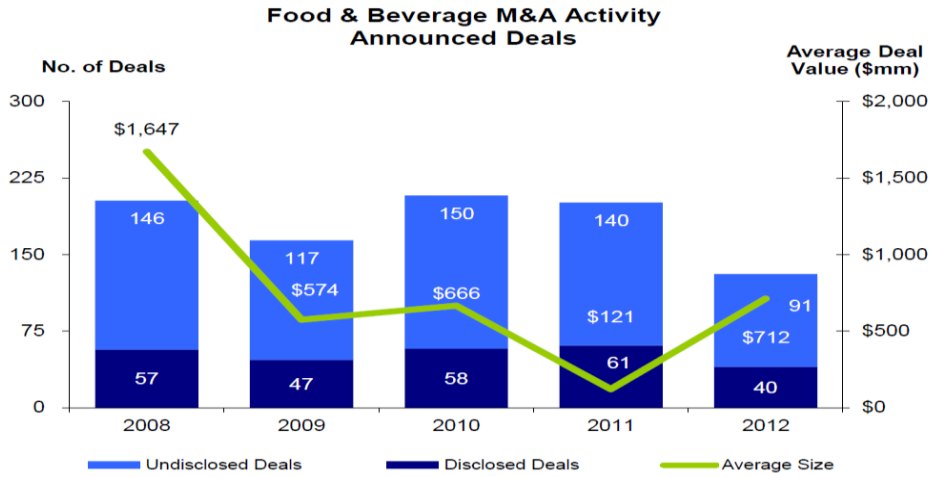
Source: Bloomberg (April 2013)

The beta of Starbucks lies under the peer group's average, indicating that the stock of Starbucks does not move as linearly as the peer groups. It is to be noticed that the EBIT Margin is somewhat lower than the comparable firm's average of 23,23%. However, the Return on Capital is almost double, indicating that Starbucks does create value by using its capital efficiently. McDonalds is definitely an outlier in this selection of peer companies, however, and being one of the main competitors with the introduction of the McCafés, it is essential to include the company.

3. M&A IN THE INDUSTRY

Grant Thornton Corporate Finance LLC (GTCF) report in their semiannual *Food & Beverage Industry Snapshots* for 2012 and 2013 that 2012 did not show significant growth in number of deals (about 5,8%). However, there was a 30% increase in average deal value (from USD5 billion to USD6,5 billion), due to a number of large deals in the F&B industry (even though no megadeal with value over USD10 billion took place) (Basil & Egerer, 2013). According to the market specialist, this growth in transaction size is a good indicator for "a robust deal market". Industry participants have high liquidity and are looking for investment opportunities to fuel inorganic growth.

Figure 18: Food & Beverage M&A Activity Announced Deals

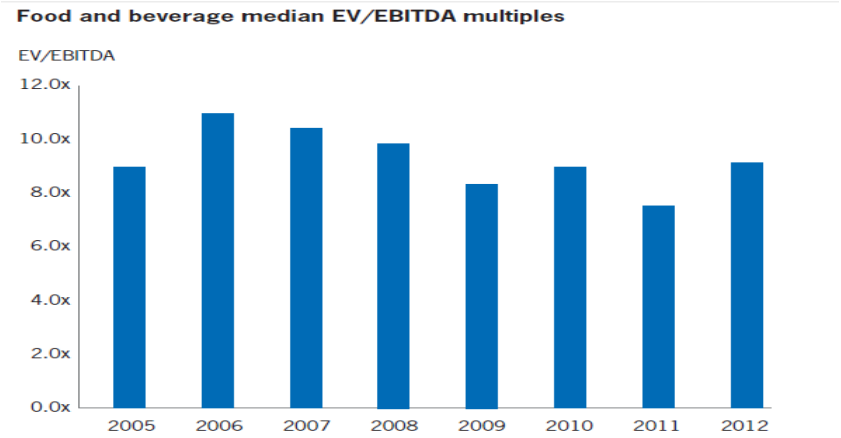


Source: Deloitte F&B IB Advisory report (Deloitte Corporate Finance LLC, 2012)

Vertical integration has been one driver in M&A in the coffee industry. Companies are attempting to cover the entire industry value chain in order to ensure quality, costs and supply and to essentially create synergies. The increasing pressuring margins due to growing competition have been another key influence. Cross-border M&A have been a way for companies to tie commodity suppliers into their groups as well as to enter faster growing markets.

As shown in the chart below, EBITDA multiples for all categories have risen since last year. These increases are attributable to growth expectations in the near term as well as the likelihood of profitability enhancements resulting from commodity price declines.

Figure 19: Food & Beverage median EV/EBITDA multiples



Source: Grant Thornton Corporate Finance report (Basil & Egerer, 2013)

According to the same report, almost 40 M&A transactions have been announced within the coffee market since the start of 2011. The highlight was J.M. Smucker acquiring Rowland Coffee Roasters for more than USD350 million beginning of 2011 and Sara Lee's North American foodservice coffee and tea business for USD430 million in October 2011.

Further, Joh A. Benckiser, a German-Austrian consumer-products company, has been incredibly active, buying coffee related restaurant chains and roasters. The latest was a mega deal buying DE Master Blenders that was announced at the beginning of the second quarter of 2013. The owner of coffee brands, such as Douwe Egberts and Senseo, a single serving coffee brand, was spun off by group Sara Lee group in 2012 entering the Dutsh Stock exchange at 8€ a share. It is estimated to be the third biggest global coffee roaster with about USD 4 billion annual sales, after Nestlé (24% market share) and Mondelez International, formerly Kraft Foods Group (11% market share). Joh A. Benckiser, also agreed to buy Caribou Coffee (the second US coffee-shop operator after Starbucks) for USD16 a share, or USD 340 million. The price is a 30% premium to the previous day closing price of USD 12.32. Previously, the holding company acquired the US specialty coffee roaster Peet's Coffee & Tea for around USD 1 billion.

4. STANDALONE VALUATION

4.1 Performance Forecast and Valuation

As explored in the literature review, the first step in analyzing the added value of an acquisition of Starbucks for Nestlé shareholders requires a standalone valuation of each company separately, assuming they were optimally managed. Optimally managed in this case refers to a number of management decisions such as the optimal use of short, as well as long-term, debt and other operational decisions.

For these reasons several assumptions — not only about the future evolution of the economy and more specifically the industry, but also about the performance of each company in its market — will have to be made.

Bearing in mind the multifunctionality of Nestlé, in particular, which operates in a wide range of areas — and considering that only the publically available consolidated financial information is accessible — a sum-of-the parts approach to valuation is certainly favorable, but not feasible. With that in mind, the second best approach is valuing the entire firm as a whole and allocating the value of the different operational segments as a percentage of revenues.

This being said, in the case of Nestlé alone, the revenues for the beverage branch will be forecasted specifically while the rest will be assumed to grow at a constant rate of GDP, plus a spread.

In order to provide a sound result, the valuation process will consist of three different, previously analyzed, valuation models: Discounted Cash Flow using Free Cash Flow to the Firm; Adjusted Present Value and Dividend Discount Model; and a Relative Valuation using multiples. As the underlying assumptions do not largely vary, all valuation results should optimally yield fairly similar results. Nonetheless, a sensitivity analysis performed for each company will illustrate the sensitivity of the valuation models to the specific input data.

The financial results from the past three financial years were used as a base to compute the forecast for the following ten years, including 2023. In the DCF, the terminal value was computed using the GDP.

Finally, the explicit period used to forecast cash flows will be 10 years. Even though this period might be too long to accurately forecast any emerging trends, the long-term character of investments in telecommunications networks implies that a stable growth stage period will not be reached until 2020. Thus, the Free Cash Flow to the Firm (FCFF) will be computed for each of the next 10 years and

discounted back at the appropriate discount rate. Additionally, the terminal value must also assume a terminal growth rate.

Starbucks, being a less spread in terms of business segments, will be valued as one taking in consideration US data for the estimations of the cost of capital and global data for the sales growth estimates.

However, a sensitivity analysis will be performed for each company so that one can understand how the final value changes in result of different assumptions. More specifically, besides a base case scenario, upper and lower bounds will be also defined from the computation of bull and bear scenarios.

4.1.1 Nestlé Group

The following section will illustrate the outcome of three different valuation methodologies applied to Nestlé Group; namely a Free Cash Flow to the Firm DCF using the weighted average Cost of Capital as a discount rate, a Dividend discount model, the H model (to be more specific), and a relative valuation using multiples will be done. The results shall be compared and contrasted in order to conclude the fair value of the group and be able to identify possible synergy effect when merging with Starbucks.

4.1.1.1 *FCFF*

Estimating the value of future cash flows is the basis and, therefore the starting point, in any Discounted Cash flow valuation. Cash flows are estimated using input revenues, operating costs, administrative and other costs, Capital expenditures, depreciation and working capital. Using the Free Cash flow to the firm approach, the change in debt will not be considered.

4.1.1.1.1 Revenues

Forecasting revenues is one of the most important steps of a valuation, namely because revenues have a direct impact on any other input and they are the starting point and therefore the most sensitive input.

Estimating the value of future cash flows is the basis and, therefore the starting point, in any Discounted Cash flow valuation. Cash flows are estimated using as input revenues, operating costs, administrative and other costs, Capital expenditures, depreciation and working capital. Using the Free Cash flow to the firm approach, the change in debt will not be considered.

Revenues are precisely estimated for a period of 5 years until 2017. The following 5 years will be projected using a simplified percentage growth. The period after 2022, a perpetual growth rate of 3,1 %, will be used, resulting in a terminal value. This rate corresponds to the expected global economic

growth. The rationale behind using a perpetual growth after year 2022 is that, initially any prediction further in the future, loses its value due to unpredictable factors. Secondly, the assumption that in the long run, no company can grow faster than the economy.

As Nestlé operates in such a wide range of different segments and products, it would be necessary to separate each of those segments and analyze the industry trends separately in order to conclude a growth rate. However, as this would exceed the scope of this work, and there is no added value in estimating the growth of only the beverage sector representing the largest share of overall revenue, a companywide growth rate estimate approach was used. It should also be mentioned, that not all hot beverage sales are in one sub category, imposing yet another difficulty in estimating sales growths separately. As discussed in the literature review, Damodaran suggests the approach of calculating grows as functions of two things: the return on capital obtained and, secondly, the investment rate. This straight forward method is based on the idea, that the company will continuously establish the historical return by operating as in the past. All the new investments in the company in the form of net profits — not distributed, but reinvested in the company — will be equally efficiently used and are expected to yield the same return.

For a more detailed display of the specific calculations, see previously presented equation 4 to 6.

This approach results in a revenue growth rate of 5,1%. Studying the past development of sales (before exchange rate impacts) this is a fairly conservative growth rate.

4.1.1.1.2 Costs and Operating Margin

COGS and other operating costs were estimated by applying a percentage of sales or operating margin approach. For estimating the future margin, the historic evolution was studies and a moving average was applied (Appendix 5).

4.1.1.1.3 Capital expenditures

Capital expenditures are mainly for investments in fixed assets. As Nestlé has just recently expanded its coffee production facilities in the past financial year, no large investments are expected for the upcoming periods. This being said, an average of three financial years of capital investments to sales was used to conduct projections, the rational being that an expansion in sales, has to be supported by investments in production facilities.

4.1.1.1.4 Working capital

To forecast the Working Capital needs of Nestlé, a set of ratios were conducted such as days of inventory held, days of sales and payables outstanding, as well as prepaid assets and accrued

liabilities to sales ratios. By using averages of the past three financial years, the values for the following five financial years were estimated.

4.1.1.2 *WACC*

After having estimated the free cash flows, the appropriate discount rate has to be determined. As the free cash flow to the firm has been calculated, the appropriate discount rate has to be the weighted average cost of capital. The cost of capital was allocated according to the consensus discussed in the literature review chapter. Target capital structure was adopted from the current capital structure as the leverage ratio is low and within the industry average. Furthermore, interest coverage ratios suggested that Nestlé is in a very healthy leverage position. To arrive at the after tax cost of debt, the borrowing premium after Damodaran was made use of. The AA debt ratio of Nestlé suggests using a premium of the risk free rate of 0.7%.

Even though Nestlé has headquarters in Switzerland, due to its global operations, using a Swiss bond yield as risk free rate bore the risk of underestimating the overall cost of capital as Nestlé uses funding in a variety of markets. Therefore the average of the past five years of the 10-year US Treasury bond rate was assumed as risk free rate. Levered beta was determined by regressing the stocks weekly returns with markets weekly returns of the past five years. In order to back up this calculation the Bloomberg estimate for the adjusted beta was consulted as well as the industry average provided by Damodaran. The equity risk premium was based on Damodaran's assumption for equity risk premium for mature markets of 5,8%.

WACC Calculation	
Target Capital Structure	
Debt-to-Capitalization	21,8%
Equity-to-Capitalization	78,2%
Company Borrowing Premium	0,70%
Cost of Debt	3,56%
Tax Rate	25,0%
After-tax Cost of Debt	**2,7%**
Risk-free Rate	2,86%
Market Risk Premium	5,80%
Levered Beta	0,74
Cost of Equity	**7,17%**
WACC	**6,2%**

Appendix 3 exhibits a sensitivity analysis of the WACC calculations by showing different outcomes when shifting the after-tax cost of debt and cost of equity by a small percentage point up or down.

For the estimates of real GDP a forecast until the year 2019 was applied. Even though this is further in the future than the terminal value, one can expect that estimates further than 10 years cannot be more precise as they are based on historical data.

The main assumptions that have to be taken in order to forecast the perspective of the firm are the growth rates. They are driven by the investment in the firm as well as by the development of the markets and the industry.

In terms of specific drivers the following are the most important ones for net working capital:

The average of the last 3 financial years has been conducted in order to obtain a more realistic estimate. This average will be used as the multiplier for the estimated future figures.

For the capital expenditure, Nestlé mentioned specifically for the coffee industry a large investment in Germany for the Dolce gusto coffee brand

4.1.1.3 *DCF*

Table 11: Nestlé DCF Valuation

Enterprise Value (in million CHF)	
Sum PV of FCFF	58.061 CHF
Terminal Value	364.127 CHF
Present Value of Terminal Value	205.255 CHF
% of Enterprise Value	78,0%
Enterprise Value	**263.316 CHF**
Implied Equity Value and Share Price	
Enterprise Value	263.316 CHF
Less: Total Debt	27.577 CHF
Less: Non-controlling Interest	1.657 CHF
Plus: Cash and Cash Equivalents	5.840 CHF
Implied Equity Value	**239.922 CHF**
Number of common shares	3331
Implied Share Price	**72,03 CHF**

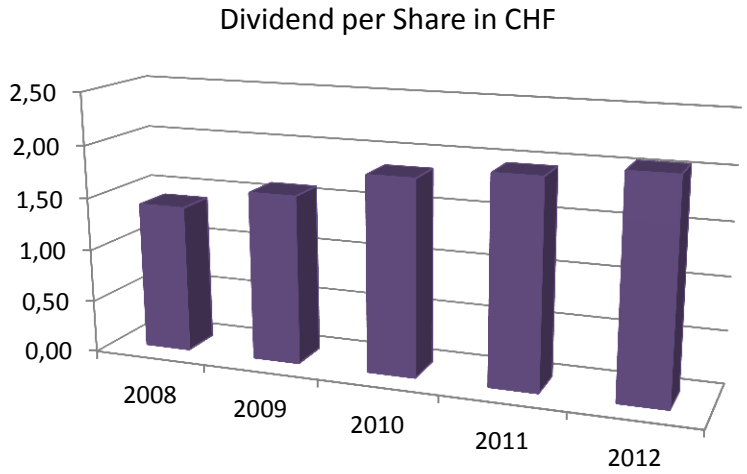
Share Price Sensitivity Analysis						
		Perpetual Growth				
		2,60%	**2,85%**	**3,1%**	**3,35%**	**3,60%**
WACC	**5,7%**	69,38	74,50	80,61	88,03	97,23
	5,9%	63,54	67,79	72,79	78,76	86,00
	6,2%	58,50	62,08	**67,95**	71,11	76,94
	6,4%	54,13	57,17	60,66	64,71	69,48
	6,7%	50,29	52,89	55,86	59,27	63,23

This sensitivity analysis illustrates the impact of a small variation in the discount rate or the perpetual growth rate. As both are approximations that have been derived by using assumptions, it is off high importance to verify the implications a small deviation of the rate can have. The analysis was conducted by shifting both rates 25 basis points up or down.

4.1.1.4 *Dividend Discount Model*

Nestlé has continuously distributed profits to shareholders. Dividends have grown thought the past five financial years.

Figure 20: Nestlé Dividend per Share in CHF



Source: Nestlé Group Annual Report 2012

Due to the stable dividend policy of Nestlé and due to the size and stability of the firm, H model of the Dividend Discount model was applied. This model allows for a two-phase analysis with different growth rates. However in comparison with the two-stage model, it allows for the extraordinary growth rate to decline over time, instead of jumping from a high to a significantly lower perpetual rate. This model presented by Fuller and Hsia (1984) allows for an initial high growth period with a linearly declining growth rate until reaching stable growth as illustrated in the graph below.

Applying the formula presented in the literature review under equation 14 to Nestlé's dividends yields a value per share of CHF 65,22 for April 2012 as can be taken from table 12.

Table 12: Nestlé Dividend Discount Valuation

H-Model DDM	2012
EPS	3,32
Payout ratio	61,75%
ROE	17,41%
G	6,66%
Present Value of Terminal Price	55,62
Present Value of dividends in transition phase	9,60
Value of the stock	65,22

Compared to the market value that the stock is trading at, this valuation suggests that Nestlé is trading at fair value.

4.2 Relative Valuation

Due to the high number of assumptions needed in the discounted cash flow valuation, a relative valuation was performed in order to back up results based on past performance. Without a doubt, valuation through multiples cannot be the only reference in the computation of a firm's value. Limitations include the fact that there is no perfect match in terms of peer group. Furthermore, as multiples are largely based on market values, they do illustrate the market's perception of the firm/ industry however they do not reliably disclose the intrinsic value of the operations of a firm. However, multiples offer the opportunity to do a sort of back testing of other valuation methods.

The peer group used for this analysis is the same as illustrated previously in table 7 based on the industry, but also company size, capital structure and risk exposure.

Ratios used for this analysis have been taken from Bloomberg as per 10th April 2013. For the valuation of Nestlé the following four ratios were conducted: Price/ Earnings, Price/Book Value, Enterprise Value/ Sales and Enterprise Value/ EBIT.

Table 13: Nestlé Relative Valuation

	PE	P/Book	EV/ Sales	EV/ EBIT
Peer Mean	20,73x	3.52x	1,95x	14,56x
Enterprise Value			179.763	204.015
Price Per Share	68,82 CHF	76,56 CHF	46,94 CHF	54,22 CHF

Source: Bloomberg

This market approach of valuation yields a range of values for Nestlé's share between 46,94 CHF and 76,56 CHF. The results of both the discounted cash flow approaches yielded per share values within this range. Therefore it can be concluded that he relative valuation backs up the discounted cash flow analysis.

Considering the market value of Nestlé's share on April 10th of 67,70 CHF, it can be concluded while conducting a free cash flow to the firm discounted cash flow analysis, that the share is currently trading at fair value. However, it should be noticed that by looking at the sensitivity analysis of the DCF, by just moving 25 basis points up in the WACC and the perpetual growth rate, the value per share is virtually identical.

When contrasting the market value with the result of the H-Model of 65,22 CHF/ share, Nestlé is trading at a marginal premium of 3,66%.

Bothe the Enterprise ratio valuations suggest that Nestlé is overvalued, whereas the Price to Earnings, and especially the Price to Book value multiple, conversely suggest that the stock is undervalued.

4.3 Starbucks Corporation

4.3.1 The Discounted Cash Flow

4.3.1.1 *Revenues*

Coffee sales, making up 83.3% of the total hot beverage market in U.S. Coffee consumption, are expected to increase through 2015 at an average annual rate of 2.7%. Tea consumption, meanwhile, is expected to increase through 2015 at an average annual rate of 3.1%, according to the National Coffee Association's (NCA) National Coffee Drinking Study.

For a detailed analysis of the revenue drivers at Starbucks, the past results were divided into geography and operating type. As previously discussed, revenues form licensed stores come from sales of products and licensing fees. Based on the notion that the majority of Starbucks' revenues are generated in the coffee shops, whether company operated or licensed, the forecast of new openings and closings was considered a stepping-stone in deriving revenue forecasts. A detailed prevision of net change in store count was conducted for a period of five years. The following five years were estimated by using a rolling average.

As can be seen in table 14, in the number of new stores in the Americas is the lowest in comparison to the other regions. This is due to the fact that especially in the US, the store count is already very high and additional openings are usually counterbalances with closing of stores. The region that offers more potential here is Latin America. Between company operated and licensed stores, the balance is quite even. EMEA, however, has a much larger increase in licensed stores than in company operated in line with the past development. China and Asian Pacific promise, as expected, the highest rate of new openings. However, this time higher in company- operated stores, are again in line with past development. On a consolidated basis, store count growth is estimated to fall between 3 to 5% annual growth.

Table 14: Revenue growth by region and store type

Fiscal Year	2010	2011	2012	E2013	E2014	E2015	E2016	E2017
Americas	1%	-2%	4%	1%	1%	2%	1%	2%
Company-operated stores	0%	1%	3%	1%	2%	2%	2%	2%
Licensed stores	2%	-5%	6%	1%	0%	2%	1%	1%
EMEA	2%	6%	6%	6%	7%	7%	7%	7%
Company-operated stores	-7%	3%	1%	-1%	1%	0%	0%	1%
Licensed stores	14%	10%	11%	12%	11%	11%	11%	11%
China/ Asia Pacific	4%	10%	16%	10%	13%	13%	12%	13%
Company-operated stores	7%	17%	30%	18%	22%	23%	21%	22%
Licensed stores	4%	9%	13%	8%	10%	10%	10%	10%
Consolidated	1%	1%	6%	3%	4%	5%	5%	5%
Company-operated stores	-1%	2%	4%	2%	3%	4%	4%	4%
Licensed stores	4%	0%	8%	4%	5%	6%	5%	6%

Assessing past revenue per store ratios, allowed estimates of expected revenue margins classified by region but also store type.

Table 15 shows the consolidated results for Starbucks worldwide. In addition to the increasing number of stores, the revenue turnover per store, or sales growth per store was separately estimated and added. Revenue margin per store in company-operated stores is obviously higher to start with but also shows faster growth as Starbucks has a direct influence. Profitability of licensed stores is not of high importance to Starbucks in terms of revenues, as partial revenues are provided by the fee structure. Further, as efficiency is driven by the licensee, often less experienced than Starbucks Corporation, the same growth in efficiency would be overly optimistic.

Table 15: Starbucks net revenues by operating segment

Fiscal Year	2010	2011	2012	E2013	E2014	E2015	E2016	E2017
Company-operated stores	8.964	9.633	10.535	11.503	12.558	13.801	15.190	16.784
# of stores	8.866	9.007	9.405	9.600	9.903	10.282	10.655	11.110
Revenue margin per Store	101,1%	106,9%	112,0%	119,8%	126,8%	134,2%	142,6%	151,1%
Licensed stores	875	1.008	1.210	1.403	1.650	1.951	2.296	2.715
# of stores	7.992	7.996	8.661	9.044	9.471	10.054	10.605	11.224
Revenue margin per Store	11,0%	12,6%	14,0%	15,5%	17,4%	19,4%	21,6%	24,2%
CPG, foodservice and other	869	1.061	1.555	1.787	2.054	2.360	2.713	3.117
Growth	7,8%	22,1%	46,6%	14,9%	14,9%	14,9%	14,9%	14,9%
Total net revenues	10.707	11.700	13.300	14.693	16.262	18.112	20.198	22.617
Year to year change	9,27%	13,67%	10,47%	10,68%	11,38%	11,52%	11,97%	10,47%

Year-to-Year change of total net revenue shows a homogeneous development.

As a function of sales, the operational costs were estimated. Appendix 11 explains in detail operating costs arising by function.

4.3.1.2 *Capital Expenditure*

Considering that a large number of the new stores added will be licensed stores, not requiring Starbucks to invest in capital expenditure, this position will mostly be influenced by openings of new company operated stores. An in line growth of capital expenditure and net new company operated store count was assumed.

4.3.1.3 *Net working Capital*

In order to estimate the change in net working capital, a set of turnover ratios were computed for the past operating years in order to understand management policies. These were days of sales outstanding with a three-year average of 11,9, days of inventory held with 64,9 and days of payables outstanding with a three-year average of 29,5. This goes to show that Starbucks uses payables as a short term financing tool. Days of inventory show an increase from 44,9 to 78 in 2010 and 2012 respectively. Therefore, an average of the period between 2010 and 2012 was used assuming that 78 days is a high figure inventory turnover figure. The very low number of receivables is no surprise due to the restaurant sector Starbucks operates in. Furthermore, Prepaid and other current assets, as well as accrued Liabilities and other current liabilities, were analyzed in form of percentage of sales.

Appendix 13 illustrates the final findings for the FCFF calculations for Starbucks for the upcoming 10 financial years.

4.3.2 WACC

Equally, as in the valuation of Nestlé, the free cash flow to the firm has to be discounted at its appropriate rate, being the WACC. Target capital structure was adopted from the current capital structure and Cost of debt was derived from the company's official rating (Baa2 Moody's and BBB Standard and Poor's). This translates into a risk spread suggested by Damodaran of 2% on top of risk free. The tax rate was assumed to be the effective tax rate of 2012.

For the cost of equity, beta was derived by regressing the weekly returns of the company's stock with the market over the past five years. The beta of 0,78 is in line with the industry average found by Damodaran and with the adjusted beta suggested by Bloomberg. For the risk free rate as well as the market premium, US data was used. The risk free rate was derived by using the average of the past five years of the US 10-year bond rate. For the market risk premium, Damodaran's assumption of an equity risk premium for mature markets of 5,8% was applied.

WACC Calculation	
Target Capital Structure	
Debt-to-Capitalization	17,0%
Equity-to-Capitalization	83,0%
Cost of Debt	
Pre-Cost of Debt	4,68%
Tax Rate	33%
After-tax Cost of Debt	**3,1%**
Cost of Equity	
Risk-free Rate	2,68%
Market Risk Premium	5,8%
Levered Beta	0,78
Cost of Equity	**7,2%**
WACC	**6,5%**

Appendix 14 shows the results of the WACC sensitivity analysis, comparable as conducted for Nestlé. Further appendix 13 illustrates the detailed results for the free cash flow calculations of the ten year projection period.

Following the outcome of the DCF is presented. By applying a perpetual infinite growth rate of 3,1% according to previously explained rational, the terminal value is USD 95 billion or USD 51 billion in present value. This represents around 78% of the total enterprise value of USD 65 billion.

Enterprise Value (in million USD)	
Sum PV of FCFF	USD 14.187
Terminal Value	USD 95.217
Present Value of Terminal Value	USD 50.760
% of Enterprise Value	*78,2%*
Enterprise Value	USD 64.947

By deducting total debt, non-controlling interests, cash and cash equivalents and lastly preferred shares if applicable, one gets to the implied equity value. As Starbucks has currently 773 thousand shares outstanding, the per share equity value coming from the DCF is USD 81,53.

Implied Equity Value and Share Price	
Enterprise Value	USD 64.947
- Total Debt	3.105
- Noncontrolling Interest	5,5
+ Cash and Cash Equivalents	1.189
Implied Equity Value	USD 63.025
Number of common shares	773
Implied Share Price	**USD 81,53**

According to the sensitivity analysis conducted for the WACC (appendix 13), a matching sensitivity analysis was done for the change in share price, according to a change in WACC and perpetual

growth rate. This is important to understand the range of values that one obtains when changing the assumptions marginally.

Share Price Sensitivity Analysis

		Perpetual Growth Rate				
		2,60%	**2,85%**	**3,1%**	**3,35%**	**3,60%**
WACC	**5,7%**	94,99	102,15	110,72	121,13	134,07
	6,1%	82,57	87,88	94,08	101,41	110,23
	6,5%	72,82	76,88	**81,53**	86,93	93,26
	6,9%	64,97	68,15	71,74	75,84	80,56
	7,3%	58,52	61,06	63,90	67,09	70,72

The sensitivity analysis demonstrates a range from USD 58,52 to USD 134,07 value per share.

4.3.3 Dividend Discount Model

The company paid its first dividend of USD 0,10 in the first quarter of 2010 and has since distributed a quarterly payment. Dividends have demonstrated a growth rate of about 31% in 2010 and 2011 and 24% in 2012 and 2013. Dividend payout has been growing from 29,03% over 34,57% to 40,22% in 2010, 2011 and 2012 respectively.

Due to the short history of dividend payout as well as the growing, yet still considerably low payout ratio, the Gordon growth model for the DDM will not be suitable to value Starbucks stock. The growth rate at this stage is too high, yielding a negative discounting factor. Furthermore, it is not feasible to assume that the growth rate can continuously maintain this level of elevation and that earnings will grow at the same rate.

4.3.3.1 *Three Stage Dividend Discount Model*

As discussed in the literature review, the three-stage dividend discount model splits the forecasting period into three stages.

Whereas the dividend payout ratio is acting inverted to the growth; as growth declines, the payout ratio raises. Equation 15 in the literature review explains the building blocks of the model in detail. This model is the most time and input requiring version of the DDM, however, it also allows the highest flexibility. It works best for firms that do to not only have a high initial dividend growth, however, that are also expected to change on other dimensions as well such as the payout policies.

The rational for having three different growth stages underlies the belief that the extraordinary growth cannot be sustained in the long run as the initial differential advantage of the firm decreases. Therefore, the growth rate stabilizes at the industry/ economic growth rate. In order to avoid an abrupt jump from high to stable growth, a period of linearly declining growth is inserted. In the case of Starbucks, this model was used as the company has a short history of dividend distribution, which

demonstrates high growth. As the growth decreases over time, the payout ratio is expected to increase until reaching a stable high rate of about 85%.

The high growth phase is estimated to be five years duration, where the dividends are growing at the fundamental growth formula (REO*Retention rate) yielding 16,19% growth. In 2012, Starbucks achieved earnings per share of USD 1,79 and distributed dividends per share of USD 0,72. The present value results by using constant cost of equity of 8,38%.

High Growth Phase					
Year	1	2	3	4	5
Earnings	USD 2,08	USD 2,42	USD 2,81	USD 3,26	USD 3,79
Dividends	USD 0,84	USD 0,97	USD 1,13	USD 1,31	USD 1,52
Present Value	USD 0,77	USD 0,83	USD 0,89	USD 0,95	USD 1,02
Transition period					
Year	6	7	8	9	10
Growth Rate	13,57%	10,95%	8,34%	5,72%	3,10%
Payout Ratio	49,08%	57,93%	66,79%	75,64%	84,50%
Earnings	USD 4,30	USD 4,78	USD 5,17	USD 5,47	USD 5,64
Dividends	USD 2,11	USD 2,77	USD 3,46	USD 4,14	USD 4,77
Present Value	USD 1,30	USD 1,58	USD 1,82	USD 2,01	USD 2,13
Stable Growth Phase					
Growth Rate in Stable Phase					3,10%
Payout Ratio in Stable Phase					84,50%
Cost of Equity in Stable Phase					8,38%
Price at the end of growth phase					USD 93,08
Present Value of dividends in high growth phase					USD 4,46
Present Value of dividends in transition phase					USD 8,83
Present Value of Terminal Price					USD 41,63
Value of the stock					USD 54,92

The DDM reaches a value price per share value of USD 54,92.

4.3.4 Relative Valuation

By using market information retrieved form Bloomberg, the following ratios for the peer group as described in the company analyzes of this work, were compared.

	PE	P/Book	EV/ Sales	EV/ EBITDA	EV/ EBIT
Peer Mean	24,59x	8,67x	4,56x	13,61x	16,99x
Enterprise Value			60.707,56	34.672,41	33.928,44
Price Per Share	USD 44,02	USD 92,22	USD 76,05	USD 42,37	USD 41,41

The range of values for the relative valuation is quite large, suggesting that not all of the multiples are offering an accurate valuation. However, as this type of valuation is a market-based valuation, it is clear that not all indicators are in line with Starbucks.

The P/BV ratio yields a value that is quite far out of the range. PE, EV/ EBITDA and EV/ EBIT all three suggest Starbucks equity to be valuing in the range of USD 41 to 44 per share. EV/ Sales, however, denotes a higher value of the equity at USD 76 per share.

Beginning of April 2013, the time of the study, the price per share of Starbucks Corporation was USD 57,80 compared to a 52 weeks average of USD 54,87. The DCF valuation conducted, let's assume that Starbucks equity is currently undervalued by 41,06% when compared to current value and by almost 49% when compared to 52-week average. The Dividend Discount model hints at a fair valuation of the markets of Starbucks equity as the current market value is basically identical (USD 54,87 52 week average to USD 54,92DDM valuation).

Lastly, the relative valuation, having such a large range does not allow a clear opinion forming on whether Starbucks is correctly valued.

Using the DCF as the principle valuation method, while viewing the other two methods as a sort of backup valuation, it is concluded that Starbucks is currently underpriced by the market.

5. VALUATION OF THE MERGED COMPANY

The following chapter will be dedicated to the details of the actual merger of the two separate entities. This includes firstly the valuation of the merged company without any synergies and, secondly, a valuation assessing the added value that will be created by the merger. Lastly, the specifics of the deal, "the architecture," will be discussed, highlighting the various possibilities of such a merger with their pros and cons for the Shareholders involved.

5.1 Valuation without Synergies

When assessing the added value of a merger it is important to separate and identify possible synergy effects individually. Therefore, the valuation without synergies gives the opportunity to compare and contrast the opportunities arising from the deal. By firstly conducting a valuation without synergies, the researcher has a reference or control point to verify whether the new valuation model is based on the same structural assumptions as the valuation model for the two separate firms. Only after having verified that the sum of two companies yields a comparable result, can one continue to value the synergies. At this stage the sum of two parts approach will apply, meaning, the cash flows will be added and discounted at a new WACC that represents the weighted average cost of capital of the

separate weighted average costs of capital. The weights used were according to the enterprise value previously calculated.

Considering the different currencies, it was necessary to convert the results of one firm into the corresponding other currency. It is common practice to convert all cash flows into the acquirers currency, therefore Starbucks free cash flow will be converted to Swiss Francs even though the USD is broader traded. For this purpose the spot exchange rate of 0,9323 USD/CHF was used with value date 10th April 2013.

Enterprise Value

		perpetual growth				
		2,60%	**2,85%**	**3,1%**	**3,35%**	**3,60%**
WACC	**5,7%**	316.466	337.347	362.175	392.184	429.188
	6,0%	292.451	309.842	330.236	354.484	383.793
	6,2%	271.739	286.395	**310.532**	323.299	346.983
	6,5%	253.693	266.171	280.486	297.078	316.534
	6,7%	237.830	248.549	260.738	274.722	290.929

The marginal difference in the enterprise value is not surprising and can be traced to the adjustment in the WACC. Given that the difference in the computed enterprise value between the combined firm (CHF 310.532 million) and the sum of both companies (CHF 310.298 million) is only CHF 234 million —representing 0,075% of combined enterprise value — it will be further assumed that the consolidated company's value is the one computed with the new WACC. Thus, the EV of the combined firm of CHF 310,532 million will be used as a benchmark for measuring synergy value.

5.2 Valuation with Synergies

In order for a merger to create value, present value of generated future cash flows of the new entity must exceed the sum of cash flows of the individual companies. In other words, there must be synergies by either generating additional cash or offering cash outflow reductions. From the perspective of the acquirer, these synergies must exceed the takeover premium in order to generate added value to the shareholders.

Broadly speaking, financial literature distinguished between two main types of synergy, which are operating, and financial synergy.

The first comes in two forms: revenue enhancements and cost reductions. The latter derives from the possibility to reduce the cost of capital by combining companies.

Acquirer and target shareholders share the synergy value as the attempt of the buyer to capture 100% of synergy value would be leading to a higher premium required by the seller who anticipates the value of synergies equally. (Kengelbach, et al., 2013)

Kegelbach et al. found that, on average, about 31% of capitalized value of synergies is collected by the seller in form of premiums. In their paper, studying 365 deals in various industries, they further show the average synergy value per industry. The food industry appears to generate slightly below median synergies whereas technology is the industry with the highest synergy value creation (Kengelbach, et al., 2013).

On a side note, it is highly important to note that most synergies tend to mount over a time period of two years or more, meaning their added value will not be immediately sealed (Kengelbach, et al., 2013). Sirower et al. (2006) specify that a 100-day period has to pass in order for synergies to be noticeable. By the laws of financial calculations and time value of money rational, it is clear that those synergies that will only be obtained in a further time period will have a lower present value to the acquirer today.

Usually, costs saving synergies are the easiest to predict and to be realized as they are directly influenced by management, whereas revenue enhancing and financial synergies are more reliant upon external factors.

5.2.1 Operating Synergy

5.2.1.1 *Cost Saving Synergies*

Cost reductions arise often from centralizing administrative functions, including reduction in headcount, centralization of head office and other office facilities, and even using marketing and other sales pushing functions in conjunction.

The second big cost saving opportunities arise in operational sectors where economies of scale in purchasing of raw materials or optimizing the turnover of plants and production lines, which result in a higher output at lower per unit cost.

A merger between Nestlé and Starbucks offers a range of cost-saving opportunities in the fields of COGS and administrative costs at a consolidated basis. Being a horizontal merger, without a doubt, economies of scale will play a very important role in the purchase of raw materials. S analyzed before, Nestlé is already one of the major buyer of green coffee worldwide. Even though not all of this coffee is up to the top quality standard of Starbucks, the combined firm will have a purchasing power that will allow tough negotiations on price and quality. Due to the size of the combined, new firm, it is assumed that the company will be able to increase its bargaining power leading to price advantages in the purchase of raw materials.

Factory, storage and transportation costs will be decreased due to higher turnover and specifically also due to the very well elaborated infrastructure of Nestlé.

As those lines are not specifically stated in the financial statements, it is vain to predict the cost savings in each of those aspects. However, taking the geographic locations, it is possible to make predictions on the cost saving effects in each region.

It is expected that one main cost reduction opportunity may arise from a better distribution network, allowing Nestlé to contribute to Starbucks in Europe and Asia. Here, a reduction of 5% in distribution is expected. For the US, the cost reduction is lower as Starbucks already has a well-established distribution network and was estimated at 2% of regional COGS. Reductions in raw material purchase are also difficult to assess due to the fluctuations naturally involved in commodity prices. However, considering that both companies together will hold the largest market share of coffee and tea purchase and production, it is fair to assume a 3% decrease in purchase prices. This synergy effect will only be fully realized within a two-year period as both companies have already entered forward contracts for the purchase of raw materials.

This combined yield a 0,5% effective cost saving on COGS in 2013, as not all the opportunities will be exploited in the first year but goes up to 2,5% effective COGS reduction over three financial years. This, in turn, results in a money value of synergy of COGS cost reductions of about CHF 13 billion

The effect of savings in selling, general and administrative will be somewhat less important. Cost savings in this area arise from reduction in headcount, centralizing administration, reducing marketing expenses. However, as the two companies only share the coffee roasting and production/ retail together, there will be a limited number of opportunities in this section. The cost savings on SG&A cost are predicted to have a present value of CHF 5 billion.

5.2.1.2 *Revenue enhancement*

Cost savings alone are usually not enough to justify the high acquisition premiums being paid. Instead, the focus should be shifted towards synergies leading to business growth and generate an increase in revenues.

This deferral towards revenue synergies implies the focus away from the operational management optimization towards the customer. Either by attracting new customers or by being able to sell more to the existing customers, the merger has to attract new business.

Nestlé has an established market in Europe in terms of retail and single serving coffee. The infrastructure and distribution channel system is well developed with new fabrics opened in Germany and England. Considering the struggle Starbucks has faced in reproducing its success story

in Europe, Starbucks should adapt its concept to the cultural diversity in Europe, similarly as Nespresso retail/ coffee shops have.

Further, Starbucks could substitute and or supplement its food and snack offerings with Nestlé products demonstrating a new distribution channel for Nestlé products. This practice, called cross-selling, bares additional revenues for both parties.

A variety of new products could be launched and cross-marketed. To name just one, Nestlé's Dulce Gusto, a leading single service coffee systems in Europe, could introduce Starbucks coffee and tea pads.

By introducing its own single service coffee machine in combination with Nestlé's R&D and expertise, Starbucks could move away from offering only single service products for different machines but sell its own increasing merchandise revenue further.

All of the opportunities mentioned above represent realistic revenue enhancing possibilities. For the forecast of the present value of those effects, several assumptions were made. Firstly, additional revenues in the CPG, foodservice and other sector will reach up to 15% of ordinary revenues in the third financial year after the acquisition. Additional revenue due to cross-selling, introduction of new products was estimated roughly.

In terms of monetary value, the revenue enhancing synergies amount to CHF 3,6 billion, or 9% of total synergy value.

5.2.1.2.1 Further motives for Merger

Other motives for the merges that could potentially translate into synergies, are however subject to a much more in debt analysis with further non-public information would be the fact that by adding Starbucks to its brand portfolio, Nestlé would diversify its consumer base by moving form retail to restaurant/ catering and service industry. For Starbucks the risk profile could also be lowered due to an instant increase in diversification in terms of geography. By relying with 75% of revenue on the US, Starbucks is highly exposed to economic factors of the US. Diversification is a key element in lowering risk. Furthermore, considering the size of the combined company, it can be assumed that the firm would almost have a oligopolistic character. This change in market structure could represent an added difficulty for new firms to enter the market securing the position of Nestlé. Also, the market power in general will be higher leading to potential for pricing power and higher margins; higher profitability and performance.

The acquisition of key expertise, research, licenses, patents, and so on is on both sides of high importance. For Starbucks, being the leading coffee retailer in the US, but with very little experience with single cup servings, the merger could be a part of R&D. Nestlé having two of the international

market leaders of single serving coffee under its group, including the patents for the capsule system, can expand the single coffee business in the US under Starbucks. This is the fastest growing sector within the hot beverage industry. Nestlé on the other side is only now entering the market of operating coffee shops with a number of Nespresso stores. The licenses agreements and operational know-how of can be of very high value to the Group.

Nestlé has a 5.840 CHF million of cash and cash equivalent that do not generate return at this point. Also, the debt ratio of Nestlé leaves some leeway for further borrowings at currently low market rates. The investment in Starbucks would be considered inorganic growth, which is speedier to reach than organic growth in times of lack of other investment opportunities.

5.2.1 Financial synergy

As briefly mentioned, financial synergy refers to the decreasing impact on the costs of capital to the lasting firm caused by the merger

The reduction can arise from the correlation between cash flows, which if not perfectly correlated, can result in a lower risk profile of cash flows or by a change in the capital structure or by tax laws influencing the free cash flow positively.

In the present case, we can assume that both firms already use their full potential of tax shields and therefore tax synergies are not of high importance and will not be analyzed in detail.

Diversification can lead to a lower risk exposure and, therefore, a higher credit rating, which in turn leads to a lower cost of debt. Debt Co-insurance is the theory that the offsetting earnings of the combined firm decrease the likelihood of bankruptcy and causing creditors to suffer losses. It is to be noted, however, that this is merely a shift in risk from the debt holder to the equity holder. Whereas the creditors are exposed to less risk, shareholders of the acquiring firm loose in the process given that total returns that can be provided by a combined firm are assumed to be constant. Therefore debt co-insurance does not create value but rather shift risk exposure and should therefore not be considered a synergy.

Considering the difference of the size of both separate firms, Nestlé will impact the new cost of capital to a larger extend than Starbucks.

According to Damodaran one can estimate the cost of equity for the combined company by firstly approximating the new beta with a weighted average of the two previous betas. Implementing this variable into the capital asset pricing model (CAPM) allows regressing the theoretical new cost of equity.

As this deal covers a cross-border acquisition, the CAPM should be adjusted to the market. Due to the global exposure the model used assumed the following variables: risk free of 2.1%, market risk premium 6,5%, new combined beta of 0,75. This will in return give a new cost of equity of 7,0%.

The cost of debt will be influenced by the potential downgrade of Nestlé due to the issuing of new debt, leading to a company-borrowing premium of 1%. The effective after-tax cost of debt of the combined firm will be 2,3%, which in turn means a merged WACC of 5,96%, being only lightly higher than Nestlé's WACC.

5.2.2 Value of Synergies

The total value of the merged firm with all synergies is estimated to be CHF 349.543 million implying a total value of synergies of CHF 39.011 million.

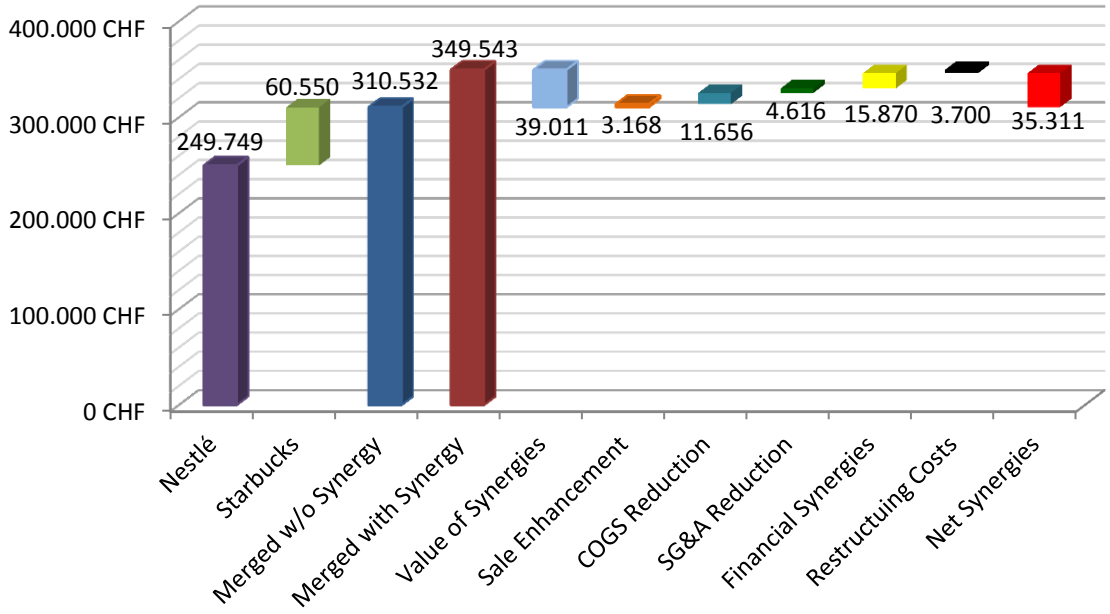
Enterprise Value (in million CHF)	
Sum PV of FCFF	77.314 CHF
Terminal Value	492.002 CHF
Present Value of Terminal Value	272.230 CHF
% of Enterprise Value	77,91,0%
Enterprise Value	**349.543 CHF**

Enterprise Value

		perpetual growth				
		2,60%	**2,85%**	**3,1%**	**3,35%**	**3,60%**
WACC	**5,6%**	356.219	381.411	411.648	448.614	494.835
	5,8%	327.880	348.695	373.299	402.830	438.931
	6,1%	303.605	321.028	**349.543**	365.388	394.230
	6,3%	282.580	297.327	314.344	334.201	357.673
	6,6%	264.194	276.797	291.201	307.824	327.220

In terms of distribution, the financial synergies contribute to the largest extend with 40,68%, followed by the cost saving synergies in COGS with 29,88%. This is no surprise seeing that the financial synergies impact the entire operation of Nestlé, not only the beverage sector. Therefore, a small variation in the cost of debt has large impacts on the fundamentally larger proportion of cash flows. Cost savings in all forms are especially noticeable in the operations of Starbucks. The large share of cost saving synergies, cost saving synergies combined contribute 41,71%, go in hand with the findings of financial literature earlier cited. Sales enhancement synergies, being more difficult to establish and carry into execution, are more vague and by applying a conservative approach in forecasting revenue enhancement subscribe only for 8,12% of total synergy value.

Figure 21: Added value by synergy



Despite the value enhancing effects of the merger, one cannot disregard the cost arising by implementing the changes needed to secure the assessed synergies. Restructuring cost were estimated to amount to CHF 3.700 million resulting in net synergies of CHF 35.311.

5.2.3 Mode of Acquisition

As previously explained, an acquisition can take several forms resulting in different outcomes. In a purchase merger the target is bought with cash or the issuing of a debt instrument resulting in a taxability of the sale, a possible benefit for the acquirer. Other tax shields could arise from depreciation of the purchased assets, which can be written up to the purchase price. On the other side, in a consolidation merger, a new company is created.

In practice one differentiates between acquisition of assets, acquisition of stock and merger. Under the first, the buyer merely buys the assets of the target at a fixed price without assuming any liability however the target firm will no longer exist in the form it has previously. Therefore, this is not a suitable deal for Nestlé. In the second, the acquirer purchases 100% of the shares outstanding directly from the shareholders and the target becomes a wholly owned and controlled subsidiary of the buyer. The advantages are that the corporate identity of both firms' remains unchanged as well as the corporate structures. However, in this case the buyer does take over the liabilities of the target, the known and unknown once. In a merger one party combines into the other and payment is usually completed by receiving shares in the surviving company. One advantage of a merger is that it is less costly for the remaining company than it is for the acquisition. Not to be overlooked, of course,

is the fact that this type of deal requires the agreement of shareholders as well as the cooperation of both firms' management.

For this deal, Nestlé should make a tender offer, where Nestlé Group commits itself publicly to buy the outstanding shares of Starbucks at a specific price directly from the shareholders. Before approaching the shareholders with the final offer however, Nestlé should dispute the deal with the management of Starbucks, leading to a friendly takeover. In an ideal world, the management would act in the best interest of the current shareholders and facilitate the process with due diligence in order to examine whether the deal really provides the promised added value. As Starbucks will remain under its brand and management and will convert into a fully owned and controlled subsidiary of Nestlé, it is presumable that the board of directors of Starbucks will receive the offer with open ears.

In terms of terminology, the deal incorporates features of a horizontal as well as a vertical merger. Horizontal integration happens due to the fact that both firms already operate in the same industry with clear overlapping product and customer base. Vertical aspects can be seen in the fact that Nestlé is not to this point, but can, however, evolve into being a supplier to Starbucks.

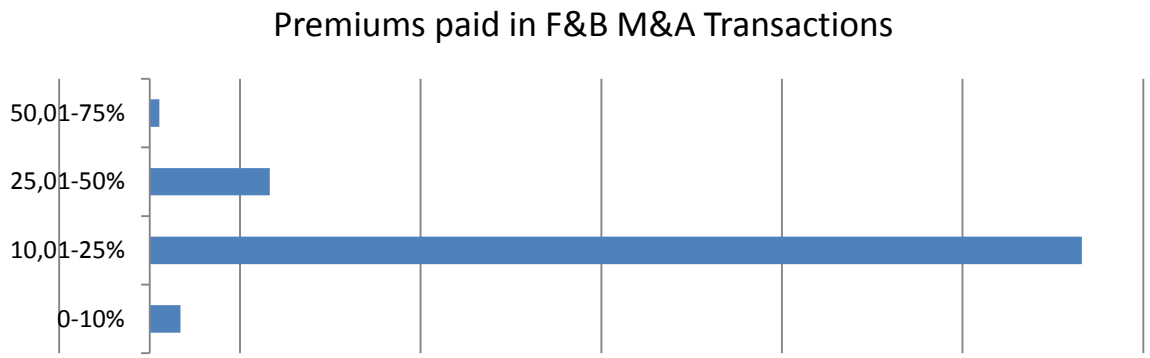
By further entering new sectors, such as the restaurant and service industry, Nestlé is expanding its product/service line to gain a larger market share in terms of geography and can be called "empire building."

5.2.1 Fair Value and Premium

By assessing the market value, but mostly the established valuation and the potential synergies, Nestlé will derive an offer price to bring to the shareholder of Starbucks. As established in an earlier section of this work, the valuation revealed that Starbucks is currently undervalued by about 40% when compared to current value and by almost 49% when compared to 52 week average. The established synergies are accounting for an additional value added of CHF 35.311 million.

Another important indicator is past transactions in the industry. For this purpose, with the help of the Bloomberg database, an analysis was undertaken studying past M&A transactions specifically in the coffee industry. Deals include 140 completed global deals with an average value of USD 16.54 billion between April 2008 and April 2013 were compared in terms of premium paid. Figure 22 below shows, the average premium paid in M&A transactions. It is clear to see that the majority of deals offered a premium between 10 and 25%. This is a good indicator of what the market generally expects.

Figure 22: Industry Premiums Paid in Historical Deals



Source: Bloomberg

In line with Kegelbach et. al. findings, it will be assumed that the premium required from Starbucks shareholders will be of 30% of the present value of expected synergies.

With a local currency synergy value of CHF 35,31 billion, this yields a premium paid of CHF 10.593 million equivalent to CHF 13,70 premium per share. Converted at the spot exchange rate value that 10th of April 2013, this results in USD 14,70 per share premium or 25% premium over current stock price. When examining the 52 week average, the premium represents a plus of 30%. Purchasing all shares outstanding yields a deal value of USD 56.042 million or CHF 52.0248 million.

The premium suggested is slightly above the industry's average, however, the suggested deal is also of a magnitude that would require an elevated premium.

5.2.2 Method of Payment

Financial literature differentiates broadly between acquisitions using cash or/and shares.

Nestlé has to take various facts into consideration when deciding on the method of payment. A first consideration has to be how the market currently value it's stock. If shares are underpriced, Nestlé would forfeit issuing new stock or exchanging stock. Secondly, how high is the off chance that the synergies estimated will materialize and in what time horizon. If the management is very confident in the deals success with a rapid capturing of all synergies, it will want to take all the gains for its shareholders. If, however, the risk is higher and involves more uncertainty, the management is likely to want to share the risk.

On the side of the buyer, he gains complete control and has complete risk and potential gain exposure. Arranging the financing and cash might be a delicate and costly issue.

In a cash deal, the incentive for the management of the target is virtually nonexistent and help cannot be expected in a smooth transaction.

In deals with payment by shares the main advantages are that the acquirer does not need to arrange liquidity or financing. The risk is barred by both sides, providing an incentive for the management of both firms to invest in a fast and efficient merger, and post-merger, process.

In the case of a full cash deal, the seller receives the full value at the close of the deal. Therefore, the seller is not exposed to any post-merger risk. On the flipside, Starbucks shareholders would also not be able to retract potential gains of the merger demanding a higher premium upfront. On the other side, when the payment is constructed by change of shares, the seller bears a proportional cut of the risk by owning shares of combined entity. This obviously implies that the seller also has a potential gain.

Considering the market value of Nestlé's share on April 10th of 67,70 CHF, it can be concluded that conducting a free cash flow to the firm discounted cash flow analysis, the share is currently trading at fair value. When contrasting the market value with the result of the H-Model of 65,22 CHF/ share, Nestlé is trading at a marginal premium of 3,66%. As the conducted valuation methods did not allow a clear decision making about the under or overvaluation of the Nestlé stock, it will have to be assumed that the market is valuing the stock fairly. Therefore, issuing new equity is not a very attractive option for Nestlé at this point considering that the cost of equity is considerably higher than cost of debt, but also taking in account the signaling effect that a share issuance would give to the market.

From the choice of cash or stock to finance, Nestlé should finance the deal with cash raised from its cash reserves and issuance of new financial debt. By favoring debt financing one cannot disregard the implications of the change in capital structure. Nestlé has already financed the past acquisition by debt financing impacting the long-term debt. Due to the healthy financial and liquidity situation, the company nevertheless can afford to raise further debt without impacting its rating largely.

6. SHAREHOLDERS VALUE AT RISK

In their publication "Avoiding the Synergy Trap" Sirower and Sahni (Sirower, et al., 2006) introduce the notion of Shareholders Value at Risk (SVAR) as a measurement tool for the acquiring company's shareholders risk exposure. They define it as the premium paid for the acquisition divided by the market value of the acquiring company before announcement. Therefore, it can be thought of as an

index quantifying the company's value at risk if no post-merger synergies are realized. This index can also be calculated as the premium percentage multiplied by the market value of the seller relative to the buyer. The greater the premium percentage paid to sellers and the greater their market value relative to the acquiring company, the higher the SVAR.

By applying formula 2 shown in the literature review, the acquirers shareholders value at risk was calculated as follows: the total premium offered is CHF 10.593 million Nestlé' market capitalization is CHF 249.749 million (at time of deal) resulting in a SVAR of 4,24%.

7. CONCLUSION

Over the past decades, demand for coffee has increased across all retail sectors, including at-home coffee, specialty coffee served at cafés, and lately single cup serving brews. While in the past the segments were distinctly separated, this notion has changed and companies are increasingly hoping to serve all segments in the coffee industry. From purchase of the green coffee over roasting, blending, selling of premium coffee at supermarkets for at-home purposes, and up to ready to drink coffee products — companies integrate all of those steps of the value chain in order to reduce cost and increase efficiency. This has led to a large number of M&A deals in this industry as companies are looking for growth opportunities by vertical and horizontal integration.

Over the years this industry's landscape has been constantly changing and is now ruled by view major players. These firms battle globally for market share and competition is fears, not only on price but also on product innovation and variety. M&A has proven to be an effective path for expanding geographically but also in terms of diversifying the product line. In this sense M&A has functioned as a part of R&D by gaining access to patents and other valuable knowledge.

Nestlé, the current market leader, is no exception to this phenomenon, which can be observed when considering its development through the past view years. Besides focusing on meeting a self-set benchmark of an annual organic growth between 5 to 6%, the firm has bet on expanding in high growth regions, summarized as emerging markets, and on streamlining production processes by acquiring different competitors or suppliers in several of its operating segments. However, Nestlé has been under attack on its position as number one in the industry. The holding group Joh A. Benckiser has purchased three industry key players in 2012 in a clear attempt to weaken Nestlé's market share.

At the same time, Starbucks has established itself as the leading speciality coffee shop chain worldwide. Although Starbucks has already reached a size where it no longer seems like a takeover

target and remains unreachable for most potential bidders, there is a list of reasons why Nestlé should nonetheless attempt an acquisition.

Besides the financial synergies that arise form an improved cost of capital, a number of operational synergies provide a promising outlook for this deal. Cost saving is expected to arise in economies of scale and scope in purchase of raw goods, namely coffee. Without a doubt, the extremely developed distribution channels of Nestlé Group offer further cost saving opportunities for Starbucks' operations. In fact, cost saving synergies are estimated to contribute an added value of almost CHF 16 billion.

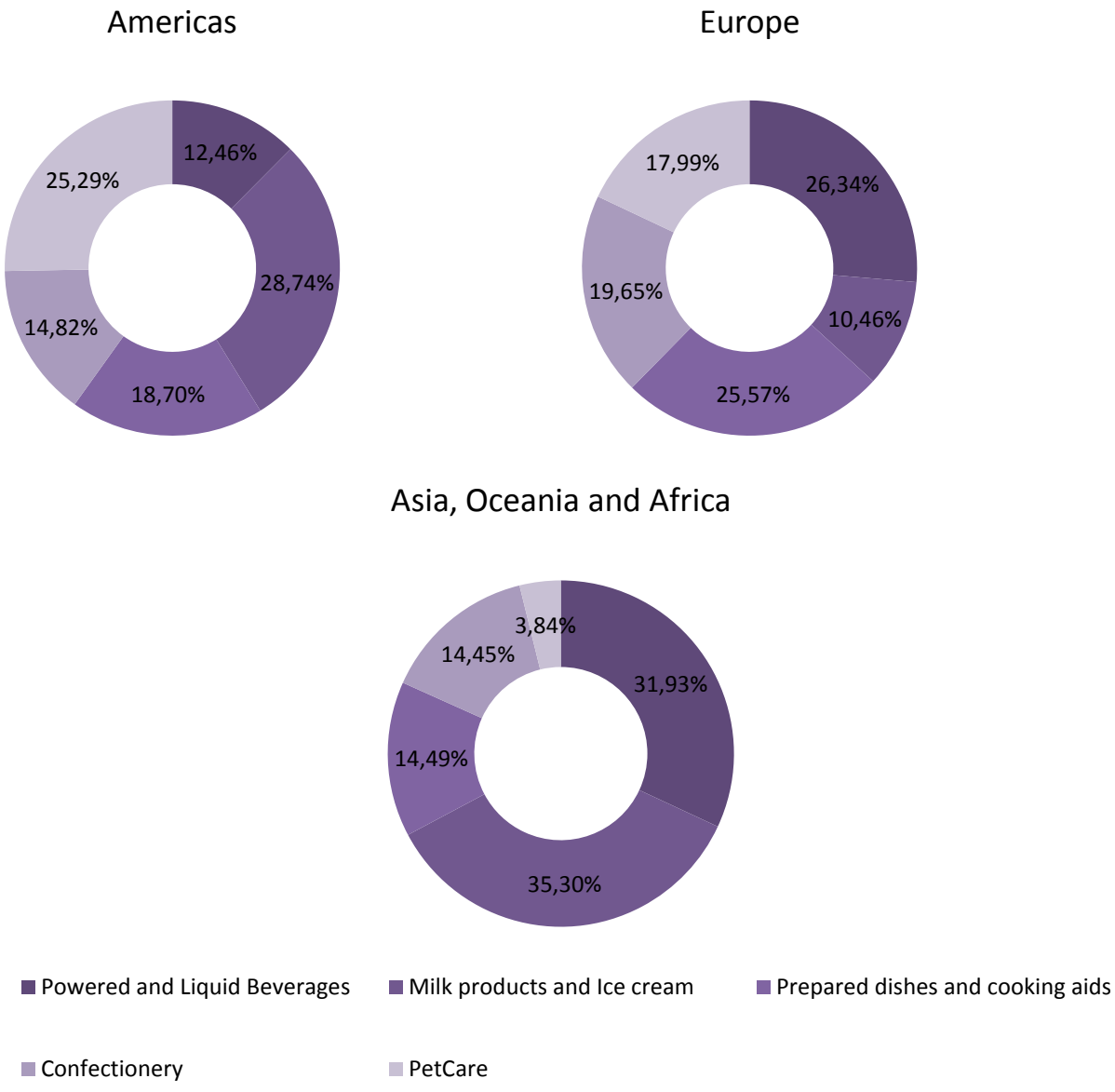
Revenue synergies are estimated to make up 9% of total synergies and are the most uncertain to calculate. Therefore, a conservative approach was applied and it is believed that there is a margin for potential upside in a real scenario. On the other hand, Nestlé can benefit from the leading role of Starbucks in the US — a market where Nestlé is not leading in this specific segment — by using Starbucks shops as retail facilities.

Nestlé will approach the shareholders of Starbucks after reaching consensus with Starbucks management in order to assure a friendly acquisition, which is beneficial for both parties and shareholders. The friendly tender offer will be set at a per share price of USD 72,50.

In conclusion, the current economic and market conditions suggest that Nestlé should approach Starbucks Corporation with an acquisition offer.

8. APPENDICES

Appendix 1. Revenue by segment and region



Appendix 2. Average annual growth of coffee market in selected importing countries between 2005 and 2011

	Average Annual Growth
All selected countries	24%
Austria	55%
Belgium	21%
Denmark	49%
France	22%
Germany	42%
Greece	14%
Italy	22%
Japan	21%
Netherland	8%
Norway	20%
Poland	26%
Portugal	81%
Spain	27%
Sweden	36%
Switzerland	24%
United Kingdom	42%
USA	37%

Source: International Coffee Council, 2012

Appendix 3. Nestlé WACC sensitivity analysis

WACC Sensitivity Analysis

Cost of Equity \ After-tax Cost of Debt	1,7%	2,2%	2,7%	3,2%	3,7%
6,2%	5,2%	5,3%	5,4%	5,5%	5,6%
6,7%	5,6%	5,7%	5,8%	5,9%	6,0%
7,2%	6,0%	6,1%	6,2%	6,3%	6,4%
7,7%	6,4%	6,5%	6,6%	6,7%	6,8%
8,2%	6,7%	6,9%	7,0%	7,1%	7,2%

Appendix 4. Nestlé historic free cash flow

	Historical Period		
In million CHF	2010	2011	2012
Sales	109.722	83.770	92.324
% growth	*NA*	*(23,7%)*	*10,2%*
COGS	45.849	44.127	48.398
Gross Profit	63.873	39.643	43.926
% margin	*58,2%*	*47,3%*	*47,6%*
SG&A	47.679	27.105	29.914
EBITDA	16.194	12.538	14.012
% margin	*14,8%*	*15,0%*	*15,2%*
Depr & Amort	3.705	3.091	3.239
EBIT	12.489	9.447	10.773
% margin	*11,38%*	*11,28%*	*11,67%*
Taxes	3.693	3.112	3.451
EBIAT	8.796	6.335	7.322
+ Depr & Amort	3.705	3.091	3.239
- CapEx	4.576	4.779	5.368
- Incr NWC		-1.516	-857
FCFF	**7.925**	**3.131**	**4.336**

Appendix 5. Nestlé forecast free cash flow

	Projection Period									
in million CHF	E2013	E2014	E2015	E2016	E2017	E2018	E2019	E2020	E2021	E2022
Sales	97.033	101.981	107.182	112.649	118.394	124.136	129.846	135.494	141.049	146.480
% growth	*5,1%*	*5,1%*	*5,1%*	*5,1%*	*5,1%*	*4,9%*	*4,6%*	*4,4%*	*4,1%*	*3,9%*
COGS	49.487	49.610	52.613	55.863	58.141	61.152	64.041	66.704	69.497	72.177
Gross Profit	47.546	52.371	54.569	56.785	60.252	62.983	65.805	68.790	71.553	74.303
% margin	*49,0%*	51,4%	50,9%	50,4%	50,9%	50,7%	50,7%	50,8%	50,7%	50,7%
SG&A	35.000	34.275	36.471	38.942	40.335	42.481	44.519	46.328	48.286	50.151
EBITDA	12.508	18.095	18.098	17.844	19.917	20.502	21.286	22.461	23.267	24.153
% margin	*12,9%*	17,7%	16,9%	15,8%	16,8%	16,5%	16,4%	16,6%	16,5%	16,5%
Depr & Amort	3.420	3.645	3.790	3.993	4.205	4.400	4.606	4.807	5.002	5.196
EBIT	9.088	14.450	14.308	13.850	15.712	16.103	16.680	17.655	18.265	18.957
% margin	*9,37%*	14,17%	13,35%	12,29%	13,27%	12,97%	12,85%	13,03%	12,95%	12,94%
Taxes	2.864	4.648	4.565	4.413	5.024	5.139	5.324	5.638	5.831	6.052
EBIAT	6.224	9.803	9.743	9.437	10.688	10.964	11.356	12.016	12.434	12.905
+ Depr & Amort	3.420	3.645	3.790	3.993	4.205	4.400	4.606	4.807	5.002	5.196
- CapEx	5.075	5.334	5.984	6.111	6.331	6.719	7.079	7.310	7.622	7.939
- Incr NWC	35	-541	-187	161	410	211	221	239	217	217
FCFF	4.604	7.573	7.362	7.481	8.972	8.855	9.104	9.752	10.031	10.379
WACC										6,2%
PV of FCFF	**4.336**	**6.717**	**6.149**	**5.885**	**6.646**	**6.177**	**5.981**	**6.034**	**5.844**	**5.695**

Appendix 6. Starbucks historical growth of stores by geography: percentage change net stores opened (closed) during the year

	2012	2011	2010	2009
Americas	4%	-2%	1%	-2%
Company-operated stores	3%	1%	0%	-5%
Licensed stores	6%	-5%	2%	2%
EMEA	6%	6%	2%	8%
Company-operated stores	1%	3%	-7%	2%
Licensed stores	11%	10%	14%	16%
China/ Asia Pacific	16%	10%	4%	7%
Company-operated stores	30%	17%	7%	6%
Licensed stores	13%	9%	4%	7%
Consolidated	-47%	1%	1%	0%
Company-operated stores	4%	2%	-1%	-4%
Licensed stores	8%	0%	4%	4%

Appendix 7. Starbucks historical store count by geography

In million USD	2012	2011	2010	2009
Americas	12.903	12.399	12.624	12.546
Company-operated stores	7.857	7.623	7.580	7.613
Licensed store	5.046	4.776	5.044	4.933
EMEA	1.869	1.758	1.654	1.618
Company-operated stores	882	872	847	911
Licensed stores	987	886	807	707
China/ Asia Pacific	3.294	2.846	2.580	2.471
Company-operated stores	666	512	439	409
Licensed stores	2.628	2.334	2.141	2.062
Consolidated	18.066	34.006	33.716	33.270
Company-operated stores	9.405	9.007	8.866	8.933
Licensed stores	8.661	7.996	7.992	7.702

Appendix 8. Historical sales growth by regional section in Starbucks company operated stores

	2008	2009	2010	2011	2012
Americas	-4%	-6%	7%	8%	8%
EMEA	1%	-3%	5%	3%	0%
China/ Asia Pacific	8%	2%	11%	22%	15%
Consolidated Sales growth	-3%	-6%	7%	8%	7%

Appendix 9. Starbucks store increases/ decreases

	2012	2013	2014	2015	2016	2017
Americas	504	127	145	271	187	207
Company-operated stores	234	84	125	153	124	139
Licensed stores	270	44	20	118	62	69
EMEA	111	108	130	143	157	176
Company-operated stores	10	-9	9	4	1	5
Licensed stores	101	116	121	139	155	171
China/ Asia Pacific	448	343	456	547	580	692
Company-operated stores	154	120	170	222	247	312
Licensed stores	294	223	286	325	333	380
Consolidated	1.063	578	731	961	923	1.075
Company-operated stores	398	195	303	379	372	455
Licensed stores	665	383	428	583	551	620

Appendix 10. Consolidated results of operations in millions

In million USD	2012	E2013	E2014	E2015	E2016	E2017
Total net revenues	13.300	14.693	16.262	18.112	19.846	21.859
Cost of sales including occupancy costs	5.813	6.218	6.941	7.771	8.462	9.343
as % of total net revenue	43,7%	42,3%	42,7%	42,9%	42,6%	42,7%
Store operating expenses	3.428	4.355	4.669	5.079	5.715	6.234
as % of total net revenue	25,8%	29,6%	28,7%	28,0%	28,8%	28,5%
Other operating expenses	430	457	526	578	631	700
as % of total net revenue	3,2%	3,1%	3,2%	3,2%	3,2%	3,2%
Depreciation and amortization expenses	550	655	708	782	869	951
as % of total net revenue	4,1%	4,5%	4,4%	4,3%	4,4%	4,4%
General and administrative expenses	801	931	1.017	1.124	1.243	1.364
as % of total net revenue	6,0%	6,3%	6,3%	6,2%	6,3%	6,2%
Total operating expenses	11.023	12.616	13.861	15.334	16.920	18.592
Operating income	2.279	2.076	2.400	2.778	2.926	3.267

Appendix 11. Starbucks historic free cash flow

In million USD	Historical Period 2010	2011	2012
Sales	10.707	11.700	13.300
% growth	9,2%	9,3%	13,7%
COGS	4.417	4.916	5.813
Gross Profit	6.291	6.785	7.486
% margin	58,8%	58,0%	56,3%
SG&A	4.456	4.737	5.149
EBITDA	1.835	2.048	2.337
% margin	17,1%	17,5%	17,6%
Dep & Amort	510	523	550
EBIT	1.324	1.525	1.787
% margin	12,4%	13,0%	13,4%
Taxes	489	563	674
EBIAT	836	9625	1.112
+ Dep & Amort	510	523	550
- CapEx	446	532	856
- Increase in NWC	-	(20,3)	(463)
Free Cash Flow	**900**	**933**	**344**

Appendix 12. Starbucks projected free cash flow

	Projection Period									
In million USD	E2013	E2014	E2015	E2016	E2017	E2018	E2019	E2020	E2021	E2022
Sales	14.692	16.262	18.112	20.198	22.617	25.151	28.006	31.222	34.815	38.820
% growth	10,5%	10,7%	11,4%	11,5%	12,0%	11,2%	11,4%	11,5%	11,5%	11,5%
COGS	6.215	6.944	7.770	8.604	9.657	10.739	11.958	13.332	14.866	16.576
Gross Profit	8.478	9.318	10.342	11.594	12.959	14.411	16.047	17.890	19.949	22.244
% margin	57,7%	57,3%	57,1%	57,4%	57,3%	57,3%	57,3%	57,3%	57,3%	57,3%
SG&A	5.193	6.343	6.792	7.719	8.514	9.583	10.621	11.826	13.213	14.704
EBITDA	3.285	2.975	3.550	3.874	4.446	4.828	5.427	6.064	6.735	7.540
% margin	22,4%	18,3%	19,6%	19,2%	19,7%	19,2%	19,4%	19,4%	19,3%	19,4%
Dep & Amort	655	708	793	879	984	1.094	1.218	1.358	1.515	1.689
EBIT	2.630	2.267	2.757	2.995	3.462	3.734	4.208	4.706	5.221	5.851
% margin	17,9%	13,9%	15,2%	14,8%	15,3%	14,8%	15,0%	15,1%	15,0%	15,1%
Taxes	993	856	1.041	1.131	1.307	1.409	1.588	1.776	1.971	2.208
EBIAT	1.637	1.411	1.716	1.865	2.155	2.324	2.620	2.929	3.250	3.642
+ Dep & Amort	655	708	793	879	984	1.094	1.218	1.358	1.515	1.689
- CapEx	742	869	1.016	1.077	1.228	1.373	1.514	1.696	1.891	2.106
- Inc in NWC	271	(25)	(59)	(40)	(55)	(62)	(65)	(74)	(84)	(92)
FCFF	1.821	1.225	1.434	1.626	1.856	1.983	2.259	2.518	2.789	3.133
WACC										6,5%
PV FCFF	**1.710**	**1.080**	**1.187**	**1.264**	**1.355**	**1.360**	**1.454**	**1.522**	**1.583**	**1.670**

Appendix 13. Starbucks WACC sensitivity analysis

WACC Sensitivity Analysis						
		After-tax Cost of Debt				
Cost of Equity		1,7%	2,2%	2,7%	3,2%	3,7%
	7,3%	6,4%	6,5%	6,6%	6,6%	6,7%
	7,8%	6,8%	6,9%	7,0%	7,1%	7,1%
	8,3%	7,2%	7,3%	7,4%	7,5%	7,6%
	8,8%	7,6%	7,7%	7,8%	7,9%	8,0%
	9,3%	8,0%	8,1%	8,2%	8,3%	8,4%

Appendix 14. Merged free cash flow with synergies

		Projection Period									
In million CHF		E2013	E2014	E2015	E2016	E2017	E2018	E2019	E2020	E2021	E2022
Sales	Netlé	97.033	101.981	107.182	112.649	118.394	124.136	129.846	135.494	141.049	146.480
	Starbucks	13.760	15.367	17.346	19.604	22.245	24.738	27.546	30.710	34.244	38.183
% growth		*5,1%*	*5,1%*	*5,1%*	*5,1%*	*5,1%*	*4,9%*	*4,7%*	*4,5%*	*4,3%*	*4,1%*
COGS	Netlé	49.524	49.610	52.613	55.863	58.141	61.152	64.041	66.704	69.497	72.177
	Starbucks	5.752	6.254	7.008	7.861	8.943	9.945	11.074	12.345	13.766	15.350
Gross Profit		55.517	61.483	64.907	68.528	73.555	77.777	82.278	87.154	92.030	97.137
% margin		*50,1%*	*52,4%*	*52,1%*	*51,8%*	*52,3%*	*52,2%*	*52,3%*	*52,4%*	*52,5%*	*52,6%*
SG&A	Netlé	35.000	36.785	36.023	39.255	41.734	43.252	44.886	47.396	49.208	50.971
	Starbucks	4.794	5.840	6.331	7.296	8.152	9.179	10.171	11.325	12.654	14.081
EBITDA		15.722	18.858	22.553	21.976	23.670	25.346	27.220	28.433	30.168	32.085
% margin		*16,2%*	*18,5%*	*21,0%*	*19,5%*	*20,0%*	*20,4%*	*21,0%*	*21,0%*	*21,4%*	*21,9%*
Dep & Amort		4.034	4.264	4.590	4.817	5.161	5.470	5.802	6.124	6.486	6.846
EBIT		11.688	14.593	17.962	17.159	18.509	19.876	21.419	22.309	23.682	25.239
% margin		*12,05%*	*14,31%*	*16,76%*	*15,23%*	*15,63%*	*16,01%*	*16,50%*	*16,47%*	*16,79%*	*17,23%*
Taxes		3.846	4.839	5.920	5.678	6.160	6.608	7.134	7.456	7.929	8.470
EBIAT		7.843	9.754	12.042	11.480	12.349	13.268	14.285	14.853	15.753	16.769
+ Dep & Amort		4.034	4.264	4.590	4.817	5.161	5.470	5.802	6.124	6.486	6.846
- CapE		5.769	6.155	6.957	7.157	7.539	8.069	8.569	8.978	9.483	10.010
- Inc in NWC		292	-545	-237	122	356	156	164	173	142	136
FCFF		6.400	7.319	9.438	9.263	10.327	10.825	11.682	12.173	12.899	13.740
WACC											*5,96%*
PV FCFF		**6.040**	**6.519**	**7.934**	**7.349**	**7.732**	**7.649**	**7.790**	**7.661**	**7.662**	**7.702**

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